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# THE <br> Big Game of North anerica. 

ITS HABITS, HABITAT, HAUNTS, AND CHARACTERISTICS ; HOW, WHEN, AND WHERE TO HUNT IT.

BY

Juder John Deax Caton, Newton Hibbs ("Roxey Newton"), W. A. Perry ("Smuahcui"), Wu. P. Lemt ("Algonquin"), Ahtiur W. Du Beay ("Gaucho"), Walter M. Wolfe
("Shoshonz"), Rev. Jobrua Cooke ("Boone"), T. S. Van Dyre, Wx. B. Leje finaweli, T. G. Farrill, D - R. B. Cantrell, Col. Geo. D. Alexander, M. E. Alehson, Hev. De. W. S. Raingpord, C. A. Cooper ("Sibyluene"),

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Long, Danill Ahroweytth ("Sananoon"), Cyrus W. Butler, and A. G. Regon.

## Edited by G. O. SH́IELDS ("Coquina"),

autbor of "cruibinge in the cascadis," "rubtinnas in thit rocitis," "huntrge in teis


## CHICAGO AND NEW YORK:

Rand, McNally \& Company, Publishers.
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I desire to express thus publicly my gratitude to my collaborators for the prompt and generous manner in which they have responded to my requests for contributions to this work. For any one man to produce a book of the scope and size of this, would require the work of many years, and then it could not be so complete as this. It is only by the hearty and sympathetic coöperation of such ardent sportsmen, trained naturalists, and big-hearted men as those composing my staff, that so comprehensive and valuable a work as this is possible. They have done the world a service of great and lasting value, and one for which all lovers of nature should feel as grateful to them as does The Editor.
Chicaco, May, 1890.

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## INTRODUCTION.

By Jomn ")ean Caton, Author of "The Antelope and Deer of' America;" "A Summer in Nomoay," eto.

\%AM requested to write an introduction to Mr. Shields' book, "The Big Game of North America," and it affords me great pleasure to comply with this request. Yet, the first question I asked myself when I read the editor's letter was, "Why introduce such men as these to American reai.ers?"

What need is there to commend, to reading sportsmen or to naturalists, a book written by such able, conscientions, indefatigable workers in the interests of natural history, field sports, game protection, and sportsmen's literature as the men whose names appear as contributors to this work? Why should I write in behalf of the noble, the pathetic, the conscientious "Shoshone;" the careful, painstaking "Roxey Newton;" the eloquent, the enthusiastic, the poetic "Algonquin;" the gallant champion of the hounds, Doctor Ellzey; the venerable lover of Nature, Colonel Alexander; the genial, big-hearted "Uncle Fuller;" the nature-loving "Sibyllene;" the careful naturalist, Butler, or the ever fresh and interesting old hunter, "Sangamon?" Their numerous and fascinating contributions to the sportsmen's press have made their names household words throughout the land.

Why should I introduce the sturdy, cautions Van Dyke; the eloquent, the beloved "Boone;" the flowery "Sillalicum;" the earnest, enthusiastic "Gaucho," or the arduous mountaineer, "Coquina?" I need not; I will not presume to do so. They are known throughout the Eng. lish-speaking world; and the man who has not yet read "The Still Hunter," "Cruisings in the Cascades," and
" Rustlings in the Rockies," has thus far missed the most intense happiness that could possibly be crowded into a few hours by his own fireside.

All these and many other well-known names appesir as contributors to the present volume-that of the last-named writer as the editor thereof. Each writes of a species of game that he has studied for years, not alone in dust-covered booke, bltt in that grander school, the realm of Nature. These men have spent days, weeks-aye, in some cases, many years-in the wilderness, sleeping on the trails of the animals they now write of-watching their movements by day, listening to their calls by night, and, after the fatal bullet has done its work, dissecting and studying the structure of the bodies of their victims on their native heath.

But this book is not designed to interest the sportsman alone. While it does not assume to be a strictly scientific work, yet the professional naturalist will find much in it, not only to interest, but to instruct, him. The natural history of an animal does not consist alone of his bones. As showing a record of the past, these contain the only reliable data to tell us of the animals that lived long ago, and to identify genera and classes of existing fauna; but, at present, other parts of the animal deserve our attention as well. He consists of flesh and blood, as well as of bones, and can not be thoroughly understood without a careful study of all these constituent parts.

From a scientific point of view, the osteology of an animal is undoubtedly of prime importance; but in a practical, utilitarian consideration, the broader field of general morphology, and especially of myology, is of equal and even greater impcrtance, while the psychology which is developed in various animals, in some respects, interests us most of all. Nature has endowed all animals with a certain measure of mental capacities, and these constitute a part of their beings. So they alike come within the domain of natural history.

None of these are beneath the study of the scientists. While the component parts of the dead animal may be
studied with the aid of the dissecting knife, other facilities are required for the proper study of the mental endowments of the animal, and for this, observatiuns of the animal in life are indispansable. Here, then, especially may the natnralist find many yaluable lessons in the several papers collected and given ta the world in this volume. The hunter alone has complete opportunity to study the habits, characteristics, and capabilities of the animals which he pursues. He observes and studies carefully the sagacity and cunning of the Fox, the Wolf, and many other animals, in securing a supply of food or in avoiding danger, showing capabilities with which they are endowed for their wellbeing. In the American Antelope, for instance, he sees a curiosity manffested which often leads it to destruction.

The sportsman, I say, studies and observes all these characteristics, not alone because they interest him and furnish him food for thought while on the hunt and for discussion by the camp-fire, but because he is aware that he must know all the resources of the game in order to hunt it successfully.

I repeat, therefore, that he who would scientifically study natural history, will find much in the papers, written by these skillful, practical hunters, and given to the world in this volume, to aid him to a full understanding of this vast subject, for which he might look in vain elsewhere.

And, then, what an array of subjects is here presented for study! Every species of Big Game inlabiting this continentis here served up; and several species that do not strictly come within that classification are treated, because they occasionally afford spert or incident to the hunter when in search of other animals. Among the most important papers are those on the Buffalo-now, alas! practically extinct-in its wild state; those on the Polar Bear and the Musk-ox, furnished by survivors of the memorable Greely Arctic Expedition, who hunted and subsisted largely on these and other wild animals while battling with icebergi, starvation, and death in the frozen North. The Rocky Mountain Goat, that mysterious and little-known habitant
of the snowy cliffs, is written of by a man who has lived half a life-time beneath the shadows of its Alpine home, and who has probably killed more goats than any other man, living or dead.

Then there is a most interesting and valuable chapter on the Peccary, or Mexican Wild Hog-an animal that few Northern sportsmen have ever seen, and yet one that swarms in certain portions of Arizona, Texas, and our sister Republic. Its habits, habitat, and range are accurately described, and thrilling accounts are given of several hunting expeditions after this animal, in which large numbers of them were killed.

We all have read many articles descriptive of Moosehunting in Maine and Canada, but here is a novelty. Mr. Hibbs has given us a paper on Moose-hunting in the Rocky Mountains, embellished with valuable notes as to the habits of the great ruminant, under its rugged environment, and with such thrilling episodes and adventures in hunting it as could only have been experienced in that strange and picturesque land.
"Sillalicum" has given us a study of the Cougar, and Nattrass one of the Lynx, never before equaled by any writers, and which could not have been produced by other than the enthusiastic hunters and naturalists that they are.

Mr. Lett's paper on the Caribou throws much new light on the habits and character of that strange denizen of the great northern wilderness. He has lived half a lifetime in its woodland home, and has had exceptional opportunities for studying it in its wild state.

Mr. Cooper contributes the most complete and comperehensive monograph of the Wolverine that has ever been written. He has lived in the various portions of the country which it inhabits, for twenty-five years, and, in addition to his own experience with it, gives many incldents and anecdotes collected from other hunters and trappers. His paper comprises over seven thousand words, and will prove of inestimable value to all who wish to learn the true life history of this, heretofore, little known animal.
o has lived e home, and other man, e chapter on nal that few et one that and our sise accurately everal huntrge numbers ve of Mooseovelty. Mr. in the Rocky to the habits ronment, and n hunting it strange and

Cougar, and aled by any ced by other that they are. tch new light enizen of the If a life-time al opportuni-
and comprehas ever been rtions of the rears, and, in s many inciers and trapnd words, and $a$ to learn the wn animal.

There are many other names and subjects that I should like to speak of in detail, but time and space forbid.

The editor of this work has not overlooked the fact that this is preëminently a practical age-an age of objectteaching. He has, therefore, illustrated his book in a way that he and his contributors may justly feel proud of.

Altogether, there is given here such a study of the natural history of our game quadrupeds, and of the thrilling incidents encountered in hunting them, as has never before been offered to the reading world. Each chapter in this book is in itself a complete work, and the book, as a whole, is a most valuable library.

Any one of the names on Mr. Shields' list of centributors should insure the sale of an entire edition of his hook, and when we multiply this possibility by twenty-six, the whole number of names on his title-page, the result obtained indicates the magnitude of the success that should, and that we hope will, crown his labors and those of his collaborateurs.

## BIG GAME OF NORTH AMERICA.

## MOOSE-HUNTING IN THE ROCKY MOUNTAINS.

By Newton Hibbs (" Roxey Newton").

Where echoes sleep in deepest forest shade, Where legend says the chleftain slew his bride, And airy phantoms float from side to side, The monarch of the mountain ranges made His home. In coat of sombre hue arrayed, With ejes of liquid, beauteous brown, and wide, He stood supreme, a king of power and pride. From beaten paths a sturdy hunter strayed Througin siient, shadow-haunted, ancient wood; And near the lair he came. An antlered head Was raised, the air was sniffed, and then the sound Of heavy hoofs was heard. He stamped-he stocd In stupld awe. A crash! The monster, dead, The hunter's prize, lay weltering on the ground.

flanayN his far western habitat, the Moose usually lives higher up the mountain-sides than either the Elk or the Deer, though on some parts of the western slope of the Rockies he is migratory, and changes his abodo as the seasons cbange. In summer, he is found only in the little parks at the sources of creeks, as near the summits of the snow-clad rauges as he can find the peculiar foliage plants suited to his fastidious taste. He will seek the food he likes best, even at the risk of his life. Shy and wary as he is, he has been known to defy men and dogs in order to spend an hour on the borders of a swamp where grew water-lilies and other herbs and plants on which he was wont to feed.

On one occasion, a party of hay-makers were camped on a prairie, near a lake, high up in the Bitter Root Mountains, fourteen miles from the timber. A lone bull Moose was seen to pass near the workmen, and between the wagons and the kitchen tent. His trail was within thirty yards of the fire that blazed up and sent its curling smoke 2
heavenward, yet he passed slowly along, regardless of scents or noises. The mowers were running with their clatter, and some of them were near enough to observe his movements plainly.

At first, the ungainly beast was believed to be some prospector's poor mule seeking water, and then returning, alone, tc a probable owner, who was believed to be digging in the gulches above. Day after day the black object came down the mountain with stately tread, and with clock-like regularity. After a week, one of the boys chanced to be in camp while his companions toiled in the hay, and was aroused from his imagined illness by the approach of the Moose to the very camp. There were guns enough in the tent to resist a formidable Indian attack, if properly handled, but the surprised hay-pitcher rushed out with a pitchfork to battle with the Moose. The broad-antlered monarch, however, had no desire to cultivate the acquaintance of the sick man, and, with the great speed of his swinging trot, passed on, never swerving from the wellworn trail that he had traveled, perlaps, for years.

On returning to camp, I was slow to believe the invalid's story; but he insisted, and reiterated, and I was at last convinced. The need of meat and the love of sport combined were sufficient to send me even in pursuit of a forlorn hope; so, exchanging the pitchfork for the rifle, I started toward the supposed feeding-ground of the great deer.

It was in September, 1883. The season was dry, and in that country there were no swamps, even in the timber, on or near the summit of the range, as is usual at the head of water-courses; so I thought it not improbable that a Moose might seek the lake for a feeding-ground. I approached it cautiously, and began to skirt the bank, with eyes and ears strained for the faintest evidences of game. After an hour of hard work, wading and creeping through willows, around and about the arms and sloughs which crept ont here and there from the main body of the lake, I saw a dark object above the flags, or cat-tails, about four hundred yards away. I knew at once it was the game I was in search of; but it
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be some returning, pe digging ject came clock-like ced to be , and was ch of the gh in the properly put with a d-antlered acquainteed of his the wellrs.
e invalid's t last con; combined lorn hope; ed toward
ry, and in timber, on le head of it a Moose roached it s and ears er an hour xs , around here and ark object urds away. of; but it
was too far away for a sure shot, and how to get nearer-a little nearer, at least-was the puzzle I must solve.

I had learned well the lesson of the cunning of the animal I mnst outwit. Even if he had been bold on the trail, in his run of fourteen miles for a feed upon his favorite lily-pads, he would now start at the snap of a twig, or the first breath of air that came to him from me, or even from the tracks I had left behind, and would soon put miles of prairie between himself and me. There was a stretch of open deep water between my cover and the game. To pass that would be impossible, and to skirt the lake, through the willows, offered the danger of a noisy course. I knew his quick ear wonld never fail to catch the least sound, so I went back to the open, beyond the fringe of brush, and traveled a mile through them. Then I was compelled to guess, without guides, the location of the cluster of flags, in which I had last seen the Moose. I came up to the point, creeping like the Panther that seeks a vantage-ground from which to spring upon the Fawn, to the edge of the cat-tails. They were dense, and higher than my head.

I proceeded, I thought, as noiselessly as the snow falls, and with more caution than I ever possessed before or since. I parted the yielding cover, and the open lake was revealed to me. I knew that was the spot, right before me, where the great brute was feeding when I last saw him. Yes; the water was still muddy and disturbed where he had been wading; but the Moose was gone! He had stolen away silently, but swiftly and surely. Had there been in that spot any other living animal, my skill and determined effort would have surprised it; but the Moose had fairly outwitted me.

Then, the next thought was that the great fleet creature would lie himself to yonder dense wood, whence he came two hours before. To do so, ne must run over an open prairie fourteen miles wide, and could not avoid being seen, at least. I looked in vain, however, ard satisfied myself that he had not yet left the willows and weeds that bordered the lake.

I summoned the boys from the prairie-grass meadow, and they tried to drive him out for me; but all the noise and diligent search they and I made failed to rouse the Moose from his hastily chosen lair in or about the lake. He knew the sitnation, and was master of it; he simply defied us. The noisy hay-pitchers returned to work, and I, jeered and ridiculed by them, walked sadly back to the tent, too much abashed to be able to convince them that I had really seen a Moose; yet the next day the same dark object passed the trail that threads the prairie from the mountain to the lake.

I hastened to the scene of my former disappointment, and walked upright to within forty yards of the Moose, as he stood crunching the root of a lily. I fired, and the plunging of that great beast in three feet of water was like the explosion of a submarine torpedo. He stopped after a few jumps, and stood broadside again. I fired again, when he pitched heavily forward, dead-shot through the heart-and floated out from shore, propelled by his insensible struggles.

This Moose was about four years old. He was black and glossy on his sides, while his back was yet brown with coarse tatters of his last winter's coat. His horns were clean, white, and new-ready for the warfare of the approaching mating-season. He was fat, and would have weighed, dressed, about seven hundred and fifty pounds.

My companions now apologized for their skepticism of the day before, and congratulated me on my skill and good fortune. Some of them even went so far as to say that they knew all the time the Moose was in there, for I never made a mistake in matters pertaining to game, but that they simply wanted to have some fun with me.

Judge Caton, in his grand work, "The Antelope and Deer of America," accurately describes this great mammal in these words:

Largest of all the Deer' family, and most ungainly in form. Head long and narrow; eyes small and sunken; uose long and flexible, and covered with hairs, except a spot between the nostrils; ears very long and conrse; antlers
defied us. jeered and t, too much really seen ect passed tain to the pointment, e Moose, as $d$, and the water was Ie stopped fired again, hrough the $y$ his insen-
s black and brown with were clean, pproaching e weighed, epticism of 1 and good $y$ that they never made that they
telope and it mammal

(21)
large and spreading, broadly palmated with numerons sharp polnts; neck short and stout, and nearly horizontal, ligher at the withers than at the hips. Body short and round. Legs long and stont, fore legs the longest. Accessory hoofs large and loosely attached. No metatarsal gland. Tarsal gland inside the hock present, but snull, and covered with blaek reversed hair. Hair long, coarse, and ruther brittle; longest about the neek; color vurlant from black to brown and yellowish gray. Antlers wanting on the female, which is smalier than tho male, and lighter colored in winter.

The venison of the Moose is good, winter or summer. It is coarse-grained-even more so than that of the Elk-but possesses a flavor peculiarly its own. I have heard it pronounced musky in flavor, but the friends of the animalthe men who love to hunt it in its forest home-do not detect the musk. When, in midwinter, the Deer are too poor to eat, the mountaineer goes in search of Moose, which, owing to their great size and strength, can procure their food despite the deep snows and blizzards. He knows that the flesh of the great ruminant is dark and uninviting to the eye, but sweet and juicy to the palate.

The hump of the Buffalo is a delicacy widely celebrated among sportsmen. The Moose has a hump on his nose, and for a delicious morsel it excels any other meat dish I have ever had the pleasure of sampling. The Beaver's tail has many admirers, and the nose of the Moose resembles it in some ways, but is far better. I never knew any otlier verdict from those who had enjoyed a dinner with that best of game dishes as a meat course.

The Moose, the killing of which is described above, was devoted to the delectation of the deserving laborers in the hay-field, and was, without dissent, voted the best meat in the world. There is, however, I will admit, something in the air that surrounds a camp, far away from civilized homes, that fits the palate to the enjoyment of wild meat. This unaccountable peculiarity may be reason for the public to look upon the indorsements of sportsmen with a degree of allowance.

The head of the Moose was cooked in the best style of the hunter's art. It was coated with clay all over, by rubbing the sticky, putty-like substance into the coarse, long
points; neck an at the hips. st. Aceessory 1 ginnd Inside r. Hair long, from black to hich is smaller
nimmer. It e Elk-but eard it proe animal-ne-do not eer are too ose, which, e their food s that the ting to the
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hair, till it was inclosed, completely, in a case of mud two inches thick. I might remark that it was not particularly well dressed, after the manner of modern civilized butchers, but was coated and cooked with tongue intact. The process of removing the horns was an excuse for saving the brains as a separate dish for the complaining member of the company. You have all heard of the great dish of brains provided from the Moose. The writer who repeats that well-worn story never knew much, personally, about the Moose. He has either been deceived by the cook, and believed the "hump" was the brain, or he has written about that of which he saw nothing. The Moose has no more brains (in quantity) than the beef steer, but with that sweet meat from the hump a quantity could be prepared that would make the uninitiated think the head, horns, and all were filled with brains.

But to return. Our Moose-head was coated with clay. In the meantime, a hole was shoveled out, large as a porkbarrel, and was filled up with dry wood, which was made to burn like a furnace till the sides of the oven were almost white with heat. The head was dropped into the hole and covered with live coals of fire. Over : was thrown the loose dirt dug from the hole, and the Moose-head was left to roast till the next morning. We all retired, feeling like a child on Christmas eve who longs for the coming of Christmas morning.

When that head was lifted to the temporary table, after ten hours of roasting, it was steaming hot, and the aroma made us ravenous as wolves. The clay was baked like a brick, and when cracked and torn off it removed the skin, and left the clean, white, sweet meat exposed. The flavor of the juicy hump of the Moose I could not describe, but it had enriched every part of our roast with its deliciousness, and few such breakfasts have been eaten by hay-makers as we ate that morning.

It is not the custom of the resident hunters, in the Rocky Mountain region, to preserve the skins of Moose they kill, for these are of but little value. They are not
materially different from those of the Elk-coarse and porous when dressed for leather. They are used by the Indians, however, for saddle-bags and for tents. They aro heavy, and consequently regarded as worthless when the hunter has a long, rough journey before him. The antlers are heavy also, and even more cumbersome; but the average hunter takes pride in the careful preservation of them.

The largest pair of antlers I ever saw was taken from the head of a Moose that was killed in the Teton Basin, near the head of Snake River. When standing on the points, they encircled the tent door, and a man could walk under the arch by. slightly stooping. They measured, from tip to tip, eight and one-half feet. The monarch which carried them was a grand specimen of the ruminant division of the animal kingdom. His weight was never known, but, as he lay on his brisket, his withers were higher than any horse in the outtit. An ordinary man could barely. "chin" the Moose as he lay on the ground, as the horseman would express that simplest way of taking a measurement. He was "fifteen hands" high without his legs under him.

In the fall of 1884 , in company with a hunting party of three gentlemen from an Eastern city, I shot and wounded a two-year-old cow Moose, in a small lake in the Cour d'Alene Mountains. The ball passed through one shoulder, and, of course, disabled her; but any man would have been foolhardy to have approached her.

One of my companions had a well-trained dog, which was sent into the water to drive the Moose out of a clump of willows in which she concealed herself after being wounded. The dog swam to the little island, only to be driven back into the water. The enraged Moose followed, with lunges that were territic. 'The dog was a strong swimmer, but he could no more escape the mad Moose than if he had been chained. He was borne down, and would have been killed only for the depth of the water. As it was, he was well-nigh drowned, when a quick shot killed the cow, and thus made it possible for him to swim ashore.
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As it was, he killed the cow, ashore.

The coat of this Moose was almost black. Along the back, however, was a brown tinge, where the coat had begun to fade from exposure to the weather. The Moose, in his best form, is black; but I have never found one over two years old which did not carry some faded tufts of his old coat till his new coat became rusty from wear.

A hunter, whom I timidly dispnte, not because I do not know him to be wrong, but because his records of hunting. adventures are widely read, tells of killing Moose with a hand-ix, after running them down in the deep snow. This may have been done in Maine or Canada, but if so, it proves to my mind that the Moose there do not possess the same wild, savage, pugnacious natures as those found in the Rocky Mountains, for surely no sane man would dare to attack one of our vicious mountain Moose, singlehanded, with any weapon short of a repeating-rifte, and before doing that he should be sure that he can control his nerves perfectly in the face of danger. In one instance, some men attacked one of our wild bulls without a rifle, but it cost two of them their lives.

A few years ago, a party of river-men wounded a large Moose near the bank of Clear Whter River, in Idaho, and it took to the water. The eager, but unskilled, hunters rushed upon the wounded animal with a bateau. It was a large boat, and was manned by six strong and fearless men. They were either without a gun in the boat, or scorned to use one, but determined to kill the Moose with axes, cant-hooks, and other woodsman's implements. They bore down by the side of the swimming Moose, which was kept in the current by walls of rocks, and dealt him a blow. This interference made him more desperate, and he turned to fight. The men were brave, in a bateau that would stem the rapids of Clear Water River with a cargo of three tons aboard; so the rushed to the battle with shouts of defiance. The Moce struck the boat with his antlers, and raised it cle: : out of the water, turning it upside down so quickly that the men were all frightened and stunned, and two of them were either killed or drowned. The other four were
rescued by their companions on shore, after the Moose had been shot several times. These incidents convince me that a man can not successfully battle with a Western Moose hand to hand-at least, not in the water.

The question of the best rifle to use in hunting Moose can not be settled to the satisfaction of all hunters by any one writer, for there is a great diversity of opinion on the subject of guns. There are, however, some essential requirements that may be stated in general terms. The rifle, to give satisfaction to the Moose-hunter, or any other hunter of large game, must be accurate, effective, and capable of rapid manipulation. Hunters of long experience shoot mechanically, and not with conscious deliberation. For such marksmen no gun is like the old gun, worn and rusty from faithful service. To such veterans I raise my hat, but offer no advice. Their success makes them honorary sportsmen in every society, and also makes their word law with amateurs. There is, however, one maxim that no thinking man will dispute, and that is, that the new guns are better than the old ones, simply because modern riflemakers have profited by the experience of their predecessors. The improvements in rifles in the past few years, have been the greatest success of the scientific world. It is unnecessary to note here the steps in the evolution from the old flint-lock to the perfect repeater of to-day. This has all been gone over in other works. Being called upon to choose the best guii for Moose-hunting, my vote would be cast for the new Colt's Lightning Repeater, forty caliber, using sixty grains of powder and two hundred and sixty grains of lead, twenty-eight-inch barrel, ten pounds weight, and carrying ten shots. This gun I unhesitatingly pronounce the most perfect in balance, the safest from premature explosions, capable of the most rapid work; and the least apt to fail to fire when subjected to the test of heat and to the manipulations of unsteady hands. The arrangements for working the gun with the left hand, while the right hand and right shoulder support it, almost without disturbing the aim, is the most important advan-

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tage this gun has over any others that I have seen. It enables the operator to shoot more rapidly, when accuracy is considered, than the common lever-actions do.

With any of the new repeating-rifes, however, all that is needed to do good work is good judgment, a good eye, and a steady nerve. I do not believe in the heavy guns of large caliber. Even for a Grizzly Bear, I would use no larger than a forty caliber. This, however, is a disputed point. Men with more experience than I have had use the larger rifles.

It is generally admitted that the best place to shoot any big game is through the shoulders. The Buffalo-hunters discovered long ago that those large animals were most certainly secured by firing at their strong and bulky shoulders. With the Moose this is surely the best policy. Their shoulders are massive and their chests are very deep, so that there is danger of shooting too high. The advice of the most successful hunters, with whom I have associated, is to shoot low, and well forward. A bullet through the lungs is nearly as effective as one through the heart. This rule should govern in shooting Deer, Bears, and all other large game.

In the winter of 1884, I established a camp in the Teton Basin, at that time an unsettled region. The high, timbered Teton Range of mountains was, and is yet, well stocked with game, and the wild meadows of the basin afforded then, but not now, excellent winter range for Moose, Elk, and Deer. In the fall, the Deer came to the low lands with the first snow; the Elk followed them as soon as the depth was increased to two feet or more; and then the Moose would come when the crist formed on the snow in the mountains.

The Moose is as thoroughly at home in soft snow as lie is in the water; but when the heavy crusts form, he retreate, and seeks more favorable feeding-grounds. My cabin was the first landmark of civilization i.s that now thickly settled valley. We had killed Deer, in season, till we were supplied with meat to last all winter. Then came the Elk, and
they were so tempting that we were moved to go in search of the first that appeared. We killed two of the choicest to be found. This meat, too, we placed in our larder, for the sake of variety.

A month later, Moose were reported, by one of the trappers, to be plentiful half a mile up the creek. The story he told of the great, shaggy beasts filled us with the spirit of the chase. We must have a Moose's nose. No other article of diet that we could think of possessed such charm fr our party, just then, as the Moose's nose; and a Moose's nose we must have. The snow was only about a foot deep, so we tramped out along the trails, in the old-fashioned way, for it still-hunt. To our surprise, we found the game very plentiful, and as tame, almost, as domestic cattle. They evidently had taken possession of the winter range that had been theirs exclusively for ages, and seemed undisturbed by i.trusion.

The tirst Moose encountered was a cow. She wore a shaggy, faded coat and a sickly look, so we did not kill her. She moved lifelessly, like a poor domestic cow. She moped about, and secluded herself in the willows where she hatd been browsing. We consulted, and decided that she must be sick; but imagine our surprise when the next one, a bull, was discovered trying to conceal himself in a clump of willows.

We were all so near together that each waited for the other to propose the manner of attack; so one of the boys, being inexperienced and noted for his bad marksmanship, was detailed to shoot the poor old bull, some of the mor generots sportsmen declaring themselves too kindhearted to shoot a sick animal. At the crack of the boy's rifle, the great, rough-coated mountain-monarch reeled and, with a groan that was half a cry of agony, fell heavily to the ground. He was found to be in fine condition for the winter season.

We feasted on hump, and discussed the peculiar action of the game we saw that day, until far into the night; they were so different from the sly animals we had hunted in
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other seasons, and amid different surroundings. We afterward noted, however, that the Moose, when driven from his timbered mountain home to the valleys, where he remained a few weeks, seemed to leave his shyness behind. This characteristic has been noted several times since. There were forty Moose counted near our cabin that winter On one occasion, a bull Moose passed throush Rexburg, Idinho, a town of considerable size. He went on through Elgin and other thickly settled neighborhoods. He was followed by more than one hundred men, and killed without more than the trouble necessary to butcher a beef steer.

My conclusions are, from these seemingly contradictory traits of this animal, that he loses, to a great degree, the sense of fear upon changing from the familiar haunts, where he passes the greater part of his life, in the solitude of the forest, to the scenes so different in the valleys, where the marches of hunger enforce a temporary sojourn. During the winter that I was the only householder in the Teton Basin, the Moose became so familiar with the surroundings that they passed around the house at night so closely that we could hear them tramping in the snow, and their fresh tracks were seen every morning within easy gunshot range of the house. They became so tame that the trappers often encountered them in their morning rounds, and they made no effort to escape.

They were feeding on the dry grass and willows along the little river. They would wade in the water where it splashed over the rocks and did not freeze, in search of the sprigs of green water-plants and strings of moss that trailed in the water below the submerged rocks. The Moose would wade about when the cold wind blew, and icicles would hang from their coarse, long hair in great white spears. It is the delight of the Moose to paddle in the water even in winter.

One of our trappers, while time rested heavily on his hands, in our camp on the leton River, decided to try to catch a Moose in a snare. He provided himself with a one and a quarter inch manilla rope, and solected a trail a
hundred yards from the house as the place to make the experiment. The rope was securely fastened to a cottonwood tree, and the noose was hung from small willows, directly over the well-tramped trail, at such a height as to allow the Moose to pass his head through and at the same time to carry the lower part of the noose forward above his knees till it caught him securely around the neck. The first night rewarded the lucky trapper, inasmuch as the success of his scheme was demonstrated. His work was well done, but the game was too strong for the trap. The rope, which would have held the strongest team of horses, on a dead pull, was snanped by the Moose, and the frightened beast ran over hills and plains, dragging the rope after him. The mark it made was seen up and down the valley, wherever the trappers went, for a month. The Moose, in his rounds of feeding, dragged the long rope through the water and through the snow in turns, till it became a rope of ice that made a track in the snow as if he were dragging a log. It must have been a great burden for the Moose to pull around, yet all winter the track was seen, where it crossed and recrossed the Teton Basin. How the poor brute ever got rid of his trade-mark, or whether he is still wearing it, no one knows. It was a new rope, and would last him for years if not unloaded by some lucky chance.

The Clear Water River has its source in the heavy forests of the Bitter Root Range of mountains, and its many tributaries drain the best feeding-grounds for the Moose to be found in any part of our country. The gold-hunters, in their excursions, pass through the silent wilderness, but they go and come without disturbing the game. So rugged are the rocky cañons of these mountains that hunters seldom penetrate to the region of the lakes along the summit, and the Moose breed there year after year in comparative safety. From these game-preserves the. Moose never migrate in winter in herds, as they do from the more barren regions farther south. There are no little valleys to invite stttlement high up in the Bitter Root Range, so the encroachments are not so destructive to the game in these

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northern ranges as they are near the National Park and in the fertile valleys of the Snake River. It is upon the tribntaries of Clear Water River that the sportsman, ten years hence, may expect to find Moose in numbers that will insure good sport to reward endurance and patience. Any man who can lay claim to the name of sportsman can reasonably expect to find a Moose in two or three days of still hunting in the Clear Water region, either now or ten years from this date. The Moose supply in that wilderness will be practically inexhaustible-as much so, at least, as in the forests of Maine.

The best season for Moose-hunting in the mountains of the Far West is October and November. The first snowfall, on the mountains, may be expected in November, and if the hunter is not discouraged by the hardships $s$ re to come with the first storms of winter, he would do well to take advantage of that season, as that, too, is about the time the bulls go forth to battle for the favors of the females. This is the season in which the native hunters, in the northeastern woods, are said to use the birch-bark horn with such terrible results to the unsuspecting g.me. The horn has never been used in the Rocky Mountains, to my knowledge, and I have never heard any such noise here as is attributed to the Moose in the woods of Maine and Canada. The cow Moose, I have reason to believe, never utters a cry of any kind, here, and the bull of our region simply whistles, like the Elk and Deer. I have often heard ther: make their challenges and utter their calls, but it was simpiy a whistle, such as a boy might make by blowing between his fingers, though coarser, and not prolonged or repeated.

My first experience with the call of the Moose was on the Upper Clear Water River, ten years ago. I was in camp in the dense cedar forests of that great wilderness, and was not expecting to see large game. I thought the whistle which echoed from the cañon, a quarter of a mile away, was the challenge of a black-tailed buck, and I went out to meet him with an antiquated Henry rifle of the lightly charged pattern. The gun was old, as well as lightly
charged, and was kept coated with dnst and rough with rust by the owner, who did not know that better guns had been made in later times. I went forth to secure venison, uncertain as I was of the accuracy of the sights, as well as of the powers of the rifle's execution, and, half in a spirit of experiment, blew upon my hands as I had learned to do when a boy, after I had failed to locate the game just where $I$ expected to find it.

To my surprise, I heard the crackling of the brush within gunshot, the animal that caused it coming nearer. "I will kill the Deer," I thought, and was soon in position, with the approaches well guarded. Sure enough, a dark form passed in view, but it : as too large and too dark for a Deer. "It is a mule," I thought; but no! his gleaming antlers appeared in full view. I knew the stranger then, but was undetermined what to do. It was folly to shoot so far at a Moose with that little old pop-gun, so I waited. The Moose came blindly on, sniffing the air and beating the brush with his wide-spread antlers, as if enraged and ready for battle.

He came within thirty yards, standing with his great, bulky form above a $\log$ which lay between us. He stood stock-still, as if listening, and I feared he would hear my heart beat; but I controlled myself, drew a steady bead with the coarse sight on the butt of his ear, and fired. The bullet penetrated his brain; he dropped like a beef, and was dead when I reached him.

This Moose came at the call, but I believe he would have come at any other signal just as promptly. In fact, I have since heard of a bull Moose approaching camp apparently in response to the bray of a mule. These beasts are full of fight when they are on these excursions, and they would almost fight a buzz-saw if it came in their way. I offen these suggestions in explanation of the success attending the use of the birch-bark horn. The Moose approaches the source of the noise in a fit of rage at the intrusion, not knowing or caring what or who it is, and not because he is deceived, nor jet because the noise of the horn is an imitation of the Moose language.

The cow Moose does not grow bold like the bull who is so ready to battle for her in the fall of the year. Furthermore, it is only during one short month that the autlered monarch of the woods is brave to defend his mate. After the rutting-season he abandons the cows, and, in company with other bulls as sullen and ungainly as himself, retires to the most secluded lairs, and there skulks in cowardice -afraid of his own shadow.

All winter long the bulls are found in pairs or in herds, with no cows or young about. They remain separated till the calves are well grown and are able to run from danger by the side of the mother.

While the young are small, they do not depend upon flight to escape an enemy. They are effectively guarded from beasts of prey by the mother. She will drive Wolves, Bears, and Mountain Lions in disorder from the field. When a man approaches the secluded bedding-ground, the mother silently steals away. She leaves the helpless young to hide in the ferns or chaparral; and well it hides, too. At the signal of the departing mother Moose, who caresses it with her nose, and may be breathes her "God bless you " in its ear, the little creature becomes, in looks, a part of its surroundings, and the hunter might step over it as a lifeless, moss-covered stone or piece of wood.

In 1885, I spent the month of June on the St. Joseph River, in the Cœur d'Alene Mountains, and I had there an experience with a young Moose which might be of interest to sportsmen. It is a beantiful country for a hunter to spend the summer in. There are great forests, dark and cool with shade; there are lakes and streams alive with mountain trout; and there are Deer, Bears, Elk, and Moose in numbers to make glad the heart of the most sordid plodder. An English gentleman, with enthusiasm and cash, filled me with the desire to find a Moose in the velvet and in the gloss of a summer coat. We procured a camp outfit, and sought the head-waters of the little St. Joseph River. There we found a great park of giant pines, the ground beneath all carpeted with soft ferns and velvety moss. The
sun had no power to darken the pale-green ferns, and the wind never blew to tangle the slender fronds. The moist ground was untracked, except by the cautious feet of the wild creatures of the woods, and all was silent, as if no echoes slumbered in those bowers. We spread our camp on the soft, sweet floor of the green-canopied and treestudded home of the gods, and rested. Rich was the peace of solitude for a night.

In the morning we were longing for adventure, like restless spirits in a new world, and went forth commissioned to explore and to conquer the denizens of that Arcadian-like land of summer loveliness. We tramped far, far through an outstretched, unchanged expanse of forest, without satisfactory results as to the finding of big game. There were dozens of that species of grouse known as the fool hen, with its staring red eyes and stupid habit of sitting like a bronze image on limbs and logs, even within reach of our hands. There were other wonders for the appreciative Englishman to admire, but he was determined to see a live Moose in its native haunts, and nothing less would satisfy his longing.

Finally, when he was separated from me about a quarter of a mile, I heard his deep voice in tones of agitation. I hastened to his aid, and found him standing with gun presented, a model for an artist, demanding an answer to his unintelligible "What is it?" He was pointing into a tangle of ferns near his feet, that was as dense as the rank clover in a rich meadow.

I, as with an echo, answered, "What is it ?" when by his side I saw a crouching little animal, with glossy brown coat, lying low and still as a frightened fawn. We could not at first determine what it was, but its innocent eyes stayed our hands before we pulled the trigger. No, we could not shoot the crouching, beautiful creature.
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"Ah," said the athletic foreign sportsman, "I will "capture the bloody thing!" and handing his rifle to me, he uses'cufluze "caprang upon it like a lion upon a lamb. A cry went up and echoed through the trees, plaintive, like the voice of
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a child in distress. It was not coarse, like the bleat of a calf, but seemed to have a softer and more pathetic tone, suggestive of humanity. Its struggles were vain in the arms of its captor. It was being subdued rapidly, when a rush was heard, and the mother Moose appeared with a fury that made us sick at heart. The mad beast was surprised, however, at the manner of foe she encountered, and she stopped in trembling doubt before rushing to battle in defense of her pleading offspring. In self-defense, I shot the old Moose dead in her tracks, and felt guilty as of a crime a moment later.

We retained the calf captive. Our pet was brown in color, with a tinge of rust along the back and down halfway on the sides. The parts of the body less exposed to the weather were nearly black, and reflected a silky glossiness. The color, as a whole, was not pleasing. Like all the other Moose I have seen, it had the dingy look of a partly faded coat. It was as large as a month-old calf. Its head was large, and had the appearance of being too heavy for its long neck; and its nose had a well-developed, ungainly lump. Its head and ears were decidedly mulish in appearance. Its legs, especially the hind legs, were long, and did duty with a drag of tardiness; but the hind legs seemed to furnish nearly all the motive power. It would stand sometimes on its hind legs, like a Kangaroo, and look about, and bleat in that pitiful, half-human tone, which often caused us to regret that we had not left it with its mother.

It was restless, and seemed to be untamable. We detained it by building a pen so designed as to guard against injury to its tender body, bit it literally "beat against the bars" every moment of its captivity. We hastened out of the mountains with it to a ranch, and procured milk for it. There we arranged a good stable, and gave it tender care; but it kept up its fretting ways. It would walk from one end of its stall to the other continually, never resting and never sleeping, to our knowledge. At each end of the inclosure it would rise up on its hind legs and bleat, and then turn about to repeat the same dis-
tressing action and pitiful cry at the other extremity of its prison. It lived two weeks, and died of a broken heart. The sorrowing Englishman gave it a burial in a pretty, shady place, such as he thought it longed for in life.

Near the northern boundary of Idaho is what is known as the Lake Region. Within a radius of seven miles may be seen fourteen weantiful tarns, evey one the reserve source of a rushing, mad, mountain river, which has a deep, rocky cañon for a bed, leading ultimately to the same destina-tion-to the great wide and winding Columbia, that redeems a broad desert and finds rest in the sea. Near these lakes is a wilderness that gives the Moose the solitude and shelter he loves, and fine groves of deciduous trees to feed upon, when water-plants are locked in winter's keeping.

The Moose in the Lake Region of Idaho do not seek the valleys in winter. Here, as in Canada, they form yards, and beat down the snow in the quaking aspen groves. They have never been hunted there in winter, to my knowledge, the Indians preferring to subsist on the meat of the Elk and Deer, which are found not so remote from their valley homes.

The Indian is not an epicure. He enjoys most the food that is easiest to secure. Any flesh is meat for an Indian's larder, the only fear he feels being that he may not get enough of it.

In the winter of 1885, I crossed a mountain divide, from a mining-camp near Cour d'Alene Lake, in search of a Moose. I went alone, as no other idle man in camp was willing to climb a mountain, on snow-shoes, that would require a circuitous run of seven miles to gain the summit The snow was only about fifteen inches deep, and the mild weather warranted the belief that a Moose would be fat and the best of fresh meat. In fact, like other lovers of the chase, I was prolific of arguments that convinced me that I should go a-hunting; and a-hunting I did go. When, after five hours of hard labor, I gained the bleak summit, a cutting wind cooled my enthusiasm. I shuddered at the horrors of a winter blizzard nine thousand
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feet above the sea. I could now turn one way and reach the camp again in an hour, or I conld turn the other, face the gale, and probably find a Moose.

I decided to coutinue the hunt. The high mountain where I stood was without timber, but ou the little plateau a mile a a way was a dense growth of willows and small quaking aspen trees. It was an ideal wintering-ground for a Moose. I could risk a run of a mile or two, even in a blizzard; so I took a cautious turn through the wind-tossed and sighing, leatless little trees. One mile, then two, were covered, and no game to encourage me; but just as I passed the point I had fixed for the place to turn back, I found a Moose-trail.

Of course, I knew the next depression and the next clump of bushes was the hiding-place of the game; so I sped on and on. At last I routed a lone Moose, and the direction he took was favorable to my early return to camp should I choose to abandon the chase. After a turn over the bleak divide, I saw the animal going on that deceptive swinging trot, but he was making for the low land and the river. There was a favorable incline for a snow-shoe run that no horse could equal for speed. I was confident that I conld run near enough to shoot the Moose, even if the snow was not deep enough to interfere with his Mand S. gait. I was successful in cutting off lis course toward the woods and in turning him down the hill.

I nerved myself for al terrific run, and determined, if possible, to approach near enough to shoot the big brute while at full speed. The mark was large, and I was armed with a good repeating-rifle. In ten seconds I could shoot four or five bullets into vital parts of such a large animal. I nade the run, with the wind against me, and after the greatest effort came up to the side of the frightened Moose, but, to my great consternation, found that I could not shoot. I could not even let go of my pole, for I was unable to stand, so the Moose gained the valley, and before I could steady myself to shoot he was far out of range. I do not believe a horse could have run as fast as that Moose ran across that valley to the timber along the river.

I was too tired to return to camp that night, and fortune favored me to the extent that I was given shelter by a kindhearted Indian. I was fed on smoked fish and smoked venison, and slept in a bed of smoked skins; but fatigue and hunger give flavor to food, and make even an Indian's bunk a soft and sweet bed.

On Christmas-day, 1883, and during the following week, I had some thrilling experiences with Moose in the deep snow on the mountains at the head of Wurm River, one of the tributaries of the Snake, in Jdaho.

I had established a winter cump in that isolated but picturesque mountain region. The snow was four feet deep on Christmas-day, and soft and level as the grass in a meadow. Our meat-supply was reduced to a limited quantity of strong bacon, and that was incentive sufficient to hasten my movements to secure some fresh and choice roasts suited to the tastes of a hunter. Only a man accustomed to the snow-shoe would undertake an excursion over mountains and cañons with four feet of soft snow on the ground; but, with the experience of the mountaineer, no better conditions could be desired when Elk or Moose are the game to be hunted.

I wus out early, even in that hour when trees and rocks snap the most with frost and the full moon is palest and looks the coldest, just before the "sun-dogs" appear in the eust. A rifle swung lightly over my shoulder, held in place by a leather strap. My Norwegian snow-shoes cut the crisp, velvety, glistening carpet with the slightest "whish-whish" imaginable, and my speed was at least six miles an hour as I skirted the bald nountain at a slight descent.

On, on I went for five miles, and then turned to climb to the great White Pine Park, more than a thousand feet above. By the use of my pole, I made the winding ascent as fast as a man would walk on a good road on an lip-grade so steep. The mountain-side was barren of timber, with many walls of basaltic rocks standing up in impassable barriers, frowning and dark above the snow. Around these
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overhanging ledges I worked m:y way, tired and half-discouraged, to the green forest-line that crowned the cañon wall.

Having gained the summit, I found the park to be a beautiful level plateau, with large, straight pines, their smooth, limbless trunks standing like pilhars supporting an endless canopy of interlacing bonghs.

The grand oid trunks were so far apart that my progress was not impeded, and I made a rapid cruise in search of Moose-trails. I was not long in finding a deep road crossing the park in a line as straigbt as a railroad. I examined the well-beaten trail; and found fresh foot-prints, indicating that the game had gone in tl.~ direction that took them farther from the camp. I resolved to follow, and my speed for an hour would have done credit to a racer of record.

After the pines grew thinner, and I could sec the cañon off to the right, a slight descent and a turn around a moint of a rocky cliff brought me to a cove, thick with quaking aspen trees and brush. On these the Moose had been leeding, and the snow was tramped as on the feeding-ground of a hundred hungry cattle. They had twisted and broken down trees fifteen feet high. The split and broken limbs reminded me of the work of Bears in a berry-thicket. The Moose will walk upon a bush with his breast, and bend it down, eating all the twigs off as he passes over; and again, he will reach up and bend down a large limb with his nose. Over the bent limb he will throw one fore leg, and hold it, as with a hook, till it is carefully trimmed.

As I skirted the leatless thicket, I saw many evidences of the great strength of these beasts, of distinct and strange habits. I conld see where they had plowed through the snow in search of a broad-leafed plant that grew in the monntain swamp, which was then solid, haring frozen before the snow came. The Mi se had not attempted to remove the snow by pawing, as the Deer do, but had rooted about like hogs, or as they (the Moose) hunt for food under water. The snow, seeiningly, was not the least hindrance to them in their search for food on the ground.

Not a Moose could I see; not a sound could I hear. They lad evidently scented me before I entered the head of the gulch, and had silently stolen away. I found their fresh trails; they had separated, two and three going together in their flight. I estimated that not less than a dozen or fourteen had been feeding in the thicket and on the frozen swamp when the alarm was $i$ vell of my approact.

I singled ont the new-made trail the ilatated a flight in the direction of cump, and ctarted on a desperate run on the down-grade. The Moose will, when chased in deep snow, and especially if closely pressed, choose a course that gives him the advantage of gravitation, if there is an incline to be chosen. I shot through the trees at a reckless speed for at least five miles, but never sighted a Moose. They were breaking a new trail in the soft snow, and how they could cover a distance of five miles in so short a space of time was a mystery to me.

At the end of that straight run they turned up a ravine, and made for the top of the mountain again. These tactics surprised me; but I soon observed that they were fanced in by a wall of rocks to the left, and the up-hill course was the only means of escape from a pocket. Frof in i reasoned that the quarry was hard-pressed, and ; $u_{0} \cdot m$ : pole with energy for a long, tiresome climb. I knew, tifa, the game was far allead of me, but their course was towas 4 camp, with an assurance of a down-grade run.

So steep was the incline, that the speed I made on my snow-shoes was only limited by the fear of obstacles to be encountered. I was reckless, and I indulged in a terrific run, barely missing a crag here and a precipice there. Alas! I did not miss every obstruction. The new-made road I was keeping just below me, to the lef', twe thed thro,h a projecting ledge, at a sharp angle, : . narrow sot, and I plunged over the wall. I shot out into the air, atal $5 \cdot \mathrm{wn}$, down, with the mumentary horror of a nightmare! My speed hurled me into the soft snow, benumbed with fright, but without a bruise.
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I recovered my snow-shoes and my pole with lamentable loss of time. I rushed on, to fall again within two minutes. I slowed up, but in the excitement I repeated the acrobatic feat once more in a disagreeably short time. If I had not fallen, I would have surely killed the two Moose I had singled out; ior I came up to them, and was preparing to shoot, when I fell-the last and hardest fall of the day. After that the course was more level, but I was too nearly exhansted to regain my lost advantages. I had run those Moose at least fifteen miles, in snow four feet deep. They were tired, and I knew they were failing; but I was even more tired than they. By the time I lost confidence in my ability to run them down, I was very near camp, and I slowly poled myself along to the place of needed rest, presenting the aspect of a hungry, tired, and disappointed man.

The snow continued to fall for four days after the day of disappointment, the incidents of which are recorded ajove; and at the end of that time the little log cabin on the banks of Warm River was completely hidden from view, except the shack chimney and the sooty line that marked the direction of the wind and smoke.

The snow lay, soft and even, seven feet deep all over the mountains and valleys around. With an enthusiasm intensified by the demands of appetite, I renewed my effort" to comply with my contract to supply the camp with fresh meat. With a rifle that weighed nine and three-fourths pounds strapped on my shou'ders, and a very light dinner at my belt, I again buckled cony snow-shoes, again grasped the long, light prope!ling-pole, and again started in search of the great ruminants. The depth of snow, when one is fairly launched upon it, does not enter into account when snow-shoeing. On that occasion, the great carpet was unusually soft for so great a depth; but I was every way equipped for easy and rapid traveling. Around the pole I carried was a disk of rawhide, stretched upon a hoop like a drum-head, that prevented its sinking into the snow, and afforded a saving of propelling power.

I had learned, by former experience and observation, that as long as the snow remained soft the Moose were loath to leave the haunts where the quaking aspen and willow grew. In the region of Warm River they grow at the heads of the little spring branches; on the border of the parks in the high regions. I began the task, always laborious with snowshoes, of climbing the great, frownirg mountain.

As the engineer works out a switch-back for a railroad over a mountain summit, I wound my way up-how many hours 1 do not know; but after attaining an altitude of two thousand feet above the steaming river, I could look back at the black smoke from the cabin-fire, and-it seemed only a stone's throw away. Yet I was rejoiced, for the feedingground of the game was even then before me.

The furrows, broad and deep, partially filled with the snow-fall of a day, told plainly that the Moose had been there only the night before. They had wallowed about like hogs in a meadow; they had broken down the brittle, frozen bushes, and had left the deep-marked roads to lead me to the next grove, a half a mile over a low hill and through the pine park.

I moved silently, cautionsly, and swiftly-full of hope that I might surprise this shyest of game in its lair; bui: ... so doomed to disappointment, as I tied so often been before. As silently as I moved, over the most noiseless of courses, I found only the beds and fresh trails left, in a lhurried flight, by two large Moose. They had plunged into the depths, and had left a road such as a rotary snow-plow would leare-ten feet wide in places.

These beds were on the snow, packed and hard, in the way to allow them to hear and see to the best advantage, by supporting them as near the surface as possible. The coat they wear, of coarse, long hair, makes the best of wraps for a snow-bed, so that they suffer no hardsiips from cold or wet. From the evidences of hasty flight and speed, I judged that I must have been very near them when they started. Their plunging must have been desperate; but even on that still morning, and in a field suited for a
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fair view, I heard not a sound nor saw the least flurry of snow. I felt rejoiced, however, over the prospect of suocess in a run of a few miles, and bent to the chase with a will.

The deep, wide road they made led across the undulating pine park, and I followed at one side, straining my eyes to select the best track and to locate the game; but in a run of two miles, at fair speed, only the same new-made road and the same evidence of desperate flight rewarded me.

At the edge of the great pine forest, the course led, at a gradual descent, toward the river. My speed was accelerated to the limit of safety, but the two Moose had also the benefit of the down-hill course, so that it was not an easy task to run them down; but I soon saw them pass over a ridge, and knew they were failing. As they were going by that time in the direction of the camp, I felt the thrill of exultation that comes with the certainty of victory.

One rush down the smooth slope would bring me within range. My rifte was unslung and carried in my hand as I shot through the keen wind. Steadily I held my course, though it tried my nerve to guide my surging shoes, now around a curve, then past a projecting crag. I was within a hundred yards of the struggling quarry. They were steaming and puffing like overworked engines. They snorted blood from their noses, and stained the snow on either side of the trail they left, but their speed was unchecked.

My pole was dragging behind; I was steadying myself to fire, when the game turned to the left, around some overhauging rocks. The mountain was steep above, and the river was at a dizzy depth below. I was all eagerness to make a good shot, when, from neglecting to watch my conrse, 1 rushed upon an obstruction of rocks, and fell.

I was injured, but was on my shoes in a few seconds. Another run brought me up to the game, and only thirty feet above them. I fired at the great bull. He staggered, and kept on; but a ghastly line of blood on the trail told of the deadly effect of the shot. The second shot was aimed at the shoulder of the smaller Moose. He fell at the crack
of the rifle; but the other struggled on, bleeding, snorting, from a deadly shot through the lungs. I fired four shots into him before he fell. He had grown frenzied, rigid, and would not fall till I approached to within twenty feet and shot him just back of the ear. He plunged forward then, and buried himself in the snow.

I stood above the fallen monarch, stupid from exhaustion, and gave no further thought to the animal that I supposed lay dead four or five rods back. Suddenly I heard a loud snort and felt a rush from behind. As I dodged to one side, the Moose I had thonght dead charged upon me and fairly buried me in the snow. His rush carried him past me, but he turned and charged again before I recovered sufficiently to shoot; but his broken shculder failed him when he turned, and he tumbled down-hill so that he missed me when he charged the next time. As he came toward me again, his eyes were green and his body was all shaggy with bristles. I had, however, recovered my position and my nerve. My aim was true, and I placed a bullet fairly between his eyes.

Although the snow was seven feet deep, and this Moose, had a broken shoulder, it was more good fortune than any advantage I heit that saved ine from being cut to pieces by his feet. I am satisfied that no man can safely battle with a Western Moose, in any depth of snow, with any weapon other than a rifle, and a good one at that.

These Moose were both bulls. The smaller one had shed his antlers, but both were still in good condition, and our larder was enriched with a thousand pounds of the finest venison that the Rocky Mcuntains afford.

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## ELK-HUNTING IN THE OLYMPIC MOUNTAINS.

By W. A. Perry ("Shlalictm").

dONARCH of the wilderness! Lord of the mountain! King of the plain! What hunter, who has sought thee in thy pine-embowered home, whose heart-beat does not quicken and whose eye does not brighten at the mention of thy name! For with it comes the recollection of boundless prairies, grass-robed and Hower-decked; of pine-clad, snow-capped mountains; of sweet breezes, gentle inalodies, grand trophies. I once heard a dying Indian speak his last words, and they were these: "To-morrow, in the Spirit Land, again shall I chase the Wapiti.". Many a white hunter, unstained by the vices of society and the snares of civilization, hopes, as did the dying Indian, that, when he shall leave the camps of earth for those beyond the unknown sunset mountains, in the happy hunting-ground, he shall again chase the Wapiti.

Excepting the Moose, the Wapiti is the largest of all the Deer family, and was formerly found in nearly all parts of the United States, in Mexico, and in British America as far north as the sixtieth parallel of north latitude; but he has vanished before the approach of civilization, and is now found only in the remotest mountain fastnesses west of the Missouri River or in the great forests of British America. The largest herds now remaining, outside of the Yellowstone National Park, are fonnd in the Olynapic Mountains of Washington, and among the mountains of Vanconver Island, British Columbia. There are still many remaining in the Cascade and Rocky Ranges, but they do not congregate there in vast herds, as they do in the Coast Ranges.

The color of the Elk is: Head and neeck dark brown, the head a shade lighter than the neck; sides, back, and thighs cream-colored gray; under the belly, black; legs are sealbrown; on the rump is a large spot of white that extends down on either side of the tail, joining the white between the legs. This white spot is bordered with black on the lower edges. These shades, however, vary at different seasons, and on different individuals.

The Elk has a beantiful head, small and well-formed. The antlers are cylindrical, with tines long and slender. The pedicel, on which the antler rests, can be plainly seen on the calf at five months of age. This pedicel never appears through the skin in Elk of any age, and will vary in height from one to three inches in Elk of different ages. At one year of age, the antlers sprout from the base, and at eighteen months of age we have a spike-buck, an incipient bull Elk. These spikes sometimes grow to a length of thirty inches before the spike-buck is two years old. The spike-buck drops these horns, not as his elder brothers do, in the last of December or early part of January, but in March or April. He is proud of them, and after the old bucks have shed their horns, does not fail to remind them of the fact by goring them frequently. In traveling at such times, he assumes the old buck's place at the head of the column; and should the band be attacked by Wolves or Cougars, a circle is at once formed, with the spike-bucks around the outer edge, and a Congar or Wolf who makes the acquaintance of the young wartior will remember the introduction to the last day of his existence.

In the summer of the second year, the antlers develop two points, in the third three, in the fourth four, and in the fifth five. After this, it is impossible to estimate accurately the age of a bull Elk, as there is no further regularity in the occurrence of points. In some instances, there are more points on one antler than on the other.

The older bulls usuadly shed their horns in the last of December or the first half of Jannary. When the time comes to drop his horns, the bull leaves the herd, seeks a
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secluded thicket, and rubs his horns against a small tree until they drop off, when he at once rejoins the herd. The top of the pedicel, from which the antlers have been dropped, will sometimes show sores as large in circumference as a silver dollar. These spots, however, soon heal over, and the antlers sprout anew in March or April. About the middle of July they are in the velvet, when the bull again leava the herd, and seeks an open meadow on some lonely mountain-peak, where there are plenty of bushes. He then devotes much of his time in the morning to thrashing and rubbing the bushes with his antlers, there evidently being some microbe or insect in the velvet that irritates the animal. There is always plenty of blood to be found on such thrashing-grounds.

In the afternoon, when the sun is shining fiercely, the Elk will lie down in the open, exposing his antlers to its rays. Hunters call this hardening the horns. By the middle of August the horns are hardened and polished; then his Elkship leaves the bigher ranges of the mountains, declares war against all ,ther bull Elk, strides up and down the cañons and morntain-sides, and collects a harem of cows, over which he rules with Turk-like severity, unless deposed by some stronger and more formidable beast of his kind. If so deposed, he loses no time, but starts at once in search of another harem, that is, perhaps, ruled over by a weaker Elk than himself. A battle royal now takes place, and if victorious, the roamer is ruler once more; if not, he continues his search for a weaker potentate whom he can dethrone.

In May, the Elk leave the foot-hills, and seek the higher ranges of mountains, going as near the snow-line as possible, and yet not so high as to be beyond the timber-line. The cows leave the herd, and seek tangled thickets, where the calves are dropped. The cow is a tender and affectionate mother, and is immensely proud of her graceful, spotted infant. She will fight for it to the death if need be. Should a Cougar or Bear appear, or a Wolf come prowling near, she will at once utter a loud call, stamp her
feet, and grind her teeth satvagely. At the sound of her cry, all the Elk in the vicinity (and the bulls at this time are never far away) come rushing in wild haste, and woe betide the intruder; for, although their horns are at this time but feeble weapons of offense or defense, their hoofs are sharp, and, surrounding the intruder, they leap upon and trample him to pieces. By a wise provision of Nature, the calves emit no seent to attract prowling carnivora, and so such attacks are not frequent.

Should the cow be alarmed while feeding in company with the calf, she will at once stamp her foot, and the calf will drop to the ground and lie motionless. It will also "'possum," and should it be lifted in the arms of a human being, it will lie limp and motionless. Only the beautiful eye will betray it, as it forgets to shut its glistening orb, and so reveals the sham.

The cows rarely produce more than one calf, though occasionally two are dropped. The calves remain with the cows until four or five months old; then, in company with their mothers, they join the larger bands. During the rut-ting-season the calves remain with the cows. The cow Elk usually drops her first calf at two years of age.

The natural gait of the Elk is a walk. They trot or gallop when alarmed, but can not sustain the latter gait for any great length of time. During the rutting-season, or shortly before it begins, when traveling, the bulls are always in advance, the cows and fawns in the center, and the rear is brought up by the spike-bulls. No body of trained soldiers could move with more discipline or regularity than a herd of Elk. The band always acknowledges one leader, the largest and strongest bull in the herd. Should he be shot, the band falls into hopeless confusion, and rushes about like demented creatures. The Indian hunters, aware of this fact, will follow on the trail of a band day after day, often refusing good opportunities to slay other members of the band, until an opportunity is afforded of shooting the leader. When this is done, the remaining members of the band fall victims one by one.

Nothing is more interesting than to witness a battle between two old bull Elks. The challenger, when approaching a band, or harem, blows a loud whistle of defiance. (Take a half-pint bottle and blow strongly into it, and the somnd so produced will be similar to the call of the bull Elk during the rutting-season.) This whistle is at once answered by the ruler of the herd, who steps boldly forth to do battle with the intruder. With heads lowered between their fore feet, the two adversaries walk around waiting for an opening, and when one is thrown off lis guard, the other mokes a savage rush; but his opponent instantly regains, counters the charge, and as they rush together, the horns strike each other with such terrific force that the report can be heard for a long distance. Slowly retreating, bellowing, grumbling, and grinding their teeth in a paroxysm of rage, they again circle around, and when an opportunity is afforded, make another charge, which is countered as before. The challenging Elk usually does most of the offensive fighting until he finds (if such be the case) that he is the weaker; then he sullenly retires, bellowing as he goes. These battles are seldom fatal, and during rut-ting-season are an every-day occurrence. Ugly wounds often result from them, and sometimes a prong of an antler is broken in the affray.

There has been a great deal of controversy in the various sportsmen's papers concerning the relative size and weight of the Elk. On the Pacific Coast they grow large: than in the Rocky Mountain regions, and will average, for cows, about four hundred pounds; for bulls, about seven hundred. Of course there are exceptions to this. I have seen an Elk that would weigh at least eleven hundred pounds; but he was the Jumbo of his species, and would stand at least seventeen hands high, as they measure horses. The Elk is a deceiving animal in regard to weight. being short-bodied and having long legs.

For so kingly an appearing creature, the Elk is a very common feeder. He does not hanker, like his smaller brother, the Black-tailed Deer, for the potato-patch, the
clover-field, the springing wheat, or the bark of the appletrees that grow in ihe ranchman's fields or orchards. True, when in severe winters the deep snows that have fallen on the mountains drive herds of Elk down into the settled valleys, they frequently join the settler's cattle, and remain on good terms with the latter, but usually soon fall victims to the ranchman's riffe.

Their principal food consists of grasses, mosses, and lichens. In times of continued storms, they browse and keep fat for weeks on the boughs and bark of maple, alder, willow, and cottonwood trees; but if the snow is not too deep, they paw the ground bare, in order to I re grass, lichens, and mosses. In the spring, they follow sceding snows until they reach the higher mountain valleys-their summer quarters and breeding-grounds. Here the grass, nipped weekly by frosts, is sweet, and just to their taste.

No sight could be more interesting to the hunter-naturalist than to watch a herd of Elk feeding in one of these secluded mountain valleys. If there be a stream running through the valley, bordered by a sand-bar, the entire band makes this their sleeping-place; and the bands always assume the same position in sleeping-the calves, cows, and yearlings in the center, and the bucks around the outer edge of the circle, so that in case of a night attack by Wolves or Panthers the strongest will meet the first onset of the foe.

Unlike others of the Deer tribe, the Elk do not often feed at night, but are stirring with the earliest dawn. Nothing is so indescribably beautiful as the motion of the head of an Elk when grazing. It is the very poetry of motion spiritualized. When the band is feeding, the leader will, every few minutes, st $\cap$ p grazing, elevate his head, and scan the valley for signs of danger. They feed until abont eight o' clock in the movning, and then retire to their sandbar; or if it be in the time of rubbing the velvet from their horns, the bulls seek their thrashing-grounds, and rub their horns vigorously. Then they lie down on some open southern hill-side, and expose their horns to the rays of the sun.

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While resting in the middle of the day, they can be easily approached. About four o'clock in the afternuon, they leave the sand-bar, or sunning-ground, and again seek the meadow, where they graze until dusk, when they retire to the sand-bar for the night.

In winter, they gather in large bands, and are constantly on the move; while they may not travel out of a small valley, yet they are in motion, seeking food. At this time they develop very hog-like characteristics for so grand an animal. With them it is the universal rush of the stroug against the weak; and if the tiny calf of the band paws upa tender morsel of lichen, the grandest bull in the circle does not hesitate to drive her away and appropriate it himself.

The feeding-ground of a band of Elk, in winter, often resembles a farm-yard, the snow being trodden down, and packel as hard as ice, and the trees, if aspen, birch, or willow, have most of the bark eaten off. All the smaller branches within reach are eaten, the animals often standing on their hind legs in order to reach the highest.

A popular. method of hunting the Elk when he inhabited the great prairies was to run him on horseback. He is usually still-hunted in the forests and mountains, dogs leing but seldom used. The weapons used by the Indians were bows and arrows, spears, and guns. Since this noble game has been driven from the prairies, there remains only the still-hunt and the Indian method of waiting on runways, surrounding the band, and then driving them over some precipice.

In former days, when Elk were hunted on horseback, almosi anything in the shape of a gun (or large caliber pistol) was considered sufficient for the purpose, as the trained horse would bring the hunter so near that he could place his gun against the animal, and could hardly fail to bring it down; but in the mountains this condition of things is reversed, and in pursuing this game the very best arm obtainable should be used.

True, when compared with others of the Deer family, the Elk is easily killed. A shot that a Black-tailed Deer
would carry for several miles before lying down will lay an Elk out in one-third the distance. In winter, when there is a good tracking snow on the ground, a wounded Elk may be follower, though at a great expense of time and labor, and will sometimes be found in a place where it is almost impossible to secure the antlers or meat, as when wounded they will endeavor to reach the most inaccessible places.

In my opinion, the best arm for hunting the Elk is the Winchester, in the larger bores-40-82, 45-90, or, best of all, the new 110-300 Express. I have given this gun an exhaustive trial on large game, and do not hesitate to pronounce it the best rifle for big game hunting that hum:n ingenuity has yet produced. Light, strong, and rapid of manipulation, terrific in killing power, there is no animal on this continent that can escape from a cool, nervy man armed with one of ihese superb weapons. Some sportsmen object to the heavy recoil of this rifie, but a recoil that is uncomfortable when shooting at a target is never felt in the excitement of game-shooting, and it is evident, from my own experience, that a wonnd from one of these bullets leaves such a trail of bood that it can be followed over bare ground by the veriest novice.

The $40-82$ is a good substitute, when the Express ibullet is used. So is the $45-90$; but while they will do the work, I do not consider them as sure as the $110-300$. One of my hunting companions, a man who has killed more Deer and Elk than any man of my acquaintance, uses a 44 -celiber Winchester, Model'73. With him that gun was the only gun wort'’ owning until he tried my Express. Since then, when a difficult shot is to be made, when we are hunting together, he stands back, and calls me to use the "thunderbolt."

One disadvantage in using a common small-bore rifle is that, in moments of excitement, the novice frequently forgeis ic elevate his sights, and so frequently undershoots his quarry. With the Express, I find that it is almost pointblank up to two hundred yards, so that no changing of elevation is necessary.

The principal Indian method of huntirg the Elk, in the Olympic Range, is by Griving them over precipices. Selecting a well-known spot, on a well-traveled Elk-trail, they will lie in wait for weeks, until a band appears coming down the mountain. The place usually selected is one where the trail curves around some great rock, just at the edge of a precipice a hundred feet or moie in height. A scout, stationed high up the mountain, gives notice of the approach of a band, and then the Indians mass at the lower end of the curve, while others conceal themselves above the curve. As soon as the band passes these latter, they spring to their feet, rush down the trail, yelling and firing guns. The Indians at the lower end of the surve do the same, and the Elk, fiuding themselves surrounded, leap over the cliff and are crushed on the rocks below. The Siwash is lazy and cruel. Śometimes, after driving a large herd over a cliff, some of them will be found alive, near the Indians' camp, a week later, witi every limb shattered. It one time I expostulated with an Indian on this needless cruelty, when he replied: "Meat keeps better living than dead. When I want to eat him, I will kill him." In that case it was not the survival of the fittest, for the Wapiti is far the nobler animal of the two.

Many years ago, when the Elk were abundant on the plains, the favorite method employed by the Indians of hanting then was on horseback. When information was brought to an Indian village that a band of this favorite game had becr sighted, all wats exciterant, confusion, and eagerness. 'The List Euffalo-horses wre at once caught and saddleal, and the most expert hunters mounted on them. Like all other species of Cercida, Elk are prone to run in a circle when alarmed. Taking alvantage of this habit, the huaters would divides in two or three bodies, and would ride in different directions, always keeping to windward, until the band were partially surrounded.

Then one of the hunters who rode a fleet horse would be sent to startle the band. As wom as he appeared, the Elk would start off, on their long, sweeping trot, and
should there be a conical mound or hill in sight, would make for it. Reaching it, they would halt on its summit, and look back at the pursuer. No sooner would they catch sight of him, than off they would go again, sweeping down the hill with the same swift stride. When they reached the foot of the hill, a hunter would rise, like an apparition, out of some coulee, or clump of bushes; then, the terrified Elk would turn and run directly $u_{i}$ the hill again. The hunter who had chased them down would now turn and gallop up the hill and down the other side as fast as his horse could carry him, and at the foot of the hill he would hide in a clump of bushes, a ravine, or other cover.

Swiftly down the hill would sweep the Elk, with their seemingly untired stride, and, when near the foot, the apparition that had so terrified them on the other side would rise before them again; swiftly they would wheel and head up the hill again. Great spots of foam now clot their sides, and is wreathed about their mouths. The leader changes his sweeping trot to a lumbering gallop; the hunter in pursuit utters a ringing whoop, which is faintly echoed by hunters in the distance again and again.

Soon, mounted huntars are riding up the hill from every quarter. The lumbering gallop of the Elk grows slower and slower. Presently, the proud leader falls, pierced by an arrow or a ball; then, the band falls into confusion, and gallops aimlessly about in all directions

Nearer come the riders. So well do they sit in the saddle, that the horse and the rider seem to be one creature. They rush upon the doomed Elk. Then, the trained Buf-falo-horse selects his victim and gallops alongside. If a cow, the frightened animal hastens its speed; if a bull, he lowers his head between his fore feet, and charges his pursuer. His mad rush is, however, easily eluded by the trained horse, who leaps away, and in another second is ogain at the side of the panting Elk. The Indian places his gon at the Elk's brisket, and fires. If the victim does not drop instantly, he fires again; and the noble brute falls, dying, on the grass.

The horse continues his wild pursuit; the Indian, standing in his stirrups, drops a charge of powder, from a flask that hangs at his side, into each barrel.* Then, sinking into his saddle again, he takes from his mouth two oullets that fit loosely in the barrels. Now, raising the gun in his left hand as high as possibie, he strikes a heavy blow on the stock with his right, in order to settle the bullets in their places; then, cocking both barrels, he quickly places a cap on earh nipple, striking the gun another heavy blow in order to jar the powder into the nipples, and he is ready to slaughter another Elk, if all have not already fallen before the murderous guns and arrows of the other Indians.

This was the must exciting of all methods of hunting the Elk, and many an old hunter, who reads this sketch, will recall the wild scenes of the day when he rode on such an Elk-hunt, in company with the degraded, filthy, unprincipled Crees, whose only redeeming virtues were a good seat in the saddle and a brigl aye for game. May this reminiscence also bring back the l reery freshness of the boundless prairie, when the trembling hand that, perchance, is now weak and nerveless was strong and brawny; when the step that now falters was bonnding and elastic; when the eye that is now fading was as piercing as that of an eag!e in its searching gaze.

Still-hunting is now the most sportsman-like method of hunting the Elk. True, it lacks the wild delirium of excite-ment that is felt in madly galloping over a prairie with such noble game in sight, vainly endeavoriag to escape; for this was a sight that must send the life-blood bounding through every vein. Yet, the still-hunter, when he stands over the fallen monarch whom he has followed stealthily for many hours, when the match was cunning against cunning, when it was reason against instinct, now has ample cause to be prond of his work.

[^0]The Elk, though not so wary as the Black-tailed Deer, is far more difficult to approach than the Virginia Deer:" It has sharp scent, and unusually good eyesight; and, in stalking it, these facts should be remembered. If in level woods, work against the wind; when you stop, scan everything within the range oi your vision. Then, if you fail to see what you are in search of, look for a tree in line with you that is easy of approach; make for it as swiftly and noiselessly as possible. When you reach it, keep behind it and take a view, first on one side, then on the other. If you see nothing, select another tree in aúvance, and keep on as before; avoid springing on or over high logs.

If yon see the slightest motion, stop instantly; the Elk has a large, mule-like ear, that it is constantly moving during insect-time. When you see what you think to be the shador of a passing bird or a leaping squirrel, stop. If, after intently looking, you can not distinguish what it is, try and get another tree in range, and approach nearer. Look close to the ground; your Elk may be lying down. Cautiously approach still nearer. When you reach the spot, a covey of blue grouse rush into the air with a startling whir. Fooled, weren't you? No, you were not fooled; you did just as every experienced hunter would have done. Again you proceed just as before, dodging behind the trees, with the wind in your face. Soon you reach a pebbly brook. You lay your gundown, stretch yourself at full length, and imbibe; then you smack your lips. Never was wine so sweet. When you raise your head, an odor, subtle and sweet, greets your nostrils. It is the breath of the balsams; yet no balm from Araby conld be more grateful. What is that sound that comes sighing like the song of the sea? Nothing but the gentle breeze among the cedar and fir branches overhead.

As you step across the brook, you see a track in the sand. You start! Yes, he has been here. Again you look intently. The firm imprint of the sand defines the track as clearly as if it had been carved there by a sculptor.

A quiver of excitement thrills your frame, old hunter though you are. Then you begin to advance quickly and swiftly against the wind. Recollecting yourself, you stop, look around, and then advance slowly, keeping concealed as much as possible. The single track has multiplied into many. See, the moss has been pawed off that log, and there a little branch has been torn from a bough of that birch.

Yet you move slowly onward. Half an hour has passed since you saw the foot-print by the brook-side. In all that time you have not come more than a hundred yards. What if you haven't? you have done just right in moving slowly. Presently you reach a little opening. You stand behind a tree, and look on one side; then, turning, you look around the other. What was that that caught your eye? Was it the shadow of a bird? No, it could not be, for it is repeated again and again. Looking intently, you are able to discern, through the tangled undergrowth, a small head crowned with branching antlers. You nove a step to the right, and now it is clearly defined against the green background of fir-boughs; there is another, and still another. Your heart gives a great bound, and then grows almost still. The Elk are too far away for a sure shot, jet they are within one hundred yards of being in line with you. Every moment you expect to hear the shrill whistle of alarm, and to see your long-sought-for quarry vanish in the greenery beyond.

Like a shadow you sink to the ground. Over the sward you creep like a serpent. You grasp a stick that lays in your way, but drop it like a fiash. It is only a "devil's war-club,' old and dry, but it has left a hundred spines bristling in your hand. If you are human, you will swear, but softly, and with bated breath. Onward you creep. The stream is reached. You spring to your feet, and swiftly move, at right angles, away from the point where you saw the Elk. As you move, your angle grows less. Then you stop, turn around, and again, like a shadow, tlit from tree to tree. You fear you may have failed to mark correctly.

But no! See that towering dead cedar? Just to the right of it is the spot where his regal antlership stood. That tree is yet a hundred yards away, and between it and you the branclies are low and interlacing. Your steps grow painfully slow. You can hear the beating of your heart. Even silence makes a sound. Slowly you advance. Again does that deadly fear cause your heart to beat slowly, faintly. They have heard you, and have

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Suddenly you stop, then start as though you had received an electric shock. There, standing not twenty-five yards away, is the monarch. Such a picture he is, too! Standing sidewise, with his head turned and his nose elevated so that his horns lie directly over his shoulder, he sniff's the tainted air. He has not seen you, but he has scented you. His large ears flip forward and back. You become aware that other forms are behind him; that other eyes are looking for the danger the patriarch has signaled. Quick! They will be away in a moment. Up with the rifle! See his shoulder? There is where his heart is-an inch or two belind it. Hold but a fraction of a second. Think; sometimes he will run for two hundred yards if shot through the heart. Bang! He won't go far. Click! click! bang! A good shot. The spike-buck's neck is broken. A still better shot, for he was stopped at full trot.

Click! click! See those funny white patches that are vanishing, and then appearing over where the old buck galloped? Don't stop to cut the bull's throat. Find the old fellow. What great splotches of red on the ground! The Express has done its work well. Run! you can't alarm anything now. Swiftly you dart away. Ha! what's this? Struggling in death lies the fallen monarch. Over him, looking intently at him, is a large cow. Beyond are several pairs of horns and ears. Eyes are peering at you from the underbrush. The cow sees you, and, with a squeal of alarm, starts off on her long, swinging trot. You see the least - glimpse of light on the ivory bead, and press the trigger. You held just half an inch in front of her fore leg. She
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strid horn reels
sinks down in her tracks before you hear the report, shot through the heart and her shoulder shattered.

Now out with your knife; seize her by the ear and slash her across the throat. Pick up your gun. Now do the same for the old bull. Not much blood in him, eh? Well, he pumped lots of it out in making those few jumps. Pick up your gun. Now for the spike-bull. Hark! A crashing in the bushes, and a bull as large as the monarch comes striding along, with his nose pointing straight out and his horns flat along his sides. Baug! bang! He stops, wavers, reels, then falls, shuddering, to the ground. Confess the truth. You were startled. You are not sorry you brought your gun with you, instead of leaving it where you cut the cow's throat, are you? Fill up your magazine, and then cut the throats of these two. When you reach the last bull, what do you see? Blood gushing out of four wounds, and all of them fatal. Now cut the throat of that spikebull, and sit down on him.

What is that crashing yon hear among the bushes in various directions? Only Elk hunting for their leader. You rise and seize your gun. Sit down. You are a gentleman; not a prowling market-hunter; nor yet a filthy reprobate of a skin-hunter. Haven't you heads and antlers to adorn your home richly, and beef enough to last two families a whole year! Sit down. What more do you want? If you are a cuss as writes, you will send a description of this scene to some sportsman's paper. You will tell how guilty you felt, how you blushed, when those bright, appealing eyes were turned on you, when their owner felt the cruel knife. (They were all dead when you reached them.) Then you will wander off, and gush about rose-tinted forests, and the winds sighing requiems through the pines. All these brilliant and intricate lies you will tell, just because it is the custom to tell them. Try and be manly about it. You did kill those beantiful creatures. You are glad you did so. It was a difficult thing to do. It was intellect against instinct. It was reason against cunning. You have won your laurels; and as the eyes of the monarch gaze down
upon you from the walls, you proudly tell your boys the story. As a skillful woodsman, an expert hunter, they will always have cause to revere you.

If you are hunting in company with others, and are not too far from camp, go to where the cow lies. Cut around her hock, split the skin up to the center of the body, above and then below. Don't be afraid of spoiling the skin, for, except as a memento, the skin of the Elk is worthless. Then, from the round, cut a plentiful supply of rich, juicy meat for all hands at camp. Then start off on your homeward way.

But stop. Consider a moment. Hadn't the intestines better be removed! Yes; a good idea. If you are a practical hunter, this won't take you long; but if you are a novice, it will bother you considerably. When done, no matter how roughly, you will feel better satisfied. Now, can anything else be done? Yes; set the big cedar on fire, if the woods are damp, so that there is no danger of the fire spreading. It will serve as a beacon to guide you back to your game, and will also serve to frighten prowling Wolves and Panthers away. To think is to act. The great cedar is hollow. A few dry branches piled in the cavity, the flash of a match, a cloud of smoke curls up, and the fire roars like a furnace. Now you may start for camp.

- Arriving there, you approach with all the dignity that becomes a victorious warrior. When your companions see your load, they will cluster aronnd you, and beg of you the tale to unfold. But this is no time for unfolding; so you calmly state that you are ahungered, and likely to die of. starvation, and that a thrilling tale will be lost to the world if you are not soon fed. Then your companions will bring forth the standard food and the thickest drink that the camp affords, and you will dine like a prince.

After dinner, you will take a seat near the fire, on something soft, with your head pillowed on a convenient tree. Then willing hands will fill your pipe, light it, bring it to you, and you find that you, who were this morning abused and chafed as a tenderfoot and a sorry hunter, are the honored
one of the whole outfit. Then, as the smoke of your pipe curls slowly upward, you will relate, in measured cadences, the story of the Wapiti that fell victims to your skill in the odorous forest green; and, as you close, you point to the halo of light that reddens in the evening sky from the great cedar, and say: "Now to rest, for to-morrow at daybreak we must go forth and bring in the meat and heads." Your friends do not retire, however, till near morning; and, as they tarry by the camp-fire, oft and again is heard the sizzling of steaks over the coals. Long will the flavor of those juicy steaks be remembered, for there is no animal that rans on legs whose flesh is so dainty, so tender, and so nutritious as that of the Wapiti.

Mr. L. L. Bales, an old-time hunting companion, sends me the following description of an Elk-hunt in Sultan Basin, Washington:
"It was on the first day of June, 1887, that my companion and self arrived at the Horseshoe Bend mining-camp. We were surprised to find a good log house, well supplied with 'grub,' and all the mining-tools necessary to run a hydraulic mine, where we expected to find nothing but a 'lean-to.' We were on a cruising expedition for the purpose of locating hunting and trapping grounds for the ensuing season. After a short consultation, we concluded to send our pack-animals back to the Skikomish River, and make the camp our headquarters for the next montl.
"We were puzzled over the appearance of everything in and about the camp. It looked as though the occupants had left but yesterday; but from knowledge we had gained in the settlements, and from a few lines written on a piece of paper and tacked on the door, we learned that the last occupant had left just six months before; also that we were welcome to the use of the house, but were cantioned to be careful of fire. With this understanding, we pulled the latch-string and walked in, when a wild-looking house-cat rushed ont.
"In a short time we had cooked and eaten supper, and began to plan our movements for the morrow. My companion concluded to cruise near camp, while I was to take a light pack and start for Sultan Basin, the head of Sultan River, twenty-two miles distant, through a rough country. The underbrush was of a dense, rank growth, and there was no sign of a trail. Daylight the next morning found me ready for my trip. Somehow or other, I found my partner's hand in mine as I said: 'If I am not back here at five o clock in the afternoon, ten days hence, you can go back to the settlements, as something will have happened to me, and in these trackless, evergreen forests it would be nseless to search for me.' I felt the honest grip of his hand as he said:
"' If you are not back here in eleven days, I will start on the twelfth to hunt you up. So long!'
"With these parting words, I turned my face to the north and started on my long and lonely tramp. At ten o'clock on the morning of the fourth day I found myself on a high, wooded mountain, just below timber-line. Away to the west of me I could hear the roaring of some stream, while north of where I stood a giant snow-peak reared its mighty head. While I listened, I could distinguish the distant roaring of three different rivers. What is that stream to the northwest? That is the Sauk, a tributary to the Skagit. And that on the west? That is the Stillaguamish. And that on the sonthwest? It is the Pillchuck, or Red Water. And this great valley lying at my feet? This is the Sultan Basin, a valley six miles long, two wide, hemmed in by great high mountains-a great big hole in the ground, just twenty-two miles from nowhere.
"Flanking a huge washout on my right, I began the descent into the basin. By dint of rolling, tumbling, and sliding a distance of over a mile, I reached level ground on the banks of what was left of Sultan River. It was quiet enough here in comparison to a few miles below, where to look down on the river, between the narrow walls of the cañon, would make you dizzy, while the river
appeared like a white ribbon below. I soon made my camp, caught a few fine trout, had supper, and turned in for the night.
"The next morning I started early to explore the basin, look for game and fur signs, calculating to use my first camp as a home-camp while stopping in the basin. The river was low, as the June freshets lad not yet come down, and in every bend of the river, either on one side or the other, were great gravel-bars, sometimes one hundred and fifty yards wide and one-fourth of a mile long. I soon struck one of these bars. Elk-signs were plenty; also the natural enemies of the Elk, the Cougar and Timber Wolf, had been there.
"There were some Cinnamon and'Bald-faced Bears, and very few Beaver signs. As I calculated to stay in the basin a few days, I wanted some Elk-meat. I kept a sharp lookout for that kind of game. I would take a few steps, and look carefully at everything within my range of vision, occasionally looking over that portion I had just passed that was still in range.
"Thump! thump! thump! Listen! Isn't that a Deer jumping? Oh, no, my boy! that is your heart beating. And, reader, if there is a heart in you, and you had been with me, your heart would have beaten too; for what had looked like a mass of dead tree-limbs, I just then discovered was the velvet-covered horns of six bull Elk.
" And now to stalk them. I felt satisfied that I was, as yet, unobserved. They were fully three hundred yards away, in plain view, lying down with their heads toward me. They were on the opposite side of the river, near the water. You will recollect this was about ten o'clock in the day, and how I had come into full view of those Elk without their seeing me, when there was not so much as a twig between us, is something I never could answer satisfactorily; but I did take ten minutes to get from a standing to a lying position, and twenty more minutes to roll off of that gravel-bar to the friendly cover of an alder-thicket near by. The rest was easy. In another half-hour I was within forty
yards of the Elk, with nothing but the river and a salmonberry bush between us.
"And now for a half-hour of close observation that money can not buy. There they were, six noble fellows, the smallest being a spike-bull and the largest a sixpointer. Do Elk chew the cud? Yes; just the same as domestic cattle. I now perceived why the Elk were lying near the water. There seemed to be a cold strata of air, kept in motion by the water, that drove the mosquitoes from the open bar back into the brush.
"The Elk were all lying with their heads down-stream. How grand they looked in eapose! How I did long for a camera! There were sets of antlers there (in the velvet) that would have weighed seventy-five pounds. How leisurely the old chaps chewed their cuds! How unconscious of danger they seemed! I leveled my rifte at the head of a three-point bull (being the smallest I could get a shot at), and pressed the trigger.
"The others never ceased chewing their cud. They seemed to think the sound had been caused by the breaking and falling of some dry limb of a tree. A defective cartridge? No, I guess the sights of my rifle must have got moved some way. No, they are all right. May be the gon is excited? No, it seemed to be as cool as possible under the circumstances. I then began to examine myself. I thought I was all right, too; so I tried again.
"Now all was confusion. Yes, I hit the Elk, but too low down on the head, breaking the lower jaw. The Elk were turning in all directions, yet I kept my eye on my wounded bnll, and fired again, breaking a fore leg. Another shot broke a hind leg. This left him floundering in the water. I hurried across, and as I approached him, he turned his hair forward and made a lunge at me. As his lower jaw was broken, his mouth looked as large as an alligator's. I finally succeeded in killing him. I skinned him, and took about forty pounds of meat; and that, with the hide, was all I could carry.
"By this time the sun was nearly down, and I started fur camp. I had just crossed back to the other side of the river again, and had sat down to rest near an Elk-trail, in an alder-thicket, when I thought I heard a light foot-fall. I could see about twenty feet back on the trail, and there sat a lungry-looking Timber Wolf. He had struck my trail, smelt the fresh meat, and followed me. I quietly unslung my pack, leveled my rifle, and shot him in the neck. As I took his scalp I gave a good old Comanche yell; for if there is anything I like to scalp, it is a Timber Wolf and a Cougar. The next day I killed six Timber Wolves around the remains of that Elk. I have often killed two or three Elk in one day, and could have killed more, yet I never was on an Elk-hunt that I enjoyed as I did that one.
" At four o'clock in the afternoon of the tenth day, I was back to the miningcamp, and found that


Elk Celf. my partner had killed two Bears and caught ten Beavers while I was gone."

And now to relate another piece of my own experience in Wapiti-hunting. In the fall of 1887 I went, with a party of friends, on a hunting expedition to a large lake that nestles among the pine-clad foot-hills beneath the shadows of snow-capped peaks of the Olympic Mountains, Washington. The Makah Indians, whose village, Osette, stands at the mouth of the cañon up which the only trail to the lake leads, guard this beautiful sheet of water with supersti-
tious veneration. No white man had ever before been permitted to visit it, and it was only by the exercise of a great deal of diplomacy that we were able to overcome the objections of the chief and gain his consent to hunt on the shores of the lake. He finally consented, however, and sent three of his young men to guide us in and carry uar camp equipage.

On arriving at the lake we arated, two of our party going on one side, and I on the other.

I soon came to an arm of the laiie that extended at least two miles into the woods, and that was a quarter of a mile wide. While looking toward the opposite shore, I saw water splashed high in the air, and began to wonder if whales inhalited the mystic lake. Keeping in the cover of the woods until I reached the bank copposite where the disturbance was, I saw a band of eighteen Elk, sixteen of them standing in a body, watching a texritic battle between two large bulls. Although the lake was at least a quarter of a mile wide, I could hear the clash of their horns when they rushed on each other. A grander sight than these two majestic forest monarchs presented could not be imagined. Whirling round and round went the two gladiators, each endeavoring to find an unguarderi point on his adversary's side. When one was of his guard, the other would rush at him, and the report would come plainly to my ears. I grew excited, and cletermined to hive a hand in the fray. The only way in which I could repcis them was to circumvent the lake; so I started on a ren round the head of it.

The beach afforded a splendid running-ground, and I lost no time until I reached a point within half a mile of the place where I knew thu Elk to be. Stopping a moment to catch my wind, I could not resist the temptation to look and see if the Elk were still tighting; but the battle was over, and the defeated Elk was walking up the beach toward me, roaring and bellowing as lie came, while the vintor had rejoined his harem.

The conquered Elk then turned off the beach into the marsh. As a path led from the beach to the marsh, from

where I stood, I started on a run to head him off. I reached the center of the marsh just as he emerged from the woods, not more than one hundred yards distant. He stopped, and began to bellow and paw up the ground; then turned and looked in the direction of the herd he was banished from by his younger, stronger, and more active rival. At last he turned and came slowly up to within thirty yards of me. I fired five shots, each of which took effect behind his shoulder; but the little 44 Winchester, with which I was then armed, was too light a weapon for such heavy game, and not until I ran up and planted the sixth ball at the butt of his ear, did he stop. Then he reared on his hind legs, his horns looming up like a small tree-top, and fell backward, driving them deeply into the soft ground. My dog now rushed forward and grasped him by the ear. The bull tried to struggle to his feet, but his imbedded horns held him fast, with a twisted neck. I ran up to him, cut his throat, and secured one of the finest pairs of antlers I have ever seen. This was a large animal, and would have we fhed at least eight hundred pounds.

Leaving the Elk, I went cautiously up the trail, and found that the others were not alarmed by my firing, but were standing in a group near the place where I first saw them. Creeping up with noiseless step, and keeping behind a large fir, I drew within one hundred yards of them, and, selecting a fat cow, fired, and broke her back. At the report of the rifle the herd started up the beach, with their long,-swinging trot, the cavalcade headed by the victor in the late unpleasantness. I fired several shots at the leader of the band. He feil behind the herd, broke into a clumsy gallop, and went crashing off into a thicket. That was the last I saw of him, for the underbrush was so dense that it was impossible to follow him after he left the beach. My dog by this time had the herd at bay, on a point about two hundred yards below. Reloading my magazine as I ran, when I came within one hundred yards of the confused mass of Elk I fired a shot at them; a yearling buck left the group, rashed into the water, and fell dead. The band
ran around the bend, closely pursued by the dog, and in a short time I knew by his barking that he had them at bay again.

Running in the direction of where the dog was barking, as soon as I rounded the bend I saw a beautiful sight. About one hundred and fifty yards distant, three Elk were in the water up to their knees. They were standing in the form of a triangle, with their heads outward, and the dog was circling around them. Their method of protection was complete; it was death to the hound had he dared to venture within reach of those horns or hoofs. Raising the sighte of my rifle, I fired three shots, each of which fortunately found vital spots, and the three Elk soon lay dead in the water.

As the majority of the herd had run up the Elk-trail which wound, broad and well defined, up the banks of a creek that emptied into the lake at this point, I started in pursuit. 1 had not gone far when I heard the dog barking, and a few moments later an Elk came rushing down the trail, with the dog howling at his heels. I sprang into the bushes, and holding my rifle at my hip, fired, striking him in the heart. He was so near me that the burning powder singed the hair on his side. After I cut his throat, the dog lapped the blood, and then started off into the bushes.

As it was near sunset, I concluded not to renture farther in the woods, but to sit down on a $\log$ and rest. In a short time I imagined I could hear the dog baying faintly. The sound gradually drew nearer, and at last I could hear a great crashing in the bushes. This tinally ceased, and all was still save the distant baying of the dog. While watching the trail intently, I saw a large object come swimming down the creek. I stepped toward it, when it saw me, turned, swam to the other side, and began to ascend the bank. This proved to be another Elk, and with three telling shots I brought it down.

I now walked down the lake, and on rounding a bend in the shore saw a camp-fire blazing, half a mile below. I went to it, and found my friends bivouacked for the night. They
had also been fortnnate enough to kill three Elk. We had no desire to kill more, and early the next morning dispatched a runner to the Indian village for men to come and carry in the meat.

While we were engaged in skinning and quartering the game, toward noon a shout heralded the approach of a platoon of dusky packers, and before sundown we were at the village with all our trophies. We gave the natives nearly all the meat, we reserving but a small quantity of that, together with the heads and skins.


## THE WAPITI (Cerous Canadensis).

## By Waf-bah-micmither

ROWNED ting of hill and woodland green !
With horns branching wide, In majesty he bounds along,
Peerless in antler'd pridel
He stands in beauty all alone,
"The monarch of the glen "-
$\Delta$ giant, dwarfing into naught
The lordiliest stag of ten.
The Elk of Scandinavia's hills,
His congener, the Moose,
The graceful red Virginia Deer,
The Sambur and the Ruse, The gentle, smooth-horned Caribou, The Reindeer, tame or free, The Fallow, nor the Axis-buck, Can match the Wapit!!

The springing Black-lall of the wood, The White-tail of the plain, The Mule-Deer and tall forest stag, May flaunt their forms in valnRusa, Tarandus, Rusina. Alees and Rangifer,
Sink Into insignificance
Before this conqueror.
On Ottawa's shores he roamed of old,
Before the while man came,
To cut the shadowy foreste down,
And frighteu back the game.
He's golng, like the Indian race,
Toward the setting sun,
And yet he finds no resting.place
From the hunter's deadly gun.
(71)

The plowshare turns up his hornsGrand rellics of the past!-
Coeval with the mighty trees
Which bunt beneath the blast;
Coeval with the atately tribes
Which trod the Ottawa's shore,
Who, with our fading forest, Shall soon be seen no more.

its thenc wick, Main rence the $v$ the Arct tion. site $t$ bon: and he vated ular o somew moder about small,
light face od
Hoors should

## THE CARIBOU.

## By Williay Pittman Lett ("Algonquin").

y
\%)
yHE Woodland Caribou (Rangifer Tarandus) is similar, in generic character and form, to the Barrenground Caribou, but averages nearly twice as large, and has shorter and stouter horns in proportion to its size. It inhabits Labrador and Northern Canada, and thence may be found south to Nova Scotin, New Brunswick, and Newfoundland, the northern part of the State of Maine, and Lower Canada on both sides of the St. Lawrence; thence westerly, in the country north of Quebec, to the vicinity of Lake Snperior. It never migrates trward the north in summer, as is the habit of the Tarandus. Arcticus, but makes its migration in a southerly direction. In this particular it acts in a manner directly opposite to the course pursued by the smaller species.

Following is the description given of this Deer by Audnbon:

Larger and less graceful than the common American Deer. Borly short and heavy; neck stout; hoofs thin and flattened, brond and spreading, excavated or concave beneath; accessory hoofs large and thin; legs short; no gland. ular opening, and scarcely a perceptible inner tuft on the hind legs; nose somewhat like that of a cow, but fully covered with soft hairs of a somewhat moderate length; no beard, but on the under slde of the neek a line of halrs, about four inches in length, hanging down in a longitudinal direction; cars small, blunt, and oval, thlekly covered with hair on both surfuces.

Horns one foot three and a hall inches in height, slender, one with two and the other with one prong; prongs about five inches long; hair soft and woolly underneath, the longer halrs, like thome of the Antelope, crimped or waved, and about one to one and a half inches long.

At the roots the hairs are whitish, becoming brownish-gray, and at the tops light dun-gray, whiter on the neck than elsewhere; nose, ears, and outer surfuce of legs brownish; a slight shade of tho same tinge behind the fore legs. Hoofs black, and throat dull-white; a faint whitish patch on the side of the shoulders; forehead brownish-white; tall white, with a shade of. brown at the root
and on the whole upper surface; outside of legs brown; a band of white around all the legs adjolning the hoofs, and extendlug to the small secondary hoofs; horns yellowish-brown, worn white in places.

This description is, in the main, correct. The rather arbitrary dimensions given of the horns is scarcely borne out or corrolvyated by the practical naturalist known as


Woodiand Caribou.
the hunter. The horns measured by Audubon for this description were probably those of a female, which are much smaller than the antlers of the male. I have two sets of horns of the Woodland Caribou, both of which came from the vicinity of the Kakabonga Lake, above the Desert, on the Gatineau River. They are singularly dissimilar in appearance, and, from the size, I judge that both belong to male heads.
were had 1 Like of th betwe The the a with first whicl small horns than ful fo and 1 the n disap the a on, t count ever
four three ally 1 food ing $p$ of $w$ broad cious boll i most twowoul

I saw a pair of Caribou-horns some years ago which were much larger, more massive and wide-spreading, and had many more and longer prongs, than either of these. Like every other variety of the genus Cervida, the horns of the Caribou are decidnous. Caribou drop their horns between the first of January and the end of February. The new horns then commence growing slowly until the advent of warm spring weather, when they shoot up with amazing rapidity, and reach their full size by the first of September. They are then covered with velvet, which the animal gets rid of by rubbing them against small trees. Both male and female of this species have horns. Those of the female are much finer and lighter than the horns of the nale. I saw, recently, a beantiful female Caribou-head, which was killed in January, and I have, also, the head of a fine doe, killed within the month of January, 1890, from which the horns had disappeared, leaving the usual indications in the skull that the antlers had dropped naturally. I shall refer, further on, to the largest Woodland Caribon ever killed in this country, which carried the grandest set of antlers I have ever seen.

The height of a full-grown Woodland Caribou is abont four and a half feet, and the weight of its carcass about three hundred and fifty pounds. Large bucks are occasionally met with that weigh nearly four hundred pounds. The food of the Caribou consists of mosses, lichens, and creeping plants found in the swamps in summer, and in search of which, and certain grasses, it paws up the snow with its broad hoofs in winter. The flesh when fat is most delicious venison; when lean, it is dry and insipid. The Caribou is the fleetest of American Deer. In galloping it makes most extraordinary bounds. As a trotter, the slow-going two-fifteen horse that might attempt to compete with him would be simply nowhere.

Like his useful congener-some anthorities believe them to be of the same species-the Reindeer of Northern Europe, the Caribou is possessed of great powers of endur-
ance, many times escaping from the Indian hunters after the fatigue and starvation inseparable from four or five days of a continued following-up hunt. When the hunted animal gets upon glare-ice, over which he can trot at a rate that would double upon the fleetest skater, the hunter is obliged to abandon the chase.

The Caribou is a shy and exceedingly wary animal, and is most difficult to still-hunt; neither can he be successfully hunted in deep snow, he being enabled to go over its surface, upon his broad, flat hoofs, like a hare. So far as I have been able to learn, it is only time lost to attempt to hunt the Caribon with dogs. The hounds might follow the scent, but they would scarcely ever be in at the denth, as it is a well-known fact that dogs can not drive them to water. They are, however, successfully still-hunted by Indians, and also by white hunters skilled in the craft. Large numbers of them are sometimes slaughtered, when discovered swimming across a lake or river, in their migrations. I have heard of fourteen having been killed by a camp of Indians, as they were crossing the River du Lievers, in a few minutes.

The Caribou is still to be found in considerable numbers on the last-named river as close as sixty or seventy miles from its confluence with the Ottawa; also on the Gatineau River above the Desert, and in more limited numbers above Pembroke, in the neighborhood of Black River, and on the shores of Lake Nipissing. They are also plentiful on both sides of the St. Lawrence, beyond Rivière du Loup, below Quebec, and are abundant on the northern shores of Lake Superior. I have no recollection of Caribon having been met with in any numbers on the south shores of the Ottawa River. Odd ones have been occasionally seen many years ago. In each of such cases the animals had evidently strayed from the north side, which has always been their true and natural habitat.

The skin of the Caribon, when tanned, is made into moccasius, and in the raw state is used in the manufacture of snow-shoes. It is tine, thin, tough, and durable. Frank

## Forrester has described hunting the Woodland Caribou in the following terms:

As to its habits, while the Lapland or Siberian Reindeer is the tamest and mont docife of fts genus, the American Caribou tis the flercest, fler:est, wildest, shyest, and most untamable; so much so that they are rurely pursued by white hunters, or shot by them, except through casual good fortune, Iudians alone having the patlence and inathetive craft which euablea them to ernwl uaseen, unsmelt-for the nose of the Curlbou can detect the smallest taint upon the air, of angthing human, at least two milles up-wind of hinn-and unsuspected. If he takes alarm, and starts on the run, no oue dreans of pursuing. As well pursue the wiad, of which no man knoweth whence it cometh or whither it goeth. Snow-shocs against him, alone, avall little; for, propped up on the broad, matural show-shoes of hils loug, elastle pasterns and wileceleft, clacking hoofs, he shoots over tho crust of the deepest drifts unbroken, in whith the lordly Moose would soon thounder, shoulder-deep, If hurd-pressed, and the graceful Deer would fall despairing, and bleat in vain for merey. But he, the shlp of the whater wilderness, outstrips the wind amoug hils native pined and tamaracks-even as the desert shlp, the Dromedary, out-trots the red simoom on the terrible Sahara; and when once started, may be seen no more by human eyes, nor run down by the flectest feet of mea-not if they pursue him from their alghtly casual camps unwearied, following his trull by the day, by the week, by the month, till a fresh snow effaces his tracks and leaves the hunter at last as he was at the first of the chase, less ouly the fatigue, the disappiolatment, and the folly.

While we have no historical record of the Woodland Caribou ever having been found in any considerable numbers on the south shore of the Ottawa, I think there can be little doubt of its having been quite plentiful on the north side of the stream, within a few miles of its banks, in the past. As mentioned before, stray members of the family have been, to my own knowledge, seen on the sonth side of the Ottawa, one having been killed ai L'Original about twenty-five years ago.

The Caribon migrates in herds of from ten, to one, two, even five hundred; and it is a notable fact that a concealed hunter, with the wind in his favor, if he does not show himself, has ammunition enough, a good rifle, and the man behind it is the right man in the right place, can slaughter a whole herd. Under ordinary conditions, the Woodland Caribou is the most difficult to approach of all the Deer genus; but when accidentally entountered, under circumstances such as I have mentioned, the animals seem to be
completely panic-strickon and unable to make any attempt to escape.

Respecting not only the difference in siza between the Arctic and the Woodlund Caribou, but aiso the great difference in the shape and weight of the antlers of the two species, there is much to be said. The Barren-ground Caribcu has horas sweeping backward with a long, graceful curve, usually with few points except near the summit, or crown, which bends forward. The antlers of this species are small in diameter, almost round, und uniform in thickness up to the palmation at the crown; und, notwithstançing their great length and general extent, are not much more than one-half the weight of those of the Woodland Caribou. The horns of the Woodland Caribou are shorter in the beam, Hatter, more massive in build, more verticai and erect in position, and very much heavier and thicker than are those of his lesser congener. Besides, they branch off on both sides, a short distance from the skull, or somewhat faintly defined burr, into extensive palmations, with many points around the upper and onter edges.

In both siecies the horns are smooth and of a yellowishbrown color. In the strange and almost grotesque tortuosities of the brow.antlers, they are singularly beantiful and interesting. In touching upun the poizts of difference between the Arctic and Woodland species, I shall have occasion, in a subsequent stage of my subject, to refer to the positive difference in the antlers, as being, in my opinion, sufficiently well defined to indicate a distinctness of species.

While on this subject, or rather on that of harns, I may mention an incident related by an old voyarjeur of the times of Doctor Kane, Captain Back. and Sir Join Franklin. While traveling in the habitat of the Barren-ground Caribon, he relates that he fomed the carcasses of two large bucks with horns interlocked, having become so while fighting. The akeletons only were to be seen, the Wolves and Foxes having eaten all the flesh. This, as the reader is aryare, is a common occurrence amongst every sprecies of the genins Cervide.

Even the males of the giant Moose have frequent and deadly combats.

It may not be out of place to state here that the Moose has frequently been vanquished by the buck of the Virginia species. The contlict soon ends when the red buck is a spike-horn.

The Woolland Caribon, although somewhat more shy and wary than its smaller congener of the Arctic wastes, is, nevertheless, under certain conditions, a very stupid animal. During the periodical migrations of a herd, they are easily killed in vast numbers by taking advantage of the wind, and shooting them as they pass along. They are, also, frequently surprised crossing rivers or lakes that intersect their line of march, when they become an easy prey to hunters in canoes.

In winter they are often seen apon the ice on inland lakes. On such occasions they can be easily shot, as referred to elsewhere in this paper, providing they neither see nor smell the hunter. The instant, however, they catch the scent of their hidden foe, they vanish like a streak of light. I huve heard it said by those who have seen them scudding over the ice, like shadows, that in an incredibly short sparie of time they appeared to the naked eye not larger than Rribbits.

They are shot sometimes at long range by hunters on the barren plains which they frequent, in New Brunswick, Newfonndland, the Province of Uuebec, and other places. By a keen and careful hunter, many may be thus killed ont of a herd.

It is much more difficult to appronch a single Woodland Caribon than it is to stalk a herd. When two or three are killed in a herd by a conceuled hunter, the remainder seem to become completely demomalized, losing, for the time being, their natural instinct of self-preservation; and instead of flecing, as they would from a visible or otherwise perceptible enemy, like a solid square of heroes in battle, they stand their ground, inspired, however, by a different and unaccountable impulse, until
the last one is shot down. Under the foregoing conditions, large numbers of these fine animals are, to say the least, wantonly and improvidently slaughtered.

Let me say here, by way of digression, something with which I believe all true sportsmen will agree, and it is this: In my opinion, especially in the pursuit of large game, no true sportsman will ever make a practice of shooting merely for count or $n$ large bag. Even in the quest of feathered game, the true sportsman cun always be distinguished from the mere butcher who hunts for game alone, or from him who slanghters to win the questionable reputation attached to the exterminator who boasts of being nble to kill a greater number than his more conscientious neighbor.

No true sportsman will ever kill large numbers of either large or small game which can not be turned to necessary and useful nccount. No true sportsman will kill a Bison for his tongue, a Wapiti for his head, or a Moose for his skin.

Had tire hunters and Indians of the United States and Canadn, for the last thirty years, been guided by such rules, there would be at the present time, on the Continent of America, one million Buffaloes, ten thousand Wapiti, and ten thousand Moose for one of each species now existing. On the part of the governments of the United States and Canada, the needless and lameutable extermination of the American Bison-the monarch of Armerican game animalsis nothing short of a national crime, a national calamity, a national disgrace.

Sport is sport. It means recreation, exercise, pure air; health, and invigoration; but wanton, thoughtless, and reprehensible slanghter of game ought to find no record in the formula of action which guides true and legitimate sportsmen.

The Woodland Caribou has sometimes been driven by hounds, as is fre puenty done in the case of the Virginia Deer; not usually, howner, with the same degree of success. It is well known by hunters, that when hunted by dogs the common Deer will circle mround the bush in
which they are started a number of times before making off for another neighborhood, especially if followed by a slow hound. The Caribon, on the contrary, when started by hounds, steers straight away for a run of perhaps thirty or forty miles before pausing for any length of time. Should the hunter be lucky enough to have himself posted on the line taken by it herd of Caribou parsued by hounds, he may congratulate himself on the fact that few sportsmen can find themselves in a more exciting position.

Some few years ago, a sporting friend of the writer, Mr. Campbell Macnab, of Rivière dı Loup, in the Province of Quebec, had a rousing climax of exciting sport compressed into a few minutes. He had with him a single hound that had been well trained upon our common Deer; and his master had determined, at the first opportunity, to try him on Caribou. Having arrived on the ground, some miles back from the banks of the St. Lawrence, where his Indian guide had reported the presence of the noble game, the latter was sent out on a large plain to put ont the dog. Macnab had stationed himself near a gorge between the hills, down which, if started, he expected the Deer to run.

A few minutes after having been cast loose, the good dog, "Curl"-so called from the twist of his tail-soon scented the game; and forthwith the melodious music of his tongue, coming down the ravine, was heord, as, with fierce howls and rapid strides, he followed in the waice of nine magnificent bucks, in rapid tlight before him. On they eame at a swinging trot, the voice of stanch old Curl increasing in distinctness and volume at every stride. At length, in single file, lieaded by a grand buck with widebranching antlers, they burst upon the hunter's view. Suddenly, from the elge of a thicket, rose a puff of smoke, followed by a lond report, and the king of the startled herd fell in his tracks, as a henvy bullet from a breechloader tore through his shoulder.

The remainder of the herd instantly became demoralized. Some of them stool still, while others jumped about in confusion. As rapidly as the rifle could be tired and reloaded, a
the fusillate went on, until eighit of the splendid animals were laid low. The ninth, warned by the tongue of the approaching dog, fled and escaped. The eight Deer were killed in probably not more than three minutes, from re distance of one hundred yarls, the hunter not having had to move from the spot on which he stood to discharge the first shot.

While still-hunting on another occaslon, Maenab discovered a herd of about eighty Woodland Caribou feeding on a large, open plain. After considerable strutegic maneuvering on difficult ground, he managed to appronch within three hundred and fifty yards of the herl, and, from a well-concealed covert, opened fire. After discharging three or four shets fruitlessly, he finally got the range, and in a short time dropped seven of the largest bucks, and then discontinued firing. He assured me that had he desired slanghter alone, and not legitimate, honest sport, he could, with little difficulty, lave killed the entire herl, for they could not see him, and so made no effort to escape. In accounting for his success, I may say that Marmab is an old and expert turget-shot, who, with either the shotgun or the rifle, takes mank as one of the most accomplished sports. men in Canada.

I have never been able to learn, from any muthentic source, that Curibou, hunted hy dogs, will take to water, as is the habit of the Cerous Virginionus. I imagine, liowever, that when pursued by dogs, silent or otherwise, they will swim twross any river or lake in the direet line of their flight. Lided by their stout legs med homel, concave hoofs, they are mpid swimmers; and from their natural capocity for enduring cold, suffer little, even from protmeted humersion in cold water.

The Woonlland Caribon is a latge and powerful aminmel, nearly, if notquite, double thor size of the Virginin Deer, and possessing great speed and immense vitulity. It requires a strong, paralyaing shock to kill, suddenly, such formianble game. Consequently, taking for granted the expurthess and nerve of the hunter, a rejeating-ritle of not smallor
than lead co of the proper

Pall experit of the Altho marked $\mathbf{v}$ that, no $e$ distinct $\mathrm{g}_{\mathrm{I}}$ Wear pauctly of reguluting exceeds al hus leex) (bille Audt IWO specele ilectslon III Hfe if con where forn lunit, on then the Arelie from the bo often, are mature we migratory there shom tereal fures

Whil foregoin existenc shape, s would in species, habitat been pla than the of the p

The suechall. and thi
than fifty caliber, carrying the maximum of powder and lead compatible with the safety of the arm, and also that of the man behind $i t$, wiould naturally appear to be the proper arm for this exciting sport.

Parker Gillmore, a celebrated sportsman and practical experimental naturalist of no ordinary ability, speaking of the Caribon, suys:

Athongh there are upon the American Continent two very distinetly marked varieties of the Reimieer, I ean not adopt the iden of many travelers, thut, so conspienous is their alssimllarity, they are ensitied to be considered distinet speceles.

We are ult aware that differenec of climate, local eauses, and abundance or puncity of foos, work wonderful alterations on animal life-more especially in regulating their stature; for Instance, the Moose leeer of Labrador seletoms exceeds sixteen nail a luif hunds, while that of Nova Scotianuil Now Brunswiek has heen known to attuin $\boldsymbol{n}$ lielght of twenty-one, or even twenty-two, humbs (vide Audulvon). Now, the grounds that are taken for asserting that there ure two speeles of Caribou are exnetly the sume, and would equally justify the deelsion that there are two speeles of Elk. The Woordlami Cirilsm leads n life of comparative ldeness, among the dense swamps ami phecelit hills, where fowsi is constantly to be founi in ubundanee. The Barreu-ground Carlhon, on the other lunil, inhabits the Immense lhats or mountain-ritges close to the Arelie:Cirele, where vegetuble growth is sponrse, and litte shelter is niforled from the biting, cold wibis aud suows peculine to se ligh a latitule. So great, often, are the straits the latter variety ure submitterd to from the inhespitnble nature of their bubitat, thet in some districts they are compelied to become migritory to obtain the neeceswiries of life. Is it, then, to be womidered it that there shonht be a marked difference in size letween the inhmbitant of the shedteted forest and the whilerer upan the burren uphand waste?

While agreeing in the main with the mationale of the foregoing argument, it seems to me, nevertheless, that the existence of such a palpably marked difference in the shapre, size, and weight of the horns of the two varieties would maturally indicate that they are distinct and sepurate species, ench formed and constituted peculiarly for the habitat in which, in the grand economy of Nuture, it has been placed. The difference to me uprears more apparent than that existing between the Woodi Buffalo and the Bison of the plains.

The Arctis Caribou has long, sprembing, slender horns, specially focmed for traveling 1 poit the open plains and thing wooded hills of the Aretie civele; while the
horns of the larger species are comparatively shorter, henvier, thicker, and more palmated. Sir John Riehardson and Judge Caton are both of opinion that the two kinds of American Reindeer are distinct in species-an opinion superinduced not only from the difference in size, sepanate peculiarities in the nntlers, and marked dissimilarity in habits, but also on account of the alssolute non-intercourse between the two varieties, although the southern migratory limit of the one overlaps the northern migratory limit of the other.

Beyond even this, naturalists generally agree that the fool best suited for the Barren-ground Carilon, of the most nutritious quality, is abundant in its northem habitat; notably the Reinteer moss and lichens which constitute its staple diet. The migrations of the northern variety are, doubtless regulated, as are the migrations of birds, ly the climate, and not specinlly by the scarcity of foorl. The same cause induces the periodical migrations of the Woodland Caribou northward. On this disputed point, I shall close with a quotation from Judge Caton's history of the Barren-ground Caribou:

The statement of Doctor King, as quotel by Bairl, for the purjose of showing a specific difference between the Barren-gromil and the Woodiand Caribon, is this: "That the Barren-ground species is pecinliar, not only in the form of tis liver, but in not possessing a receptacle for bile." This implies, certanly, that Doctor King had fonnd, on examinaton, that the Woxilund Caribon has the gatl-binder athehed to the liver. This certalply is not so; for the gall-bladider is wnating Ja the Wowhand Caribon, as well as in all other members of the Deer family, n fact long shace observerl mad attented by several maturalists, nad often confirmed by critial examibation. Notwithetaming there ure malay strong ximilitules lertwen our two kimis of caribon, there are ummerous well-authentlented differences, whith, when weil considered, not only justlfy, but compei us to class them as distinct simectes.

In a paper read some years ago before the Fioh Nathmists' Club of the City of Ottawa, on "The Deer of the Ottawa Valley," I strongly urged my belief that there is a difference, not yet rationally arconnteal for, between the branching and spike-homed Deer of the Cerruss Virginiauus species. Be this as it may, the distinctuess and dissimiladity, in many barticnlars, bee ween the Barren-gromme
and positi and d almos gin in ing th closely the ch the hu ains fo the clin

On, Caribo pletely contint killing howeve well sk or brow and the it close is unal object и1c. ludicro jnmps

As a the lin chase. killed black-l stance, partinul probath denth-s If th Europe
and Woodland Caribou, are, in my opinion, sufficiently positive to lead to the conclusion that they are sepunte and distinct spectes.

When pursued by hunters, the Woolland Caribou almost invariably makes for a swamp, and follows the margin in its course, tuking the water, und frequently ascending the nearest mountain, crossing it by a gorge or ruvine. If closely pressed by the hunters-who occasionally follow up) the clase four or five days, camping at night on the trailthe hunted unimal scales the highest peaks of the mountnins for security, when the pursuit becomes laborious, and the chances of success very uncertain.

On one cccasion, two hunters followed a small herd of Caribon constantly for an entire week, and when completely tired out they gave up the chase, which was then continued by two other hunters, who at last succeeded in killing two of the animals at long range. Occasionally, however, when fresh tracks are found, and the hunter is well skilled in his craft, Caribou are surprised lying down or browsing, and easily shot. When the snow is not deep, and the inland lakes are covered with ice only, the animal, if closely pursued, runs over the ice with such speed that it is unable to stop if struck with alarm by any unexpected object presenting itself in front. It then sudilenly squats upen its hannches, and slides along the glare-ice in that ludicrons position until the monentum ceases, when it jumps up again and moves off in some other direction.

As a matter of conrse, when the Caribon takes to the ice, the hunter, if he knows his game, nlways gives up the chase. Sometimes, when the month and throat of a freshkilled Caribou are examined, they are found filled with a black-looking mucus, resembling thin mud. This swbstance, however, is supposed to be ouly a portion of the partially digested black mosses upon which it had fed, probably forced upward into the throat and month in its death-struggles.

If the accounts given of the speed and endurance of the Europenn Reindeer are momert-an mimal to which the

Caribou is so closely allied-then it may be naturally irnagined that the lunting of this powerful animal must be a laborions undertaking.

Journeys of one hundred and fifty miles are satd to be a common performance of the domesticated Reindeer, and in the year 1090, one unimal is affirmed to have drawn an offlcer, carrying important dispatches, the astonishing distance of eight hundred miles in forty-eight hours.

By hunters, either white or red, the Caribon is followed only on those rare occasions when snow of unusual depth is crusted over to the point at which it is not sufficiently strong to support the game. Then the toil is too great even for his mighty powers of endurance, and he can be run down by men, on snow-shoes, inured to the sport and to the hardships and privations of the wildemess, but by such men only. Indians in the Canadian Provinces, and many hunters in the Eastern States, can take and keep his trail, in suitable weather, under the conditions referred to. The best time for this mode of hunting is the latter end of February or the beginning of March. The best weather is when a light, fresh snow of three or four inches has fallen on top of deep drifts, with a crust underneath sufficiently strong to bear the weight of the hunter on his broad smowshoes, enabling him to follow the tail with swiftness and silence. Then the hunters crawl aroumh, silent and vigilant, always up-wind, following noiselessly the well-detined footprints of the wandering, pasturing, wantoning heral; julging, by signs, ummistakable to the reteran limiter, mulistinguishable to the noviee, of the distance or proximity of the game, until at length, us the rewand of patlenco und persererance, they steal poon the hemel hasispected, and either finish the hunt with in suth slifi inni it trimuphant Whoop, or, as is frequentily the mise, Ilscorer that the ganie, from some unimagined manse, fins tuksif silurm und sturted on the jump, and sugive it 111 in hespaif. An
 so difficult, none requites so rate u combininilon ins this, of quickness of sight, wariness of trent, rety finstinct of thes
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speed, conld many endur degree qualit Reind ence o
craft, and perfection of judgment." Fortunately, however, the weather conditions that favor this mode of hunting usually come only within the close season, so that it is seldom resorted to by the true sportsman.

In identifying the relationship between the wild Reindeer of Europe and the Woodland Caribon of America, Judge Caton's admirable book is the nost precise and exhaustive treatise that I have met with." To my mind, it proves practically, from personal study and careful examination, that there exist many similarities and peculiar characteristics in both of these fine animals. The antlers, however, of the American species would appear to be somewhat heavier and more palmated than are those of the animal of the Old World-as much more massive, at lenst, as the American Woodland Caribou is larger and heavier than his European congener.

Doubtless, if turned to account, from his great strength, speed, and endurance, the Woodland Caribou of America conld be domesticated, and his services made available in many ways arlvantageous to mun. Perhaps his inability to endure the heat of warm summer weather might, in some degree, operate against the possibility of utilizing those qualities which, in Laphand and Greenland, have made the Reindeer so valuable, and even so indispensable, to the existence of the inhabitants of those cold northern countries.

I have alrealy referved to the speed and endurance of the Reindeer of Europe, an animal so closely allied to the Woolland Caribon; and from knowledge gleaned from anthentic somres, of the speed und staying qualities of the latter, I am inclined to believe that there is mo exaggeration used or intended. When the robust build, clem-cut, bony limbs, and general active make-up of the Woolland Caribon are taken luto aroonat, I find no difficulty in believing that one of those mimals, in full health and in good travelling condition, in his wild state, could easily trot twenty or twenty-five miles ail hour, nul kpeppup that ratio of speed, on fivimble gromind, for al lenst fuir bir live homes, or longer. The greni, lumbering Movise is a imugnilicent trotter, but the

Caribou could get beyond his mange of vision in half an hour. There can be no doubt that the Caribou is the champion trotter of America.

The general character of the island of Newfoundland is that of a rugged and barren country, with hills never exceeding one thousand feet in height. Large lakes nad ponds, the breeding-grounds of geese, gulls, and ducks, are so numerous that probably one-eighth of the entire island is under water. The uneven surface of the land is covered by woods, marshes, and barrens. The trees consist of fir, spruce, pine, juniper, birch, witch-hazel, mountain ash, aspen, and alder. The marshes are as often upon the sloping sides of the hills as in hollows, the moisture being held in suspen-sion- by a deep conting of moss, which renders walking, under a lond, extremely laborions. The barrens nee in many places interspersed with large patches of "tucking-lushes," or dwart juniper, which grow about breast-high, with strong branches stiffly interlaced-so firm that you can almost walk on them-and the labor of struggling through them beggars description.

The "Bethuk," or "Baeothic"-the aboriginal "Red Ind'ans"-so named from the Deer's fat and red ochre pigitants with which they anointed their bodies-are now extinct, although the miles of Deer-trmp fences male by these people, and which are still in a fair state of preservation, prove them to have been numerous in the early part of the present century.

During the summer months the Caribon are to be found in the woorls to the northward; but every fall they migrate, in vast herds, to the barren hills near the sonthern shore, where the comparative less depth of snow and the winter thaws enable them to obtain thé moss und lichens upon which they chiefly subsist. It was during such migrations that the Indians used to slay the animals necessary for their winter use, as they followed within the fences until the outlet terminated in a lake, when the animals fell an easy prey to the arrows and spears of their ambushed and canoed foes.
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The reckless slaughter of Caribon for sport only - the carcasses being left to rot on the ground-has compelled the Government of Newfoundland to enact stringent luws for their protection; but it is still a grand country for the true sportsman, as he is certain to find game in abuadance in the immediate vicinity of the countless lakes and streams, which enable him to transport the trophies of the chase to salt-water navigation without the fatigue of backing it for miles, ankle-deep in soggy moss.

The following exciting sporting incidents are jotted down after a bivonac chat with one of Canada's crack shots with a ritle, at either running or flying game. Few persons, outside of the family circle, have any knowledge of the skill and experience, as a sportsmnn, of Mr. Frederic Newton Gisborne, F. R. T. C., Canala's widely known engineer and electrician-an experience gained in the swamp glades of Central America, the Kangaroo haunts of Australia, and the barrens of Newfoundland and Canada.

A remarkable and unusually ponderous pair of Woodland Caribou-horns, now being remounted by Mr. Henry, taxidermist, of Ottawa, happily obtained for the writer the following brace of interesting anecdotes connected with their possessor.

When crossing Newfoundland, in the '50s, Mr. Gisborne was preparing to camp some fifty miles west of the Bay of Despair, and thirty miles inland from the sonthern coast. He was accompanied by half a dozen men, amoug whom was his fait, ind follower and friend, Joe Paul, a Miemac Indian from Cona liver. Paul was one of Nature's gentlemen, a grand hunter, and an intense admirer of his master's skill with a twenty-inch muzzle-loading rifle, of 44 caliber. Joe's keenness of sight was proverbial, being almost equal in power to that of an ordinary field-glass.
"Me see one, two, three, four Curibon!" exclaimed Joe, gently. "Come this way;" and the binocular confirmed his statement.

## IMAGE EVALUATION TEST TARGET (MT-3)



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They were advancing down the side of a hill fully two miles distant, on a long, flat marsh interspersed with deep pools of still water and unknown depths of bog mud. The beaten Deer-path traversed the center of the marsh and skirted the edge of the largest pond. There was no shelter or cover of any kind, excepting a little grove of dwarf spruce, in which was the camp, distant a quarter of a mile from the path; and when the herd reappeared upon the marsh, and proved to be one old stag, one five-year-old stag, and two does, Joe added:
"Fine meat, white stag, but no man can stalk him!"
Nevertheless, Mr. Gisborne prepared for the attempt, despite the half-scornful look of Joe. Crawling along on his stomach, he slipped into the ice-cold water, feet first, holding on to the rotten edge of the bank, which was about a foot above the water; and with his body floating, he quietly slid his riffe along the edge, and thus advanced to within two hundred yards of the Deer-path; when, finding himself chilled to the bone, he with the utmost difficulty crawled out behind a slight rise in the ground which happened to be between himself and the herd, then eight hundred yards distant, and quite beyond the range of his Tilliputian rifle. The old stag, however, sniffed the air, and then walked gently down to and around the pond; but the other animals sauntered on, quietly feeding, until one of the does noticed the hunter, who lay with eyes nearly closed, as still as a log, and at once moved after the old one; the second doe then followed down the path. No doubt. Joe was muttering, "Ah! Me say no man, no Indian, can stalk that white stag! Now he run!"

But the two were running-the stag, and the hunter also, to shorten the distance for a flying shot at one hundred and sixty yards. Then came an almost inaudible crack, in the intense excitement of the moment, and away bounded the noble animal, with his nose high in the air, along the pathway.
"Ooh!" shouted Joe. "Him hit-mon Dieu!" (all of the Conn Indians speak better French than English) "him hit!"

And, sure enough, after running several hundred yards, the stag wheeled round, ran back up the marsh, and fell dead, with a ball through his heart, within ten yards of the spot where he received the fatal bullet.
"You all some Indian - you 'Waabeck Albino'" (Auglice, "White Indian'"), said Joe, with his eyes on fire, as he patted Gisborne's wet shoulders, with the affectionate pride of a young maiden for a victorious lover; and then both fell to work cooking venison steaks.
"Now, Joe Paul and Peter Jeddore," said Mr. Gisborne's young bride, in the year 1857, to the devoted Indian servitors (not servants), who were again to accompany her husband upon a mineralogical surveying trip north of Trinity Bay, Newfoundland, " mind you bring me home a fine set of Caribou-horns."
"Suppose the Captain (the synonym of boss in Newfoundland) kill him, me carry him," responded Joe, regarding her not too affectionately, as the worthy fellow was a " wee bit" jealous of her gentle anthority.

In due course of time, one tine afternoon in September, Gisborne and Joe might have been seen sitting on the side of a hill twelve miles inland from the Bay of Bulls, Trinity Bay. Bear-spoors wereplentiful, and Deer-paths innumerable, but no game in sight.
"Suppose we go back to camp at harbor-soon clark," said Joe. Standing erect on a large boulder, clean-cut against the sky-lines, Joe gazed long and earnestly northward.
"Caribou come!" he said, gently; "come very quickbelieve frightened: now me see-Wolf after him."

Joe subsequently shot a fine buck that was heing chased by a Wolf at Deer Harbor, only a few miles inland from Bay of Bulls, and always insisted that the same Wolf had twice driven game to their larder.

In a hollow beneath the hunters ran a stream, the banks of which were skirted by alder-bushes and a broad strip of juniper and spruce trees on either side; :nd down the oppo-
site hill-side rushed the Deer for cover at the head of the droke (Newfoundland term for grove) of timber, which commanded almost half a mile down-stream, and for which point Gisborne ran "for all he was worth," while Joe started for the upper end for a chance shot if the Deer was turned from below.

It was a nip-and-tuck race; for, when Gisborne reached the brook and proceeded apward, the freshly splashed boulders proved that the stag had been turned. Rigid as death, he listened attentively, awaiting Joe's shot-when, without a moment's warning, the alder-bushes waved, and the great stag appeared in mid-air as he cleared the brook at a bound and dashed into the opposite growth; but not until a ping from Gisborne's rifle had placed a bullet a little behind his shoulder, which landed him, dead as venison, upon his mossy bier.

A few minutes later Joe waded down the stream, with a quiet look of exultation in his eye.
" Me know you git him," he said. "Wolf sit top of hill -watch if he come out-but he dead somewhere. Oh!" he added, "one shot-dead! Now Gisborne’s squaw say, 'All right, Joe.'"

What a noble brute! and what magnificent antlers-fiftyfour points! And the horns are here in Ottawa to prove the correctness of the count.

Now, however, came the tug of war-the transport of the carcass from the glen to camp. Joe was ill with a sprained back, caused by slipping off a wet boulder; but he nobly bore the head and hide, while Mr. Gisborne staggered along under the weight of the hind quarters in one piece, and, after innumerable resting-spells, ultimately reached the harbor, played out, but elated; and no wonder, his total load, as scaled at a store at Heart's Content, having been one hundred and eighty pounds. The haunch, which Mr. Gisborne presented to his friend, Sir Alexander Bannerman, Governor of Newfonndland, turned the scale at sixty-four pounds. It was covered all over with a coating of fat two inches in depth. .


BIG CARIBOU HORNS.

The last-mentioned Deer must have been far above the ordinary size and weight even of Newfoundland Caribou, well-known to be the largest in America. I think, considering the size and weight of the horns, an illustration of which is subjoined, and estimating the total weight by the statements of Mr. Gisborne, as well as the weight of the hide, that this magnificent animal would weigh at least five hundred and fifty pounds. The shooting of such a grand animal is an event of never-to-be-forgotten interest and importance in the career of any sportsman, and our friend, Mr. Gisborne, is to be congratulated upon having, by keen insight and true sporting patience and strategy, succeeded in laying low perhaps the largest Caribou ever killed in America.

On reading the far-back history of the large game animals of the British maritime provinces, one finds it difficult to believe that any number of Moose or Caribou can still be found near the eastern coast. The Micmacs, or "Red Indians,", of Newfoundland, in ancient times were in the habit of destroying both species for their skins alone, leaving the carcasses-the finest venison in the world-to rot where they fell, or to be devoured by the carnivora of the woods.

In Cape Breton alone, the Indians destroyed, in one winter in the olden time, five hundred Moose, taking away nothing but the skins. This shameful slaughter of Caribou was accomplished in the following manner: Brush fences, miles in length, were constructed on each side of their line of march in their autumnal migrations. These fences narrowed at a point where there was a lake or river to be crossed, widening out laterally for many miles through the wilderness. The poor animals unsuspectingly passed along through this fatal defile, which ended at the edge of the water. The day, even the hour, of their arrival was known through the agency of the scouts; and when they entered the water, they were set upon by the concealed hunters in force, in canoes, and hundreds were thus mercilessly butchered in a few hours.

Although the machinery for the enforcement of game laws, generally speaking, is miserably inefficient, I am glad to believe that any such improvident and wanton destruction would not be tolerated in any civilized part of the American Continent to-day.

In the foregoing sketch of the Caribon-the Reindeer of America-while adhering strictly to zoollogical facts, I have endeavored to make the paper as interesting to naturalists, scientific and practical, as I hope it may prove to sportsmen, who have had many opportunities of learning, amid the wild hannts of our large game animals, minute and nseful particulars beyond the reach of the mere scientist, whose researches have been contined to books.

I met recently with an article classifying black and silvergray Foxes as distinct species, as well as distinct from the large red Fox, which, if commonly accepted history is correct, is not a native of America, but has descended from English ancestors, imported by Sir Guy Carleton in the Colonial period of the United States, who had found that the small, grayish-colored native Fox had neither the speed nor endurance to hold his own before a pack of Foxhounds. From the fact that one hundred and fifty years ago there was a greater number of black and silver-gray Foxes in the Canadian part of this continent than rel ones, I was always of the opinion that they were distinct in species from the red variety of a later date.

My faith, however, in the above theory met with a somewhat staggering shock a few years ago, when a boy in an adjacent township found a pure black, a pronounced silvergray, and four red Fox puppies in the den of a sle-Fox of the real red variety. In color, the three varieties were as strongly marked as possible. This strange result may not, however, shake the theory of distinctness of species; but possibly might be accounted for-as such incidents are explainable-as difference of color and other peculiarities are accounted for, in the frequent antagonisms existing in one litter of the young of the canine, or rather domestic dog, species. The black and silver-gray alluded to were kept alive
until nearly full-grown, and, when killed, they were in all points still different and distinct in the color of their fur. Doubtless there are many peculiarities relating to some of the Deer family yet to be revealed by careful future investigation. And there is no more valuable source from which the naturalist may draw for information than on these same simple dwellers in the forest, the men who live by hunting and by wooderaft.

Hitherto, the standard naturalists of the world have contributed to the fund of general information a vast amount of useful knowledge, which will in future be supplemented by many strunge revelations which are at present in the vale of mystery.

No single writer, so far as my researches have gone, has devoted so much time, money, and talent to the history of the Deer family as Judge John D. Caton, of Ottawa, Illinois. Few, if any, have had, or rather made, such ample opportunities of studying and observing the characteristics of the Cervidee of the world. In my opinion, no other writer or investigator of this most interesting group of animals has turned his grand opportunities so persistently, patiently, and practically to such good account.

## TIIE BARREN-GROUND CARIBOU.

This animal is smaller than the common Deer (Cervus Virginianus). General color, clove-brown in summer, whitish in winter. Inhabits the "Barren Grounds" and Arctic regions of North America.

There are two species of Reindeer-commonly called Caribou-in North America, contined in their geographical distribution, to the eastern and northern portions of the continent. The Barren-ground Caribou is abundant, in the summer season, in a tract of barren, treeless country bounded on the south by the Churchill River, on the west by the Great Slave, Athabasca, Wallasten, and Deer Lakes, and the Coppermine River, while toward the north its range stretches away quite to the Polar Seas. From the circumsiance of its being the only Deer found in this desolate
region, the Barren-ground Caribou has derived its commonly received name. I extract the subjoined foot-note from "Billings' Naturalist and Geologist," to which excellent work I am indebted for much of the valuable information contained in this sketch:

Note.-The Reindecr have eight incisors, or front teeth, in the lower jaw, and twelve molar, or grinding teeth, six on each slde. In the upper jaw they have no incisors, but two small canine teetlr and tweive molars, slx of the latter and one of the former on each slde.

Tarandus, a Relndeer; Arcticus (Latin), Arctic. In the "Natural History of New York," this animal is called Rangifer Tarandus; in Audubon and Bachman's "Quadrupeds of North America," Rangifer Caribou; by many authors, Cervus Tarandus; by the Cree Indians, Attehk; by the Chippewyans, Etthin; Eskimos, Tooktoo; Greenlanders, Tukta; French Canadians, Currebouf, or Caribou-literally, a "square ox."

This animal is not, however, strictly confined to the territory above mentioned as its persistent and perpetual habitat. In the autumn it migrates toward the south, and spends the winter in the woods; and again, toward the northwest, it ranges nearly across the continent.

This is the Deer so frequently mentioned by the hardy adventurers who have periodically, and often disastrously, braved the dangers of the Arctic Seas in search of the northwest passage. Its flesh and skins have kept many of them from starvation, and furnished the most serviceable and appropriate clothing to protect them from the intense cold of the Arctic regions.

From accounts furnished by many travelers who have visited the Barren Grounds, we learn that Tarandus Arcticus is a small Deer, the largest, when in the highest condition, weighing only from ninety to one hundred and twenty pounds, exclusive of the offal. In proportion to its size, its legs are shorter and stonter than those of the common Deer, and the nose and front part of the head resemble more the head of a cow than that of any of the more graceful members of the genus Ceroidce. The horns are slender, and palmated at the crown. Near their base they send out brow-antlers, sometimes of singular irregularity, which incline downward in front of the forehead, and are flat-
tened laterally, so that the palmated portion is vertical before and between the eyes.

Both males and females have horns, which fall off and are renewed annually, as in other Deer. The ears are small and oval, and are covered, externally and internally, with thick hair. The feet are broad, Hat, and concave beneath, and well adapted for digging in the snow, and, from the sharpness of the outer edges, admirably fitted for


Barren-Ground Caribou.
running upon glare-ice. The tail is of moderate length, the liair in winter being long and coarse; in snmmer, short and smooth. The general color is grayish-brown, with the belly, inside of legs, and under part of the neck, white.

According to that eminent naturalist, Judge Caton, and other celebrated writers on natural history, the Caribon is a true Reindeer. This fact has been satisfactorily and scientifically proven by the learned and experienced author of "The Antelope and Deer of America," not only by a 7
thorough acquaintance with the North American Caribou, but also by a prolonged sojourn in Lapland, devoted to the study of the Reindeer of the Old World amid their native ice and snow. With many writers, however, the point of identity between the Reindeer of Europe and the Caribou of America remains still doubtful. It has been contended that, although the Caribou of America is a true Reindeer, it belongs to a distinct species from those of the Old World, although in generic character and habits identical.

Sir Jchn Richardson, the celebrated explorer of the northern portions of America, in his work on this animals of the country, says:

In the month of July the Caribou sheds its winter covering, and acquires a short cont of hair of a color composed of clove-brown mingied with deep reddish and yellowish brown, the under surface of the neck, the belly, and the janer sides of the extremitles remuining white at all seasons. The hair at first is fine mul flexible, but as it lengthens it increnses gradually in diameter ut its roots, becoming at the same time white, soft, compressible, and brittle, like the hair of the Moose. In the coarse of the winter the thickness of the hair at their roo's becomes so great that they are exceedingly close, and no longer lie dowa sinoothly, but stand erect; and they are then so soft and tender below, that the flexible colored tips are ensily rubbed off, and the fur appears white, especially on the flanks. This occurs in a smaller degree on the back; and on the under purts the hair, although it aequires length, remains more flexible and slenter at its roots, and is consequently not so subject to break. Toward the spring, when the Deer are tormented by the lavev of the gad-fly making ideir way through the skin, they rub themselves against rocks until all the coiored tips of the hair are worn off, and their fur appears of a soiled white color.*

The closcuess of the hair of the Caribon, and the lightness of the skin, when properly dressed, render it the most appropriate article for winter clothing in high lititudes. The skins of the young Deer make the best dresses, und they should be killed for that purpose in Augnst or Sejitember, as, after the latter date, the hair becomes too long and brittlo. The prime parts of eight or ten Deer-skins make a complete suit of clothing for a grown person, which is so impervious to the cold, that, with the addition of a blanket of the same material, anyone so clothed may bivounc on the snow with safety, and even with comfort, in the most extreme cold of an Arctie winter's night.

[^1]The Barren-ground Caribou, which migrate to the const of the Aretic Sen in summer, retire in winter to the wools lying between the sixty-third maisixtygixth degree of latitude, where they feel on the long grass of the swimps, About the end of April, when the partinl meiting of the snow has softeued the oetraria, cornicularia, und ceromyces, whith clothe the barren grounds like a carpet, they make short excursions from the wools, but return to them when the weather is frosty. In May the females procecel toward the sen-coast, and toward the end of June the maies are in fuil marels in the snme direction. At that period the power of the sun has diried up the lichens on the barren grounds, and the Caribou frequent the moist pastures which cover the bottons of the narrow valleys on the coasts mid islands of the Aretic Sen, where they graze upon the sprouting carices and on the withered grass or hay of the preceeing yeur, which is at that period stilistanding and retaining part of its sap. Their spring journey in performedi mitly on the suow, and partly niter the snow has disappeared, on the lee covering the rivers and iakes, which have in general a northeriy direction. Boon ufter their arrivul on the const, the femnles drop their young, generaily two. They commence their return to the south in September, nud rench the vicinity of the woods toward the end of October, where they are joined by the males. This journey takes piace after the snow has fallen, and they serape it awny with their fect to procure the liehens, which are then tender and pulpy, being preserved, moist and unfrozen, by the hent remaining in the earth. Except in nutumn, the buik of the males und females live separately; the former retire deeper into the woods in winter, while herds of the pregnant docs stay on the skirts of the barren grounds, and proceal to the const very early in the spring.

Cuptain Parry saw Deer on Meiville Peninsula ns late ns the 28d of September, and the females, with their fawns, made their first appearance on the $\mathbf{2 3 d}$ of April. The males in general do not go so far North as the females. On the const of Hudson's Bay, the Barren-ground Caribou migrntes farther south than those on the Coppermine or Mackenzie Rivers; but none of them go to the southwarl of the Churchill.

When in condition, thero is a iayer of fat deposited on the back and rump of the males to the depth of two or three inches, or more, immediately under the akin, which is termed depouille by the Canadian ooyageurs, and as an article of Indian trade, is often of more value than wil the remainder of the carcass. The depouille is thickest nt the beginning of the nutumn; it then becomes of a red color and acquires a high flinvor, and soon afterward disappears. The femajes at that period are lean, but in the course of the winter arquire a small depouillé, which is exhausted soon after they drop their young.

The flesh of the Caribon is tender, and its flavor, when in season, is, in my opinion, superior to that of the fluest English venison; but when the animal is lean, it is insipid-the diffcrence between lenn nad well-fed Caribou being grenter than one can conceive who has not had an opportunity of juaging. The lean meat fills the stomach, but never satisfies the appetite, and searcely serves to reeruit the strength when exhausted by labor.

The Chippewyans, the Copper Indians, the Dog-ribs and Hare Indians, of Great Bear Lake, would be totaily unable to inhabit their barren lands were it
not for the Immense herds of this Deer that exist there. Of the Caribou-horns they form their fish spears and hooks, and, previous to the introduction of European iron, ice-chisels and various other utensiis were likewise made of them.

The bunter breaks the leg bones of a recently slsughtered Deer, and while the marrow is stiii warm, devours it with relish. The kidneys, part of the intestines-particulariy the thin folds of the third stomach, or many-pliesare likewise occasionaliy eaten when raw; and the summits of the antlers, as long as they are soft, are also delicacies in a raw state.

The colon, or large intestinc, is inverted, so as to preserve its fatty appendages, and is, when either roasted or boiled, one of the riciest and most savory morsels the country affords, cither to the native or white resident. The remainder of the intesthes, after being cicaned, are hung in the amoke for a few dsys, and then broiled.

The stomach and its, contents-termed by the Eskimos nerrooks, and by the Greenlanders nerrikak nerriookak-are ulso caten; and it would appear that the iichens und other vegetable matters on which the Caribou feeds are more easily digested by the human stomach when they have been mixed with the salivary and gastric juices of a ruminating animal. Many of the Indians and Canadian royageurs prefer this savory mixture sfter it has undergone a degree of fermentation, or lain to season, as they term it, for a few days.

The blood, if mixed in proper proportion with a strong decoction of fat meat, forms, after some nicety in the cooking, a rich soup, which is very palatabie and highly nutritious, but difficult of digestion.

When all the soft parts of the animal are consumed, the bones are pounded small, snd a iarge quantity of marrow is extracted from them by boiling. This is used in making the better parts of the mixture of dried meat and fat, which is named pemmican, sud it is also preserved by the young men and women for anointing the hair and greasing the face on dress occasions. The tongue roasted, when fresh or when half-dried, is a delicious morsel.

When it is necessary to preserve Caribou-meat for use at a future period, it is cut into thin siices and dried over the smoke of a fire, and then pounded between two stones. This pounded meat is dry and husky when eaten alone; but when a quantity of the biack fst, or depouille, of the Deer is added to it. it is onc of the greatest treats that can be offered to a resident in the fur countries.

The Caribou travel in herds varying in number from eight or ten to two or three hundred, and their daily excursions are gencraily toward the quarter whence the wind blows. The Indians kiil them with the bow and arrow or gun, take them in snares, or spear them in crossing rivers and lakes. The Eskimos also take them in traps ingoniously formed of ice or snow. Of all the Deer of North America, the Barren-ground Caribou is the easiest to approach, and they are slaughtered is the greatest numbers. A single family of Indians will sometimes destroy two or three hundred in a few weeks, nnd in many cases they are killed for their tongues aione.

This Deer is described as of an unsuspecting but inquisitive disposition. The northern hunter, when he sees a Caribou feeding in the open piain,
spproaches as near as possible without being seen, then throws hinself on the ground, draws his coat of skins over his head, and arrang 38 it so as to resemble somewhat the form of a Deer. He then attracts the animal's attention by a loud bellow. Urged on by curiosity, the silly Caribou spproaches to examine the mysterious object, capering about and running ound in circles. Meanwhile the Indian lies perfectly still, well knowing that ins prey wili not be satisfied until he can get a near view. When within a shoit distance, ten or twenty yards, the hunter shoots him with an arrow.

Before the introduction of fire-arms-which are ccmmon at present amongst nearly all the North American tribes-the Indians used their bows and arrows, however simple and rude in construction, with singular expertness and deadly effect.

Another mode of capturing the Arctic Caribou may be thus described, and it may be easily imagined that the process results in the most extensive and deadly slaughter: A large inclosure of brush, sometimes a mile in circumference, is constructed, with a narrow entrance, situsted upon one of the most frequented paths or runways of the Deer. Within are a multitude of winding lanes formed of the same material. In these they place a great many smares made of Deer-skin thongs of great strength; and then by various expedients the hunters manage to drive a herd of Deer into the inclosure. The terrifled animals run about in all directions through the winding avenues, become entangled in the snares, and soon the whole herd is kilied. Grent numbers, it is sald, are slain in this way; and some families are so successful that they do not require to remove their tents more than two or three times in a season.

The late Elkanah Billings, one of the leading paleontologists of his time, and a naturalist of distinguished ability, thus speaks of the Barren-ground Caribou:

From all the information we have been able to collect upon the subject, the Tarandus Arcticus never travels so far south as Canade, although its near relative, the Woodland Caribou, is abundant in certain parts of the province (now the dominion). Audubon and Bachman state that from the "Barren Grounds" it ranges westward neross the continent; and that it is mentioned by several authors as Inkabiting the Fox, or Aieutian, Islunds.

At the present day, it is a well-known fact that the Caribou, most likely the Arctic species, is quite abundant in Alaska. Mr. Billings cestinues:

It is not found so far to the southward on the Pacific or the Atlantic Coast, nor on the Rocky Mountains within the limits of the United States. In every part of Arctic America, including the region from Hudson's Bay to far within the Arctic Circle, the Barren-grouud Caribou is met with in greater or lesser sbundance.

I have devotcd considerable space and as much care as possible in the foregoing authentic-so far as my researches
warrant-description of the characteristic peculiarities, habits, habitat, geographical distribution, and physical conformation of the Barren-ground Caribou. I have done this for two reasons: First, because the Tarandus Arcticus is one of the most curious and interesting animals of the entire cervine genus; and, secondly, because this beautiful animal is, perhaps, the least known, generally speaking, of the large family of the Cervida. In anatomical structure, and in all other respects, the Caribou of the Far North is admirably adapted to the cold and inhospitable regions in which he finds his home. Without the Caribou, the native inhabitants indigenous to the frigid regions in which Nature has fixed their congenial habitat could not exist. The precarious supply of Walrus and Seals wonld inadequately compare with the abundant provision found in the Reindeer, an abundance which must soon become limited, should the unwise and improvident slaughter to which I have referred be much longer permitted to continue.

From the view of a sportsman and a naturalist, it seems to me that wise and rational legislation should be made to control the Indian, as it does, or ought to do, the white man. Culpable and barbarous extermination of large game, which constitutes the glory of the forests of any land, is vorse than willful setting of fire to the woods. Society should protect itself against criminals guilty of either act; and the law, with a wise, strong, and relentless hand, should protect the Indian against himself.

The Barren-ground Caribou is less cunning and less wary than any other species of Deer; and, consequently, when, as shortly will be the case, the iron-horse plunges through the frigid habitat of the Musk-ox and the Tarandus Arcticus, and the roar of the steam-whistle startles the affrighted denizens of the Arctic Circle, the enterprising sportsman, armed with the deadly repeating-rifle, will soon decimate the mighty herds which still exist, despite the deplorable butchery of the Indians on the constituted highways of their migrations, as well as by means of the pens already described.

## On this head, Parker Gillmore says:

Capable of resisting with comparative impunity the greatest severity of cold, they suffer severely from heat, to avoid which they make two migra:ions annuaily to the north in summer, grazing back to the south in winter. During these journeys the greatest destruction to the species takes place, for they almost invariably follow the same line of mareh, with which the natives are acquainted, and where they wait for the herd, either entering mountain deflles or crossing rivers, when they are surrounded and indiscriminately slaughtered. They are also hunted on snow-shoes, after the manner of hunting the Moose.

When the time comes to which I have referred above, the interminable plains and hills of the Arctic Circle will, by the annihilation of time and space, be almost next door; then we shall have many an interesting and thrilling tale of flood and field for the sporting journals, to delight the soul of the sportsman who has neither the time nor the money to spare to enable him to visit those, at present, far-off fields of sport. We shall all then become as well acquainted with the Musk-ox, the Polar Bear, the Walrus, the Barrenground Caribou, and the fields of ice which glisten beneath the eternal splendor of the unsetting sun, and the distinct crackling of the aurora borealis, as we now are with the game animals and birds of our own country. Sporting literature, notwithstanding what mere humanitarian writers and thinkers may say to the contrary, has an elevating and humanizing effect; and the true sportsman, wherever you find him, in the palace or in the humble cot, on the mount-ain-side or in the vale, on land or water, in the city or amid the glorious and sublime solitudes of Nature, is ever and always a gentleman.

In the country as far as two hundred and fity miles north of the Ottawa River, in the unbroken wilds of which the Woodland Caribou abounds, I know of no authentic accounts of the appearance of the Arctic species. Dnring very severe winters, the Ptarmigan comes southward to the pine woods, within one hundred and fifty miles of the Ottawa. Many of them are brought to this city, and mounted by taxidermists. The wanderer of the Arctio Circle never, that $I$ have learned of, comes so near.

Although the European Stag ànd Scandinavian Elk are represented in America by their more ponderous cousins, the Wapiti and the Moose, Europe, or any other part of the Old World, has no parallel to our Barren-ground Caribou. The Woodland Caribou, in almost every point, is identical with the European Reindees but it would seem that no other part of the world produces an animal sufficiently similar in form, size, and generic characteristics to our Arctic Caribou as to warrant the determination of an identity of species. This I consider a very strong argument in favor of the very generally received conclusion arrived at by distinguished naturalists, that the Barrenground Caribou is a distinct species of the genus Cervida. Constitutionally formed and fitted to inhabit a country pecul:arly suited to his nature and wants, he stands, as it were, alone, the cervine lord of a territory as yet untrodden by any other branch of the great deciduous-horned family to which he belongs. The Mule Deer and the smaller animal, the Black-tail, are much more similar in general features than are the two varieties of Caribou, both of which differ from the Virginia Deer, not the least distinct of such difference being in the shape of the antlers and the style of their growth. In the Virginia species the prongs grow from the posterior side of the beam, while in the antlers of the Mule and the Black-tail they spring from the anterior. Inhabiting such a distant and inhospitable portion of America, it is bnt natural to conclude that there is still much to learn about this interesting member of the Deer family. When he shall have disappeared from the fastnesses of his Arctic habitat - if the time shall ever come-the aboriginal inhabitants of that section of America, whose existence mainly depends upon him, in all human probability shall also have disappeared from all bnt .ne page of history.

If $I$ have written one sentence upon any portion of the history of the Reindeer of America; if I have been fortunate enough to be able to contribute one thought which is calculated to amuse or entertain my large family of rela-
tions-the sportsmen of America; if I have been permitted to add one well-authenticated fact to the fascinating records of this singularly interesting species of the great family of Deer-I shall congratulate myself upon the, to me, gratifying conclusion that I have not been all my life an enthusiastic sportsman in vain:

And now my pleasant task is done; It brings back many a glorious run, Emerging from the lambent haze
Which circles round the camp-fire's blaze,
Revealing to fond memory's eye
The dear departed scenes gone by, When limbs were lithe and arms were strong, And life one gladsome burst of songRevealing, 'mid unfading sheen,
The "runway" in the forest green;
" The antler'd monarch's" springing bound;
The matchless music of the hound, When headlong on the steaming scent, With Instinct true as steel, he went! The gaze into the spreading track, The breaking twig, the rifle's crack, The quivering limb, the closing eyeThe forest's dylng majesty!


## THE WOODLAND CARIBOU.

By Dr. R. B. Cantrell.

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80NTIL a very recent date, little could be learned of the real character of the Caribou (Rangifer Caribou', and museums monopolized exhibitions of stuffed specimens, with monographic descriptions of this almost mythical species of the Deer family. Now, however, facts can be multiplied without which it was before impossible to gain any scientific knowledge of the Caribou. "When doctors disagree," etc. Even such distinguished naturalists as Audubon and Agassiz collided on the generic name of the lordly, independent Woodland Caribou, that defied all the arts of man to domesticate or train for any useful purpose, as his congener, the European Reindeer, is trained. As Agassiz only proposed a name-Cervus hastatus-it was not finally adopted, and Audubon and Bachman requested their subscribers to alter the name on their plates-splendid illustrations-to the common name under which the Caribou has become known and recognized in America, and that can by no possibility lead to any misapprehension. Rangifer Caribou is ther fore conceded by all authorities to be the most applicable to the Woodland Caribou, and Rangifer Greenlandicus to the Barren-ground Caribon of the Arctic regions. The Greenland Reindeer is as distinct from its European cousin as is the Woodland Reindeer, although he is much smaller than the Woodland Caribou; the latter averaging in weight two hundred and seventy pounds, while that of the Arctic brother is only one hundred and twenty-five pounds.

In regard to its boreal habitat, the Caribon resembles the Moose, as well as in its palmated antlers, its overhanging muzzle, and the shape of its foot. But the Moose has a ( 107 )
large, coarse, ugly ear, while the Caribou has the smallest and shortest ear of all the Deer family. To this fact the trappers of the Maine woods attribute that acute sense of hearing that enables the Caribou to detect the slightest sound, even the rustle of a single dry leaf, and which will start him like an arrow from the range of his pursuers.

It is difficult to assign limits to the range of the Caribon. The hahitat of the Rangifer Caribou has been a mooted point that can be settled only by an agreement to differ with any rigid limitation. Migrating occasionally to the polar regions of his Eskimo brother, the Rangifer Greenlandicus, our Woodland species may be only paying a ceremonious visit, attracted by the feast of Reindeer moss there so liberally spread out for him; or, perhaps, negotiating for reservations for future occupancy, beyond the widening hunting-grounds of the dreaded white man. It is certain that the Woodland is chiefly found about Hudson's Bay, in Maine, and the States bordering on the St. Lawrence.

Emmons considers it doubtful if the Caribou ever inhabited Massachusetts; but he has occasionally appeared in the northern parts of Vermont and New Hampshire. Richardson gives as a northern limit the sonthern extremity of Hudson's Bay, reaching as far west as Lake Superior, and southerly to New Brunswick and Maine.

Caton asserts, contrary to most authorities, that west of the Barren Grounds the range of the Woodland Caribou extends north to the limits of the continent, and that in the northern parts of Montana and Washington, and in British Columbia, they are clained to be still larger than on the Atlantic Coast. We can not surmise any confusion as to the two families, Rangifer Carivou and Rangifer Areenlandicus, in the mind of Caton after the statement we have made as to the relative averages of the weight of both species. Besides, the irank confession of that distinguished naturalist, in his treatise on the Antilo-capra and Cervida of North America, that he has failed to domesticate the Caribou, while he has held in captivity every other species of American Deer, affords ground for confidence in his state-
ments of what he does know; and to this author all friends of the Caribou are more indebted for facts than to any other recent writer.

Like the Chameleon, the Caribou changes color, to the eyes of investigators, and this gives rise to very amusing disputes. Pallas describes it as of a rich, glossy reddishbrown in summer, becoming grizzly about head, neck, and belly toward winter; but he declares it never becomes anything approaching to white! In the face of this statement, Audubon gives us a beautiful Caribou, "in pure white and brown," painted from Nature, and Caton says "the body is sometimes nearly all white." For ocular demonstration, the contributor has only to look at a skin that affords a soft, white couch for his little daughter, who makes her annual pilgrimage to the haunts of the Caribou in the Maine woods. In July and August the Caribon sheds its winter coat, and we find it with a smooth coat of short hair, a mingled red and yellow brown, the under surface of the neck and belly and the inner sides of the extremities remaining white all the year. During the winter months, the hairs become so thick and close that they stand erect, and the brittle colored points are rubbed off, leaving a soft, white fur, especially on the flanks. When the gad-fly makes its appearance, at the close of winter, the Caribou rids himself of his tormentor, and the remainder of his color-tipped hair at the same time, by rubbing against rocks and stones, until he becomes entirely white, and looks as spectral as a soiled white fur will admit.

The horns are so varied in shape that no two samples can be found alike, and in no individual case do the horns grow into the same shape or number of prongs as in the season before. In both sexes there is a remarkable development of brow-antlers, which extend forward over the forehead. The horns of the Barren-ground Caribou are larger and more graceful than those of the Woodland Caribou, although he is so much smaller in size. A distinguishing peculiarity of the Caribou antler is the great length of beam of the antler in proportion to its thickness. In the
adult, some of the branches of the antlers are palmated, the upper branches having posterior projections. Almost invariably, the brow-tines on one of the antlers is broadly palmated.

To interested readers, the following dimensions of a pair of antlers which the writer lately measured muy not be out of place. Bearing in mind that the horns in both sexes are irregularly palmated, bifurcated, and rather long, we find a specimen where the two main antlers are furnished with irregular, sharp points, some of them seven inches in length but most of them quite short: Width between the horns, on the skull, eight and three-fourths inches; depth, one and three fourths inches; length of main beam, three feet. There is a palmated brow-antler, with four points, inclining downward and inward; on the opposite horn there are two points, but the antler is not palmated. Immediately above the brow-antlers there is a branch, or prong, on each horn, abont fourteen inches in length, terminating in three points; these prongs incline forward and inward. About half the length of the horn from the skull, there is another prong on each, about two inches long; beyond these prongs each horn continues about the same thickness, spreading outward slightly to within a few inches of its extremity, where one diverges into five points and the other into six. The horns are but slightly channeled, and are dark yellow. Between the tips, where they approach each other, the horns are two feet apart, and at their greatest width two feet eight inches.

Nature has been so lavish in brstowing all this parure of horn on the favored Caribou, that the small ears can hardly be criticised. Five inches, posteriorly, in height, flattened, very broad at the base, and tapering to the end, they are less in size than those of the Elk, but more active.

As an offset to the advantage of the Elk in the size of ears, the Caribou boasts of a somewhat longer tail. It is abont four inches vertebra, and, including hair, six and a half inches long.

The hoof of the Woodland Caribou gives it an advantage over every pursuer, except the nimble Wolf. The bones
connected with the accessory hoof in the Caribou are more than ten times as large as they are in the common Deer. In "Forest Life in Arcadie," Captain Hardy's enthusiastic description reads as follows:

I can aver that its foot is a beautiful adaptation to the snow-covered country in which it resides, and that on ice it has naturally an advantage simiiar to that obtained artificialiy by the skater. In winter-time the frog is entirely absorbed, and tho edges of the hoof, now quite concave, grow out in their sharp ridges, each division on the under surface presenting the appearance of a luge mussei-sheli. The frog is absorbed by the latter end of November, when the lakes are frozen; the sheil grows with great rapidity, and the frog does not fill up again till spring, when the antlers bud out. With this singuiar conformation of the foot, its great Jaterai spread, and the additional assistance afforded in maintaining $\boldsymbol{u}$ foot-hoid on siippery surfaces by the long, stiff bristles which grow downward from the fetlock, curving upward underneath between the divisigns, the Caribou is enabled to proceed over crusted snow, to cross frozen lakes, or ascend icy precipices with an ease which places him beyond the reach of all pursuers.

When startled, the Caribon's gait is like that of the Moose -a long, steady trot, breaking into a brisk walk. Sometimes he gallops, and when suddenly frightened or provoked, will bound a distance of twenty feet. In this connection, an amusing incident occurs to mind. John Danforth is the proprietor of Camp Caribou, on Parmachene Lake, in the Maine woods. Having been teased by trappers and guides about his neglecting fine opportunities to train the Caribou, Mr. Danforth trapped two fine animals, and, before his admiring assistant guide, proceeded to attach a rein, in the shape of a lasso, to one of the untamed creatures. Unfortunately for the courageous trainer, the Caribou determined to reverse the order of things, and teach his presuming tutor the lesson that what we aim at is not always obtained, when we aim for the sake of what we get, and slipping the lasso to his flanks, he made a bound of some twenty feet, carrying his trainer, like the tail of a kite, in a straight line after him, and dropping him only to make another leap. Finding his tormentor still holding on to him, a third bound finished the performance. Mr. Danforth found himself in such a bat tered condition that "he thought every bone in his body
was broken, $\vee$ and his interested witness cried out: "Hang on, John, hang on," until the final catastrophe, when he was rolling on the ground in a fit of langhter, and pausing at intervals to say, "Oh, John, how your eyes stuck out!"

Mr. Danforth has a number of fine specimens of mounted Caribou-heads.

All attempts to transport the Caribou across the Atlantio have failed. They have invariably died on the voyage. Some attribute their deaths to lack of Reindeer moss.

Like all the Cervida family, the Caribou is very wary, and frequents marshy places, dense forests, or high, rocky hills which are difficult of ascent. He feeds on arboreous food, grasses, and aquatic plants, and his tlesh is always tender, though sometimes insipid and tasteless.

In my estimation, the order of preference is, Moose first, Caribou second, and Virginia Deer third.

- The best time for hunting the Caribon is about the middle of December, and the best arm, in my judgment, a Marlin or a Winchester repenting-ritie, with $45-70$ cartridge, which I consider the most killing cartridge for all large game.

As indicating the difficulties often encountered in hunting the Caribou, I will relate a bit of my experience in company with one of the best and oldest guides of the Dead River region, Andrew Douglas.

We left King and Bartlett Camp, crossing three miles over the mountains, and going in a birch canoe more than a mile on Baker's Pond, when we heard the splashing of a Caribou in a little bay masked in by alders, through which we could not possibly get a shot or make our way. The Caribou, alarmed at the unavoidable sounds we made, fled. He left imınense tracks that could not be mistaken, and we made a second attempt to catch him the next night. Again we were baffled, though the Caribou was evidently feeding and drinking in the same inclosure. In desperation at his escaping again, we cut away the alders, and hoped to meet our m ry opponent in a fair and open encounter the third night; but he anticipated our conclusion, and did not appear that night.

Often, when one least expects to meet the Caribou, he appears. This I experienced one night to my great surprise. During my last fall's trip to the Maine woods, I was out on Big Spencer Pund, "jacking" for Deer. Throngh the darkness I suddenly discerned a light figure standing in the water up to its middle, and a pair of eyes like fire-balls looking toward our silent boat. As it was too late in the season for Deer to come into the water, I wondered what it could be. A shot from my Marlin sent the wounded animal flying from the lake, and I was not sure it was a Caribou until I saw his tracks the next morning. I truiled him a mile by the blood before I found him, and considered myself in luck, ns the Caribou has great vitality, and will sometimes go five miles, after being fatally wounded, before stopping.

A brief summary of the points touched upon, must form the conclusion of this paper: Summer pelage, brown and white; winter vesture, grayish ash and white; hair, soft and woolly underneath, the longer hair porous and brittle, from one to one and a lialf inches long; skin, thin, soft, and makes pliable leather.


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## THE COLUMBIA BLACK.TAILED DEER.

By Thomas G..Farrell.

8S the Virginia Deer is to the Eastern States, so is the Columbia Black-tailed Deer (Cervus Columbianus) to the Far West-i.e., the latter species constitutes the common Deer of this region. By the term Far West I refer to that portion of North America which lies between the Rocky Mountains and the Pacific Ocean.

There are many who suppose that, besides the Elk, the Black-tailed Deer is the only representative of the Cervido to be found in this region, and before I proceed further, I wish to correct this erroneous impression. A person sepking information regarding the varieties, habits, and characteristics of the game of a certain region, is likely to think, apon meeting with a hunter of large experience, that from him he can gain all the information desired; but, from my own experience, I find that these people are often unreliable, for, although honest in their opinions, they differ greatly. One will make assertions which the others will most emphatically contradict, and the only means of arriving at anything like a correct conclusion is to take the statements of large numbers of these people, and, by comparing these and sifting out what appear to be the most logical and accurate of their statements, the truth may be arrived at.

Some writers not having followed this or any other legitimate course of investigation, this region has been robbed of the credit due it as the abode of several species of the Deer family.

The Moose, the grandest of this grand family, snpposed by many to be found nowhere west of the Rocky Mountains, is met with in considerable numbers in the Bitter Root

Range, and along the headwaters of the Clear Water River, a tributary of the majestic Columbia. It is also found on the Big Hole River and its tributaries, in Western Montana. The Mule Deer is also to be found in the same region, as well as on the eastern slope of the Cascade Mountains. Caribou are plentifrl in British Columbia; and in Northern Washington wid Idaho there is still another member of this interesting family, which is a native of this region, and whose existence has been almost universally overlooked. It is the White-tailed $\mathrm{D}_{\mathrm{E}}$ a to which I refer. This animal is undoubtedly a distinct species, as it is smaller, and has a longer tail and shorter ears, than the Black-tail. In color it is lighter than the other Deer, and it usually inhabits lower ground. So the reader will see that the Deer family is well represented on the Pacific Coast, there being at least six different species.

But by far the most coman member of this family, on the Pacific Slope, is the Columbia Black-tailed Deer, so named because it was first noticed by Lewis and Clarke, while they were in the region of the great river of that name. This animal is to be met with from Lower California to Cook's Inlet, in Alaska. In size he is intermediate between the Mule Deer and the Virginia Deer, for, although no taller than the latter, he is more compactly built. I know of a Black-tailed buck having been killed which weighed two hundred and seventy pounds after having been disemboweled, and there are anthentic reports of still larger specimens. Such animals are rarities, however, the average weight of a full-grown buck being from one nundred and seventy-five to two hundred and twenty-five pounds.

In summer the animal is of a light cinnamon color, but it is in the late fall and winter that it attains its most beantiful pelage. The color of the animal at this season is a beautiful steel-gray on the back and sides; the throat, inside of legs, and belly being white. The tip of the nose is black, but just back of it, and on the lower jaw, the color is white. Between this and the universal gray there is a beautiful black band encircling the muzzle. The forehead
and back are slightly darker than the rest of the body, and the tail is entirely covered with hair. The color of this appendage is .white on the under side, and black, or very dark, above. In the Rocky Mountains and headwaters of thy Missouri River, the Mule Deer is frequently mistaken by hunters for the Black-tail. This mistake is a very pardonable one, for the Mule Deer also sports some black on his ily-disturber, if it may be so designated. One of the infallible proofs of the distinctiveness of the two species, is that the tail of the Mule Deer is naked on the under side, while that of the Black-tail is, as I have previously mentioned, entirely clothed with hair. In color, the female is almost identical with the male.

The eyes of this Deer are probably the most beautiful of those of any of the Cervidae of this country, they being large and black, and possessing that soft, liquid appearance associated with the eyes of the Jersey cow. Although he can see a great distance, and has what may be generally termed acute vision, his great curiosity often tempts him to linger long after he has discerned the hunter. In mountainous and open countries, this fact is sometimes taken advantage of by hunters, who lure him on to destruction in a manner similar to that in which Antelope are often stalked; but let the Black-tail once scent the hunter, which he can do at almost twice as great a distance as any other Deer, and there will be but little likelihood of his getting a shot at that particular Deer for some time to come. When disturbed, he goes off with a bounding motion, seemingly proud of his steel-spring-like legs.

The antlers of a full-grown buck consist of two main beams, which spring backward and upward from the head, and from each of which spring from one to six tines, according to the age of the individual. The antlers of this species are not nearly as large and majestic as those of the Mule Deer. When a buck is one year old he has two "spikes" rising from his head; when he is two years of age these spikes will each have a branch, and when he is three years old there will be three pommels to each horn. After
this, the age of the animal can not be reckoned with any degree of certainty. In common with the rest of the Deer family, the horns of this species are shed annually. In the spring the horn becomes loose and drops from the head, and from the same spot the new horn begins to grow, as if it had pushed the old horn off. The buck immediately takes to the thick brush-usually to the high mountainsthere to remain until his new head-ornaments-or weapons, if you please-have attained their entire growth. This proceeding takes place in the almost incredibly short time of from four to six weeks. By this time the antlers are as large as they ever will be, but are soft, and covered with that beautiful brown substance known as the velvet. If cut, the horn will bleed, and if one should kill a buck whle in the velvet, and there should happen to be any dogs about camp, he will have to keep a watch on them, for the dogs have a great fondness for the soft horn. Indians and Chinamen are also very fond of it.

While the horn is in its extremely soft state, the animals are generally in poor condition. It does not take them long to pick up what they have lost, however, and by fall they are enormously fat.

When the antlers are grown to their entire size, the animal seeks the ridges and elevated spots, where he may be found sunning his beautiful head-ornaments. Under this treatment, or from other causes, the horus soon become covered with creases, and appear to shrink. They get hard, and the animal proceeds to rub them against overhanging limbs, or the bodies of small shrubs, thus removing the velvet. The antlers do not become perfect until fall, when the velvet is entirely removed, and the horn is hard and highly polished.

The rutting-season occurs in October and November, and at this season the actions of the bucks are very peculiar, not to say ludicrous. Their necks swell to a large size, so that the hitherto loose skin of the same becomes actually tight. With bulging eyes and wide-spread legs, they plunge through the forest as if possessed of an unclean spirit. It
is a well-known fact that at this season of the year they seem to lose almost all sense of fear, hardly noticing even a hunter when they meet him, or, if they should do so, plainly showing that they would almost as soon fight as flee. During this season, the bucks have terrific combats among themselves, during which they sometimes get their horns interlocked, in which case both animals perish miserably.

The venison of a buck during the rutting-season is tough, and has a strong, disagreeable flavor. After the buck has won for himself a mate, the two animals may be found together until the fawns are born, which event occurs during the following spring. A doe of this species generally has two, but sometimes three, most beautifully spotted fawns. The spots are almost white, and remain on the young animals until they are about five months old.

The buck takes but little interest in the welfare of his offspring, but the doe is a devoted mother. When surprised in company with her fawns, there is a general scattering, but it will not be long before the mother will be seen timidly returning, to find out how her young are faring. The hunter who takes advantage of the mother's devotion must be hungry indeed, or else possessed of an inhuman desire to slaughter. The killing of spotted fawns is forbidden by the laws of most States, but this does not prevent the killing of a great many of them by Wildcats, Panthers, Wolves, and other beasts of prey.

In mountainous countries, where the snow falls to a great depth during the winter, the Black-tailed Deer form yards, as do the Elk and Moose. This term applies to a tract of country which is selected by the animals on account of the abundance of food, in the form of deciduous trees, mosses, and lichens, that is to be found there, and in which a large number of Deer make their headquarters during the entire winter.

It is in such a place, and under such circumstances, that the ruthless Indian gets in his deadly work. In the Bitter Root and Cœur d'Alene Mountains, where Indians are
numerons, they gather together every winter for a great annual slaughter. With snow-shoes and repeating-rifles, they will swoop down on a Deer-yard, and before the affrighted animals can escape through the deep drifts, many of them will be stretched out on the snow. Their fleeh is cut into strips, and converted into jerked venison.

One of the localities where the Black-tail are found in the greatest abundance is in Southern Oregon, among the foot-hills of the Siskiyou Mountains. Here the country is largely timbered with huge pines, with but little underbrush, which makes hunting easy, and the recollections of the evils that have been perpetrated in this fair region, by the skin-hunter and jerked-venison fiend, are enough to: chill the blood of any lover of the Cervida. These skinhunters are about as mean a set of scoundreis as ever went unhung. A couple of these sneaking apologies for men, who are thoroughly acquainted with the country, and well armed, will start out, and, will, in a single day, kill and skin a dozen, and sometimes two dozen, Deer. The hides only are taken, the carcasses being left to form food for birds and animals of prey. The jerked-venison fellow is one degree higher than the skin-hunter, for he saves the hams also, which hecures and sends to market. I have known a single shooter-I can not call him hunter, much less sportsman-tosit on a ridge which commanded a couple of ravines, and in a single evening shoot down fourteen Black-tailed Deer as they came down to the creek to drink. Thanks to our sportsmen's clubs, these matters are being looked into, and the evils somewhat abated.

As Black-tailed Deer inhabit almost all kinds of country, they are hunted in different manners. Still-hunting is doubtless the most humane and sportsmanlike manner of hunting them, but some gentlemen, who are undoubtedly sportsmen, insist upon pursuing them with hounds. The only instance in which this is excusable is where the brush is very dense and the game scarce, for, as a hounder ex. plained to me, one might, under such circumstances, still-
hunt a week and never catch sight of a Deer. Their sense of hearing and smell is so acute that they will discover the hunter long before he suspects the presence of the game.

When chased by hounds, they will take to water to throw off the dogs; but this they do not do as readily as do the Virginia and White-tailed Deer. They seem to prefer leading the hounds awhile before resorting to this their last expedient. Hounding undoubtedly has a bad effect on any species of Deer, for the sight and sound of dogs pursuing them frightens them so that they frequently desert a section entirely when they are persistently hounded. Another bad feature about this sport is that, in a country where hounding is carried on to any great extent, the ranchmen or farmers soon learn what the music of the hounds means, and upon hearing them they immediately repair to the nearest runway, shotgun in hand. The reader will doubtless understand the difficulty the Deer will experience, in such a case, in getting through the line of pickets which soon encircles it.

The venison of an animal which has been running at its highest speed for two or three hours must, of necessity, be far inferior to that of an animal which meets death in a milder manner. I have known a man to take great pride in telling how his dogs, which were part Blood-hound, and which were allowed to run freely in the woods, would take the track of a Deer or an Elk and run the animal to death.

But there are certain circumstances under which I can see nothing unsportsmanlike in hounding Deer. Let us take the following as an instance: A party of gentlemen, worm out with the cares of business, decide to take a day in the woods. Hounds are procured, and they repair to some part of the country which is but little settled, and where Deer are to be found. The stands are taken and the dogs put out. They take the track of a Deer, and away they go. Probably for an hour or so the hanter has nothing to do but smoke his pipe, keep his eyes open, and commune with Nature. Seated on a moss-covered log, with his gun by his side, he watches the antics of the birds and squirrels, which
are not long in finding him out. Presently he involuntarily checks his hand as it has almost conveyed his pipe to his month. Hark! What was that sound? He holds his breath, and listens. The far-away baying of a hound causes him to jump to his feet, rifle in hand, and his heart in his throat. Nearer and nearer comes the incomparable music of the hounds, now rising to the crest of a hill, now sinking into a valley. Louder and louder it rings out in the still forest, for the birds and squirrels are quiet now. If the hunter has an ear for music, the inimitable voices of the dogs make his blood tingle and his hair almost stand on end.

Suddenly, with a rattle and a bound, a magnificent buck dashes down the path. The rifle is thrown to the shoulder, and the trigger pressed. Perhaps the hunter has the satisfaction of seeing lis game tumble end over end; perhaps he sees his black-and-white tail vanish among the trees with a defiant flourish. I say the rifle, for to use a shotgun on a Deer is murder, pure and simple.

One easy manner of hunting Deer is to lay in wait for them at a salt-spring, or "Deer-lick." In various sections of the Far West there are deposits of clay which contain salt, or alkali, and in these the Deer and Elk have licked cavities capable of hiding several animals at once from the sight of a man at some little distance.

But, reader, think of the feelings of one who has successfully captured a noble buck by still-hunting! Let us suppose that the sportsman starts out early in the morning. As he wends his way through the forest, the sun is just coming up over the distant mountains, and the eastern sky and clouds are painted with gold and purple. The birds twitter, and the squirrels chatter merrily, as if to welcome the advent of day. As he approaches the singing brook, the trout dart nnder the shelving bank, and a covey of grouse springs into the surrounding trees.

A large section of country is traversed, and althongh the sportsman sees plenty of fresh signs, he has been unable as yet to discern a single animal. He ascends a ridge. Slowly
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and stealthily he nears the top, and peers over. His heart gives a sudden leap, for in that little glade, just out of gunshot, there are a large buck and a couple of does feeding, all unconscious of danger. To get within gunshot, he must retrace his steps and make a detour. After a great deal of patient work, he gets on the lee side of them, and now begins the difficult part of the performance. To get within safe shooting distance, he should reach that little clump of bushes out there in the glade; but the ground between him and his intended victims is covered with nothing but short grass. By crawling a little farther through the brush, he gets the clump of bushes between him and the game, and then quickly and noiselessly he approaches them. As he reaches the brush, he drops to his knees, and, with throbbing heart, crawls to the other side. There they are, quietly feeding, but moving away. Slowly he raises his rifte and covers the buck, but hesitates to fire, hoping that the animal will turn, so as to give a side-shot. Presently the opportunity offers, and, aiming just behind the shoulder, he presses the trigger.

At the report of the rifle the buck gives one desperate bound, and falls, while the does quickly betake themselves to Hight. Well may he feel proud, for he has sought a keen, wary animal in its natural home, and outwitted it.

Again, he is cautiously and stealthily picking his way through a tract of brush-land, in which grow a few scattering pines and firs. The greatest skill and patience are necessary to avoid making loud noises in the dry brush and weeds, and alarming all the game within a quarter of a mile. He slowly makes his way, however, placing his moccasined feet on the ground with the silence and stealthiness of the cat. He makes frequent pauses to peer through the brush, in hopes of seeing a patch of gray hair, and listens attentively, hoping to hear a rustle in the stillness about him.

He is ignorant of the fact that only a hundred yards ahead of him a magnificent buck is taking his morning siesta, in his bed just in the edge of a clump of salmon bushes. Presently-despite all the care of the sportsman-
the buck hears the faint sonnd of a twig scratching over the hunter's clothing.
"Ah! what's that? One of my kind? Or is it a cow, or a horse?" His antlered head is up; he sniffs the air, looks, and listens. "No; as I live, it's one of those still-hunters: I'll just lay low, and if he don't come close to me he can't see me, sheltered as I am by these brush. But no; he is coming my way. Well, adieu, vain young man. Call again." And with a graceful motion his muscular form springs into active being, and with a few flying leaps he vaults away, over logs, rocks, and whatever obstructions come in his way, as bnoyantly and as lightly as a kitten dances over the carpet. His white fiag sways softly from side to side, waving the hunter anything but a sign of distress.

At the first rise of the noble game, the rifle comes antomatically to the shoulder; there is a convulsive clutch at the trigger, a puff of smoke, a flash of fire, a deafening intonation, and a crash of lead through-the brush! and, ulas! the buck continues his wild leaps, still flaunting his defiance in the face of his would-be slayer. Another cartridge is thrown into the chamber; another and a more careful aim is quickly taken. The sportsman is cool now, and there is in his cold gray eye a determination to put this bullet where it will count. The Deer is now sixty, yes, seventy, yards away, and almost hidden by the thick foliage; but just as he rises over a high log the leaden missile catches him in the short ribs, crashes through his vitals, and comes out at the point of the opposite shoulder. Suddenly that white tlag is closely furled; the great stag doubles up and pitches heavily forward; he recovers, and makes a few more leaps, but they are no longer fearless and graceful-they are convulsive and catchy. He swings from side to side, stumbles, his head drops, and finally he goes down, stone-dead.

On another day, the hunter is tramping through a more open country-a heavily wooded region, but where there is no underbrush. He has hunted several hours patiently
and carefully, and though he has seen plenty of fresh signs -made last night and early this morning-he has not yet seen game. Toward noon he crosses a narrow tamarack swamp, and just as he reaches the upland he catches a glimpse of several moving objects. His quick and welltrained eye is able to discern the forms of a buck, a doe, and two fawns, tripping gracefully through the woods at right angles to his course, and nearly two hundred yards away. There is no favorable opportunity for a shot, for only fleeting glimpses of their forms can be seen as they pass through openings between the giant pines and hemlocks.

Finally the sportsman utters a plaintive "bleat." The game stops; but only the rump of one fawn and the head of the doe can be seen, the rest of their bodies being hidden by the trees.

They stand and listen attentively for several minutesit seems like several hours to the hunter. Finally they turn and take a few steps toward the source of the familiar sound that attracted them. Again they pause, look, and listen. The hunter has meantime seated himself on a log, with his left foot on a branch of the fallen trunk, in order to have an easier position for a shot. This time only faint glimpses of the sides of two of the Deer can be seen, and as the sportsman peers round the trunk of a great fir that stands between him and the game, the doe catches a glimpse of the movement.

That settles it. There is some mystery in that corner of the woods, for she has both seen and heard. She will now investigate it if it costs her her life. The group moves forward again, and again pauses. Still, they are all so closely covered as to afford no fair shot. The hunter sits motionless; but, despite the fact that he is a veteran, this terrible suspense is telling on him, and his heart is pounding at his ribs like a trip-hammer. The Deer make a few more steps toward him, but to save his life he can't yet see a piece of one of them big enough to shoot at. In his time he has faced Grizalies, wounded Buffalo bulls, and even

Confederate soldiers, without flinching; but somehow this pesky business unnerves him, and he is now shaking like a leaf. He wouldn:t dare shoot at anything less than the broad side of the buck now, and-he blushes to confess it, even to himself-he's ufraid he couldn't hit that.

Again the Deer move forward, bent on finding out what it was that moved and that made that noise. This time their movement takes them down into alittle swale, so that they are entirely hidden from the hunter. But he is sure they will come on, and is aware that when they come out of the swale they will be less than fifty yards from him. Confound this nervousness! His heart is ponnding his ribs so that he is really afraid the Deer must hear it when they stop again.

But his riffe is at his shoulder, and his left elbow is resting on his left knee. In a few seconds the Deer emerge from the draw, within thirty yards of him; but nowplague take them!-they are behind a big hemlock-log that is as high as the doe's back. Her great dark eyes, and those of her children, are peering over the log full at him, while the great, spreading antlers of the buck reach up, it seems, almost into the branches of the pines. Yet the hunter sits motionless-or as nearly so as possible-and, the wind being in his favor, the game has not yet found out that he is alive; but they will soon. They move uneasily, a step or two at a time, from side to side.

Finally, patience ceases to be a virtue. Tre hnnter can stand it no longer. He has cooled down somewhat, and drawing a bead on the buck's neck, he pulls. Fortunately, he wabbles on at the supreme moment, and the quarry falls dead in his tracks.
. The doe and the fawns bound away as if shot out of a cannon. Sir Hubert is still too much rattled to shoot on the run; and, as he hoped, the surviving members of the family, after having made a few jumps, halt to see why pater familias doesn't come, and then thesportsman plants a bullet in the shoulder of the fawn nearest to him. The others skip out again. He fires two more shots at them,

but they go out of sight unscathed. However, it is just as well, for he has meat enough and to spare. He is happy, for he has again pitted his cunning against that of the wildest and most wary animal on the earth, and is again the winner.

Probably the best arm to hunt Black-tailed Deer with is the 44 -caliber repeating-rifle. Some hanters use the 45 r caliber, while others will use nothing but a 32 -caliber. It seems to me, however, that the 45 -caliber is better adapted to Moose or Elk shooting; and I am satisfied that if the hunter armed with nothing but a 32 -caliber rifle should meet with a Grizzly or Cinnamon Bear, he would enal rather uncomfortable. He would then wish, most de; outly, for a more powerful weapon.

Of the many places in which it has been my good fortune to hunt Deer, I think the locality in which I found game most abundant, and where the climate and scenery combined to make the most pleasant hunting-ground, is in the Cascade Mountains, in Oregon. The region rif which I speak more particularly is about forty miles east of Cottage Grove a a small village in the Willamette Valley. This $^{2}$ region is the great water-shed of Oregon. Here it is that the Willamette and Unipqua Rivers, on one side, and the Deschutes River, on the other side, have their beginnings.

As the reader is doubtless aware, there are many high and beautiful snow-peaks in the Cascade Range; but the region of which I write consists of a plateau, the altitude of which is between eight and ten thousand feet above the level of the sea. Here the snow lies, on the north side of the hills, during the.entire summer, and the vegetation partakes of an Arctic nature. In the valleys there is some fine timber, but upon the higher portions of the plateau the vegetation is stunted.

Here one will find small trees growing almost on a level with the ground. The weight of the snow has pressed them down, so that, instead of growing up straight, as they should have done, they consist of but a short trunk and a
lot of long limbs. Other trees have a bend in their trunks. When young, the snow has pressed them over so as to permanently bend the trunks; but they have afterward recovered, and grown straight up. Such cases aye numerous, and the bend of ten affords the tired hunter a comfortable seat. In some places, rhododendrons, laurel, and other shrubs grow abundantly, and afford considerable cover to game. Although open, and easily traversed when one once gets there, this region is difficult to reach, as many miles of rough trail and thick underbrush must be traverse 3 before it is reached.

It has been several years since I visited this region, and game may not be as plentiful there now as then; but I think that, on account of the inaccessibility of the country, the Deer have been but little hunted there. When I was there, one could have killed, had he so wished, from six to ten Deer almost any day, by simply taking a good stand and shooting them as they came to water. As may be conjectured, the snow falls to a great depth in this region during the winter.

I remember once having seen me trees that had been cut off fully thirty feet from ti.e ground, and my guide explained that they had been so cut by a party of prospectors who had wintered in this ;egion one season. He said that the snow had fallen to such a depth that it was on a level with the tops of these stumps. I asked him how the occupants of the old cabin which we found in this ravine managed to snbsist. He replied that this was easy enough as long as the provisions held out, as they kept a space around the door packed down, and the fire kept an opening through the snow for itself. We may readily fancy the ioneliness of such a life, away up in this altitude, with no animal life within miles, and nothing but howling winds and drifting banks of snow to listen to or look at.

Of course a great deal of this region consists of nothing bat rock, but in some places there are patches of soil which appear to be very fertile, and in the summer-time these spots are made beautifu! with shrubs and flowers. I once
picked strawberries with one hand while the other rested on a snow-bank.

Interspersed throughout this region are many small lakes. Some of them are not more than twenty-five or thirty acres in extent; but they are all clive with mountain trout. The larger streams also contain these fish in great i indance. As I have previously mentioned, the Black-
ind Deer is here found in great abundance. There are auso many Elk, Black, Prown, and Cinnamon Bears, Panthers, Wildcats, etc. In fact, this is an ideal hunting and fishing country.

Once in awhile a few of the Klamath or Warm Spring Indians visit this region for a hunt; but they are peaceable, and the hunter has nothing to fear from them. No matter how rough a piece of country may be, no matter what hardships one has to undergo to reach it, you may rest assured that the obstacles are not insurmcuntable to the hardy prospector, and that if he has not already been there, .the near future will witness his advent. So it is with this region; for many years ago these enterprising mountain men washei the gravel of the creek.beds and chipped the rocks of "hr, der!ges with their prospecting hammers. The digginss to be of but little value, but some pretty good h. 1 , this nature :' at gave me my intraduction to this country.

A party of ainl, including myself, were sent into this; region to put up some mining machinery. The machinery was not heavy, and we experienced ho trouble until ve arrived at Cottage Grove. One bright morning wa nulied out of that village, our party forming quite a procession, as it was composed of some thirty men and almost as many horses. Most of the men walked, the animals being used to haul the machinery, provisions, etc. For the first ten miles we along very well, but the rest of the forty-mile journey win; ove: a trail, than which a rougher would be hard to find.

On the third day we reached our destination, and in the course of time all the machinery was set up. My part of the
business now being over, I found myself in a great game country, with plenty of time to enjoy myself. It is, perhaps, needless to add that I availed myself of the opportunity to my entire satisfaction.

I spent many a pleasat day Deer and Elk hunting, and I remember one day in $y$. lar. It was in the latter part of August. The men had , hinting that a little venison would be acceptable; so, aiter breakfast, I took down my 44-caliber Winchester, and started out alone. Taking the summit of a ridge, I walked slowly along, more intent on watching the beautiful effects of the rising sun on the mountains than on hunting Deer. Suddenly, a buck jumped up from a ravine about one hundred yards from me, and made a dive for a clump of underbrush. I fired at his vanishing form, but failed to stop him. I mentally kicked myself just as I palled the trigger, for I did not want to wound any Deer that I did not get, and I knew that with me it would be hut a chance shot that wonld kill a running Deer at such a distance and under such circun-: stances.

As I sauntered along, I saw several Deer jump from their beds in the cañon, and bound off into the brush. Had I wanted to kill a lot of Deer, I would have hunted in these places; but I knew that it would be hard to get the venison out of such places, and thought I would find plenty of Deer on the ridges, before the day was over. These ridges run one into the other, and by walking along their summits one can travel all over this country with but little inconvenience.

It was about ten o'clock when, in passing through a clump of brush, I saw, about three hundred yards distant, on the south side of the same ridge, a large buck and a doe.

Of course, I was hunting against the wind, but, as there was almost no cover between the game and inyself, I saw that I would either have to risk a long shot or make a detour and come up on the north side of the ridge. I was not slow in choosing the latter plan, and, retracing my steps,

I descended the ridge a short distance. After walking parallel with the summit until I thought I was in the neighborhood of my game, I cautiously, and as silently as possible, crept up behind a large rock, and peered over. To my surprise, no Deer were in sight, and I supposed they had taken alarm and fled. I was on the point of jumping to my feet in disgust, when suddenly I espied my friends almost one hundred yards from me. The doe was now lying down, and the buck was browsing in a clump of brush.

Resting my left elbow on my knee, I drew a bead on the buck, and waited for him to show himself more fully. He soon came out, and presented a fine side-shot. Taking good sight on him just behind the shoulder, I pressed the trigger. At the crack of the rifle, he went down like the traditional log, while the doe and another buck, which I had not noticed, quickly vanished over the ridge.

Upon going up to my game, I found that the bullet had broken both shoulders of a four-point buck. I gave him another shot in the head, which quickly put him out of his misery.

I am always careful in approaching a wounded buck, for I once saw a mom nanion of mine terribly injured by one of these animius. 'There was a party of us hunting in Southern Oregon, and one of the older members of the party had that very day cautioned us to be careful in approaching a wounded Deer. Poor H-_ was hunting on the same ridge that $I$ was on. I saw him fire at a buck, and as it fell, he laid down his gun, and, drawing his knife, ran up to the animal to cut its throat. I thought, by the way the animal went down, that it had not received a mortal wound, and shouted to him to be careful, at the same time making my way rapidly in his direction. My warning was too late, however; for, as he approached it, the buck suddenly rose to is feet, and, jumping against the hunter, hurled him to the ground. The next instant the animal bounded into the air, and came down with all four feet on the prostrate man. At this instant, one of the party, who had approached from another direction, fired at the animal and
killed it. We had to carry the wounded man sixty miles on a stretcher, and he never fully recovered from his terrible experience.

After disemboweling my Deer and hanging the carcass on a tree, I determined to cross over to another ridge. To do this, I had to descend into a valley which was full of brush. As I was pushing my way through this, I suddenly became aware of the presence of a Bear. I did not see the animal at first, but I smelt her. This may seem strange to some of my readers, but it is the fact, nevertheless; and as I looked up, I saw a large female Black Bear standing erect, not more than thirty feet from me. She was looking straight at me, and apparently had her nose turned up, thereby disclosing a very formidable set of ivories. When she saw that I had discovered her, she gave vent to a deep growl that was full of meaning. She probably had cubs in the neighborhood, for these animals will generally run from a man, unless they be so inr'mbered. Not wishing to have any trouble with so quick and powerful an animal in the thick brush, I quickly, and as quietly as possible, "crawfished'' my way into the open.

Upon getting out, my courage returned to me, and I determined to go through there, Bruin or no Bruin; so, cocking my Winchester, I marched bravely in, but the animal had by this time disappeared. After a hard climb, I found myself at noon on top of the highest ridge of this high region, and sat down on a rock to eat my lunch. My sportsman friend, if you have any love for the beauties of Nature, and had been with me that day, you would have had but little time for the disposal of that plain lunch-you would have had your attention almost wholly taken up by the beautiful sight which was spread out to my vision. You have doubtless visited a cyclorama; and the position I occupied was similar to that of the people who occupy the central platform of one of these institutions. A beautiful view was spread out to me on all sides. In these high altitudes the atmosphere is wonderfully clear, and one can see a great distance.

Looking away to the north, my eyes fell on the glittering summits of Mount Hood, Mount Jefferson, and the Three Sisters. Betwenn them and myself the mighty Cascade Range stretched its timbered length. Some of the mountains were clothed almost to their summits with a majestic forest of fir. In some places this had been visited by fire, which some careless camper or settler had allowed to spread, and the weather-beaten, but upright, trunks of thousands of giant trees glistened in the sunlight like so many needles.

Far in the east, towering above the sage-brush plains of Central Oregon, the hazy summits of a spur of the Blue Mountains were seen; to the west, the eye overlooked the beautiful and fertile valley of the Willamette; and turning to the south, the vision rested on the spotless summits of Diamond Peak, Mount Theilson, Mount Pitt, Mount Scott, and last, but not least, Mount Shasta. Truly, this was a sight long to be remembered; but the one in my immediate neighborhood was hardly less beautiful.

From my central position, I overlooked a number of ridges running into each other, in some places slightly covered with snow. These ridges consisted mainly of naked, but not unpicturesque, rocks; but in some places these were hid by a scrubby growth of firs.

Looking down the southern slope of my ridge, I beheld a sight that, could it have been transferred to canvas, would have formed a most beantiful picture. Here had been deposited considerable soil, which appeared to be of a red, volcanic nature, but which was sufficiently rich for the support of a good deal of vegetation. On this ridge grew thousands and thousands of rhododendrons, of three different colors-rel, white, and pink. Growing in the moister spots were a species of wild pansy, two varieties of lilies, and several other beautiful Howers, the names of which I am not familiar with. Huckleberry and other shrubs were here to be found in great abundance. Thrushes, blackcaps, grossbeaks, chickadees, and other birds were fluttering about among the shrubbery, and, strange as it may
seem, this region was the abiding-place of thousands of humming-birds, of different varieties and most gorgeous plumage.

I took my rifle, and wandered about among these plants and flowers, drinking in the beautiful sight, for a full hour, and as I did so the thought came to me that at last the sportsman's paradise, the mysterious happy huntingground of the red man, had been discovered. Here was game in the greatest abundance; locomotion was easy; the climate was nearly perfect, and the air and water were the purest in the world; scenery the superior of which is not to be found on the continent, and birds, flowers, and berries of beautiful colors and forms.

During the time that I was feasting on the beauties of Nature I saw several Deer at no great distance, but did not disturb them. Once a large doe jumped up from her bed among the shrubs and bounded slowly away; but I was not shooting does as long as there were plenty of bucks. The afternoon was half-spent before I directed my steps toward camp. I had hardly walked three hundred yards, from the spot where I ate my lunch, when a fine two-point buck walked out from behind a wall of rock. Throwing my rifle to my shoulder, I gave it to him where I thought his heart lay. Down went his tail, and, after making about half a dozen quick bounds, over he went on his head. On coming up to him, I found that my aim had been true, and that thin ball had passed through his heart. In such a case a Deer: will often run as long as he can hold his breath. I soon had him hung up, and proceeded on my way to camp.

I had rrived within almost half a mile of camp, when I came upon two bucks and three does feeding in a little glade. They were not more than fifty yards distant, and had not discovered me. So confident was I of killing the buck I had selected that I did not take careful aim, and I made a clean miss. The does and the other buck ran off in alarm, but their curiosity would not admit of their going far. The buck that I had fired at gave but a couple of bounds, and stood looking at me. Within a second after I
fired my first shot I was ready for a second, and as he stood there, proudly, looking at me, I planted a bullet in the base of his neck. This time he did not go far, for the bullet went, lengthwise, entirely through his body. Hanging him up, I proceeded to camp, where a substantial supper awaited me.

The next morning I took a couple of ponies and brought my game to camp. Not long after this it clouded up, and there was a slight fall of snow. The miners : ere not slow to take the hint, and the mines and cabins were soon closed up, and we all hied ourselves back to civilization.

It would take an abler pen than mine to give a realistic description of this wonderful region. The only way in which you can fully appreciate its beauties is to visit it, which pleasure I earnestly hope you may sometime enjoy.


## THE MULE DEER.

By Revi. Jobiua Cooke ("Boone").

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|  |PRESUME that it is not the design of the editor of this work to have his contributors go into minute details of description of the noble animals of which he wishes us to write, especially of the Cervide; the handsome and remarkable volume of Judge Caton on "The Antelope and Deer of America" has left nothing of that kind to be done after him. I assume that it is our province to give fair general descriptions of the animals, to treat of their haunts and habits as we ourselves have discovered them, and to narrate such incidents of region, forest life, the actual hunt, as should make the reader our companion for the time, and the sharer in our instruction and our pleasure as we tell the hunt in its details, and "fight our battles o'er again." It is one of the pleasures remaining to those who have been themselves shat out, by busy life or other cause, from pursuit of our nobler game animals, to read the stories as told by more favored ones; while these latter, now debarred from former privileges, seek a measurable rene:wing of them through the medium of the pen. So, without further prologue, I will enter on the part assigned me, with this pleasure, that my theme is one of the finest animals of the chase, or of our continent.

Although, as I said, I do not suppose it is minutely technical description that is looked for from us, yet it is proper that the animal should be fairly set before the reader before entering on details and incidents of its pursuit. This can not be done better than in the words of Judge Caton, who has both hunted the Mule Deer in his native haunts and raised him in his noble park in Illinois. Judge Caton says:

This Deer was first discovered by Lewis and Clarke, on September 18, 1804, in intitude $42^{\circ}$, on the Missouri River, who then called it "Black-tailed (137)

Deer." By this name they often mention it, untll May 81, 1805, after they had discovered the Columbia Black-tailed Deer, when Captain Clarko, oi enumeruting the animals found on the Columbin River below the falls, calls it the Mule Deer. By that namo they ever after identify it, except in a siagle instance. On their return, in 1800, near where they first met it they cuptured their last specimen, nad cailed it Mule Deer. In the Rocky Mountains, where the true Bhack-tuiled Deer is not known, it is still called the Blacktuited Deer. On the Pacific Coast, where it ranges with the Columbia Blacktailed Deer, it is known by its true name, Mule Deer, by which designation it is also recognized by naturnilists. The original habitat of this Deer has not been very much restricted since its first discovery, though it has deserted or become scarce on the Missouri Iiver aud other hunted localities where the white man has too much disturbed its seclusion. Its most natural home is in the mountains; but it is found on the great plains, hundreds of miles east of them, where it most affects the broken nad arboreous borders of the atreams.

West of the Rocky Mountains, this speciea of Deer is met with almost everywhere. In the Coast Range, north of Ban Francisco, it is almost entirely replaced by the Columbia River Binek-talled Deer, and south of that poiat this variety entirely gives place to the California variety. In Oregon, Wash. ington, and in British Columbia, the Mule Deer is met with, but not so abundantly as in the mountains farther enst.

In the face of civilization, they maintnin their ground better than the Wapiti Deer. In tlight, they do not rua like the common Deer, but bound along, all the feet leaving and atriking the ground together. For a short distance the flight is rapid, but soon seems to weary. Once, when altting on a crag on the Irocky Mountains ten thousand feet above the sea, I watched one, which had been atarted by a companion, as he bounded through the valley a thousad feet below. In a run of half a mile, he showed evident fatigue. That the labor of such a motion is greater than that of the long, graceful leaps of the common Deer, must be manifest to all who observe them.

Their limbs are larger and courser than those of the common Deer, and they are less agilo and clastic in their motions, and are less graceful in form. Their large, disproportioned ears are their most ugly feature, and give tone to the whole figure.

The summer coat is a pale, dull yellow. Toward fall, this is replaced by a fine, short, black cont, which rapidly fades to gray. As the season advances, the hairs of the winter coat grow larger, and so become more dease, as well ns of a lighter color. Usually, in the forelsead is a dark, bent line in the form of a horseshoe, with the toe downward. The brisket and belly are black, growing lighter toward the umbilicus; thence, posteriorly, a still Highter shade prevails, till, at the inguinal region, a dull white prevails. Between the thighs it is quite white, widening toward the tail. This white portion extends to one inch above the tail, where it is six inches broad. Lower down, it is elght inches broad, and lower stili, between the légs, it con.utraets to four inches in breadth. Viewed posteriorly, this white patch is a conspicuous object. Below the knees and elbows, the legs are of a uniform dark cinnamon color.

Thus much for the Deer himself; now for the getting him-a very different thing!

In a wild, lonely nook of the Blue Mountains of Oregon, between the west and south forks of Burnt River, lies our camp for a fall hunt-for recreation from a hard summer's work, and for meat to stretch out the beef for the winter. It is October. In that altitude of five thousand feet above the sea-level, and in an almost rainless climate, the air, under a cloudless sun at midday, is cool and bracing; and the sun once down, the cold requires a good winter fire for the night. I have lived many years-more than three-score-and I have never known greater physical and mental enjoyment combined than at just such a camp-fire, in just such a solitude, with just such a company-all fond of the woods, of the rifle, of the hunt for Deer. The summer's work had been a most toilsome one, putting up hay to carry the stock of the ranch through the winter, and getting everything in order for the near approach of that season. And now the work of the long, weary, wearing months could be thrown aside; care could be given to the winds for ten days or a fortnight, and the keen pleasure of seeking the wary Deer in the midst of his haunts, and glinting over the brown barrel at the noble game, could be enjoyed to the full.

And noble game it is; for it is the Mule Deer of Oregon and Washington-next to the Elk and the Moose, the largest and finest of our American Cervida. We were camped in the midst of a region he peculiarly loves-near the foot-hills that slope upward from the forks of the river to ridges and mountains covered with pine, fir, laurel, mountain mahogany, grease-wood, from all of which he crops his fare, and in the midst of which he seeks the places of his rest and his hiding-always with possibilities of meeting the lordly Elk, which, even at this season, and earlier, comes down from his far mountain haunts for the alkali-springs that are found here and there along all these mountain streams. And this wild tract stretches away a* hundred miles to the west, an uibroken wilderness of forest,
ridge, and mountain, where one may go the whole distance to the John Day country without meeting face or dwelling of humankind; so that there was force in the caution, as we started ont, "If you get lost, go east!"

My hunting companion was my eldest son-six feet and an inch in his stockings; with dark hair and eyes, a manly face and form -a powerful man; withal, a good shot and an unusually fine hunter, always the reliance of the ranch for meat when no one else could secure it. And, best of all, to me a warm-hearted, generous, loving son, who was delighted to have his father with him after a seclusion from all he loved for five long years.

We hunt together to-day. He has with him his farorite Drer-dog, a cross of the Hound and the Pointer. I have my beautiful Irish Setter, equally at home with Elk and Deer as with the grouse on the foot-hills and in the meadows below; but in manner of hunting wholly another animala c'anged dog, as may be accomplished with any good Setter in three days' time. And so, the drowsiness of the night shaken off, our coffee and breakfast over, just as the sun is rising over the far foot-hills of the east. we grasp our good rifles, wish good luck to our companions, and start for the ridges and mountains west of us. It would be difficult to convey to one unused to life of this kind, in the open air and in woods and hills, and not fond of the rifie and its uses, the sense of exhilaration, the springiness of step, the thrill of gladness through the whole system, that are inspired by life, for a time, in wild and sublime scenes like these; especially, when added to all of ordinary forest freedom is the bracing quality of a rainless atmosphere and a clondless sky, at an elevation of five thousand feet above the sea. Movement itself becomes pleasure; to climb a steep hill-side or thread your way along a steep ridge has no fatigue, while the intense and solemn stillness of the primeval forest, far from the sound and haunts of men, with the sense of entire physical freedom from care and to go where you will coming in sharp contrast with the confinement of daily life through the rest of the year, com-
bine to make all a simple ecstasy for a lover of Nature and of the hunt.

To one not fond of these, to stay at home and saw wood would be preferable. I have actually been out amid the grandest scenes, in the most glorious weather, and where every breath and every sight was an inspiration, with men who were glad to get back to their saw and their wood, or their equivalents.

All right! Non cuivis omnia! Were all of the same mind, the wilderness world would be speedily overrun, and plain and forest and mountain be stripped of their game more rapidly even than they are now being stripped by the foreign butcher and the skin-hunter-men whom I always class together in my mind.

Added to all other stimulants of the scenes I was mowing in, was the unquenched and unquenchable tenderness for the noble boy who led the way before me; tall, powerful, manly; his face browned by exposure to almost the hut of his rich brown hair, and his dark, hazel eye beaming with affection for the father for whom he had planned this very hunt a year ago, and when he was two thousand niles away. He paused now, as we were entering the thickets f mingled laurel, greasewood, and mountain mahogany which partially filled the spaces between the boles of the fir and pine.
"Now, father, we are on the ground, and liable to see a Deer anywhere. This is mostly new ground to me, for I never hinted on it but once, and it is a bad country to get lost in. 1 wish that you would keep near me to day, and don't make me look for you, for I shall want all my eyes for the Deer. If we both see the Deer, I want you to shoot, for you are a better shot than I am, while I know best where to look for the grime. But don't get away from me, for it is so easy here to get lost."

He is really a fine shot himself; but he spoke from a traditional feeling as to my use of the rifle when he was at an age that he could not lift one. We passed on, I a few rods to one side of and behind him, and soon were in that
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absorbed noiselessness that all Deer-hunters will understand, where to break a twig or step on a brittle stick gives one a twinge as for a guilty thing.

We had gone sideling up a high ridge, on the very brow of which rose a single massive rock, fifteen or twenty feet in height: We were nearing it sic:vly, within a hundred yards, when out from behind it stepped a nobie dee. She moved on to a little mound or hillock, and there stood moticnless as her eye canght us. It was a sight. I shall never forget, and shall never see again. Below and beyond her the ridge pitched steeply down, so that her entire form stood outlined above the horizon against the clear, blue sky. She stood as if for a picture, as, indeed, she was in herself. In a life of sixty years, and in pursuit of game under all conditions, animated nature has never presented to my sight anything so beautiful.

She stood slightly quartering to us, visible from her great nine-inch ears to her very hoofs. My son barely turned his head, and whispered:
"Do you ses that?"
But my rifle was at my shoulder, and, as he spoke, I fired. The Deer gave a wheel backward, and went out of sight. This was bad. I had been perfectly steady; my rifle was perfectly sighted for just that distance, and she ought to have fallen in her tracks.

I felt crestfallen. As we walked slowly up, my son said:
"Father, where did you aim?"
I said: "At the big, round, whitish spot on her left breast; for the wuilet would pass through the heart and out on the other side."

With much chagrin, he said:
"I should think an old hunter, as you are, would have known enough to aim at the point of the shonlder. Then if your ball had dropped six inches, you would still have got her; but now, if yo: ، dropped four inches, it went below her brisket, and you have missed her altogether."
"But," I said, "at that distance I didn't mean to have my ball drop four inches."

This brought us to the mound, and there, behind it, lay the Deer, dead, in a posture as striking as that in which shs stood sharply defined against the sky. The revulsion of feeling from chagrin to gratification was almost painful. My son bled her, and we then looked upon her as she lay. Head, neck, and form were in just such position as she might have been in sleeping on her side, while her strong, cinnamon-colored legs were disposed at full length, as if arrazared by hand. Her coat had passed from the blackish shade which it takes on aftfir the yellowish summer dress intu the sieel-mixed, with its satin sheen of the full winter coat. Down her throat was the deep-black band that marks the species, while breast and belly were of broader and deeper black still, till shadis:- into the pure white between the thighs and up on both sides to two inches above the tail. We walked around her in silent admiration.
"Well, father, I have hunted these Deer for five years now, and that is the handsomest one I ever saw, and you will never shoot such another. She is one of the lilest does-probably eight or ten years old-and in perfect condition. She will weigh near three hundred as she lies there." Then he said, "Now, let us see where you hit her."

The ball had struck the round spot of the breast directly in the center; had passed between the shoulders, through the heart, and out on the other side.
"Well," he said, "that is close shooting! I can't shoot like that! But don't you see, father, if you had gone four inches lower you would have missed her altogether?"
"Bates," I said, "you remind me of a harum-scarum fellow that went from a Massachusetts town into Washington's army, in the Revolution. He was brought back for treatment, his head furrowed by a British bullet, but the skull not fractured. The minister of the town, meeting him one day, thought it would be a proper occasion for a lesson. He said, solemnly: 'Isata, dirl you know that if that bullet had gone an inch lower yon would have been in eternity?' 'Ye-e-s,' said Ike; 'and if the d-d-darned thing had g-g-gone an inch higher, it wouldn't have h-i-i-it
me at all!' Ike's 'if' was as good as the dominie's, and it was a fair reply."
"Oh, yes," said Bates, "you'll always have your story; now we'll cut up the Deer."

The truth was, he was right; the point of the shoulder is always the shot for a Deer. The shoulder ois both sides is broken, the lungs and spine are penetrated, and the animal goes down at once. But then, he was my boy, and it wouldn't do to give in. As Mr. Bagnet says, "Discipline must be maintained."

We drew the fine animal, put her on the mound for notice when coming in with the horse, and resumed our hunt in good heart over the good omen for the day.

We now kept along the northern side of the ridge, the sonthern being steep and quite bare, while our own side was a long slope, and covered with all the woods that give food and shelter to Deer. We :it gone, perhaps, half a mile, and were some four rods apart, my son just then hidden in some thickets of mountain mahogany, when right ahead of him a sundred yards I saw a fine Deer walking rapidly down the hill-side. I drew up my rifle, but it was passing four or five huge pines, and no sooner would I get my sight to bear than a huge tree-trunk would come between me and the game. I waited till it had passed the last tree, and fired for the shoulder. It went heavily to the ground, and floundered around as Deer always do when struck in the shoulder. Bates said, in a low tone:
"What now?"
"I've got one, yonder," said I.
When up from the hill-side, directly beyond niy son and over his head, sprang my Deer as lively as ever. I fired again, and brought it down. As will sometimes happen, I could see distinctly the whitish parting of the hair as the bullet struck the side.

At that moment a Deer sprang up directly in front of Bates, and not twenty feet away. He was taken by surprise, fired a snap-shot, and missed. It came whirling toward me, directly in my face, with the big Deer-dog close
at its heels. If I had not moved, I think it would have jumped directly on me, or over me; but seeing me as I* raised my vifle, it swerved to one side, and swept past me like the wind. . I waited to get the motion, and at the third jump pulled for the flank toward me. It is four years since, but $I$ can see as distinctly as at the time the bead on the flank as I pulled. But, alas! I had thrown out the old cartridge without throwing in a new one, and all the answer to the trigger was a dull, sickening snap! I had not yet become used to the mechanism of the new rifle, and in my haste made the error. The Deer went on his way, and I will venture to say lay down in his lair that night the worst-scared Deer in the mountains-what with men, dogs, gons, all coming on him at once in his afternoon nap.

We went up to my Deer on the hill-side, and found it a fine large doe. I may here say, in explanation of the number of does killed, that this was just before ruttingtime. when the does, yearlings, and fawns keep by themselves and out of the way to avoid the bucks, who are already seeking them. At the same time, they are in their finest condition for meat of any time in the year. We had bled and drawn her, and were resting after our lunch. The big boy looked pleased, and spoke of our good fortune of the first day, and, with his own big heart and big nature, was so glad the luck of the day had fallen ic me.
"But say, father, that was a fine shot at the other doe, for a man that hadn't seen a Deer in the woods for eighteen years."
" Oh," I said, " long before you were born I had my turn of buck-fever at my first Deer, and fired my rifie off into the tryj of a big hickory. . It was my vaccination, and I never had it since. But then, Bates, about the shot; if I had dropped four inches I would have missed her, you know!"

He langhed, "Oh, that's all right! you didn't happen to drop!"

I looked at the Deer before us. A thought struck me.
"Batea, this isn't the Deer IF shot at first, at all. This is at least a three-year-old doe, and that was a yearling."
"Well, that would be luck," said he; "can you tell where you shot at it?"
"Of course; just beyond the last of those big pines." We went at once, and there lay my yearling, stone-dead.
"Well, this is luck! Now, father, I understand why your gun snapped on that other Deer. You were elected to miss it, for if yon had killed these three Deer in three shots, and all in motion, the woagon wouldn't have held you doon going home!"

So we had our laugh again, and bled and drew our Deer. Bates cast his eye up at the declining sun, for it was now afternoon.
"Father, I'll have just time to go to camp, get the horses, and get the Deer home before dark."

It was a thing as much beyond me as to pull up one of those pines and stand it on its top; but he is perfect in all that pertains to horses and wooderaft, and as he drew his belt a hole tighter, threw his rifle over his shoulder, caught up old Tige's leash, and struck off in an entirely different line from that by which we had come, I followed on, with as little sense and as little hand in the matter as he had when I rocked him in his cradle.

Over foot-hills, down gulches, across ridges, a half-hour's sturdy tramp, and we paused.
"Do you know where you are?" said he.
And there before me was the camp; the horses at their pickets in the bunch grass; the wagon in its place as we left it, and our morning fire smoldering, with just enough smoke to give it a human look and make one feel at home. We saddled the two cattle-horses; hung the lariats and lash-ropes in their places; he mounted one and led the other, and was soon out of sight. It was two good miles to our first doe, and he told me that he struck the place within ten rods; he loaded her on Jack, followed the ridge to the other two, loaded them on George, and just at dusk his tall, manly form appeared again from the woods, afoot himself, and leading the horses with the game, seemingly as fresh as when he started in the morning. Such is the vigor

that life in these hills and in that dry, matchless climate gives to the men who live there.

Meanwhile, I had not been idle. We had bronght the livers of the Deer; and by the time the horses were unloaded and at their pickets again, the coffee, potatoes, bread, onions, liver with bacon, were set, all smoking-hot, before him.

The dark eyes glistened, the great, brown face Hushed, as jhe sight struck one sense and the odor another, and all, the stomach. He sat down, removed his hat, bent his head in reverence to the higher Father, and said:
"The word of thanks, father, and I am ready!"
It was body and soul working together, and every inch a man! A fellow-ranchman came to his cabin one day, and said:
"Mr. C-, my old mother is dead. She was a Christian woman, and I don't want to put her in the ground like the cattle we bury. There isn't a minister within thirty miles. Your father was a minister; you have taught our Sabbathschool. Would you come and say a word over my mother?"

It was a new experience, and the big boy thought a moment.
"Whitehead, I never did anything of the kind; but if it was my mother-and I have got one whom I worship-I should feel as you do. Your mother shan't be buried like a dog. I'll come." And he went. As he wrote me afterward, "I recalled the words I had so often heard you pronounce over the dead. All alone, I read a passage of Scripture, sang a verse of a hymn, said a short prayer, said the 'dust to dust,' and all was over. It was a tight place, father; all the men and women of the valley were there; but I thought of mother, and it carried me through."

A rough young ranchman said to him, one day:
"Bates, we notice that you will take part with us in our sports up to a certain point, and then you stop. We wonder why."
"Jerry, when I left my home, I made up my mind to go nowhere and take part in nothing that would displease my mother."

The reader will pardon this digression; but that was the kind of boy God had given me, and that was my companion for this hunt in the mountains. In camp or in cabin, no meal without the word of thanks to the Giver.
"Father, have you got the coffee-pot full? I am dried up like paper, and I'm hollow to the knees!"

I knew whom I was purveying for, and what had been the draught of the day on that sturdy frame. Indeed, I had only to judge by my own measure, and double it for his. There was something of all the dishes left when, after an hour of untiring application, he leaned back, laid down his knife ard fork, wiped his lips, and said:
" Well, I must call a halt, or I shall be as bad as old Tige when he had filled up on the first Deer's inwards. He looked like a gyp, and near her time!'"

This is the restorative power of the woods. The pure, clear air; the wild, grand scenery; the manly tramp, with the eager expectancy of the hunter every moment; every physical power drawn on, and then all physical waste repaired by the appetite that would seem gluttony at home; then the profound, dreamless sleep of the tired frame in the hemlock-boughs; the flickering flame of the camp-fire; the sighing of winds through the pines; the weird sounds and shadows of the woods-all soothing the nerves, relaxing the muscles, and leading the mind into that state which the ancients beautifully made the province of the twin-brother of death; but with a daily resurrection to restored powers, instead of the final one to an endless, immortal, unwearied state.

The dawning of the following morning found us in our woods again, wholly restored from the fatigue of the preceding day, and eager to follow up our yesterday's success by another like it. It was to be Bates' day to-day. While the light was yet dim, and a slight mist hung over the ground, I saw, at a good, fair distance from me, a doe feeding from a laurel-bush. Her head was down in the center of the bush, her whole body outside, and perfectly defined. I counted her as good as in my hand, and
niming for the shoulder, fired. When the smoke that hung on the damp morning air had cleared, no Deer was to be seen. Yesterday's experience had made me overweening, and I went forward very confident of finding her stretched out within a reasonable distance. I did not find her stretched out at any distance, and sending old Tige on her trail, his speedy return revealed no blood drawn, and a clean and palpable miss.

All riffemen have these unaccountable misses in recollection. A defective bullet, a stray twig deflecting, dim light, a failure of eye and finger to work together, a raising or depressing the gun as the trigger is pulled-some conscious or unconscious cause lies at the bottom of misses, where five out of six shots, all day long, would be fatal. I ascribed mine to the dim light. Past three-score, and shooting with the naked eye, the chill morning air making the eye water-perhaps making the finger numb-something of this kind probably was at the bottom of my erring shot. I was sorry; somewhat mortified, and somewhat chastened, too, under the reflection that the day before I had been utterly unsatisfied with the two Deer I killed because I failed to kill the third.

Nature has her revenges. And Nature is a personal, intelligent, kindly father, correcting our pride and rebuking our ingratitude. Even in the mountains, and on a hunt, we may learn this.

We went on. Suddenly, thump! thump! thump! went a Deer up a steep acclivity before us, but too thickly covered to allow ns to see him. Now was my son's opportunity. With bounds like that of the Deer himself, he sprang forward, and caught sight of the Deer looking back for the cause of alarm, as is their wont, often. He threw his Burgess to his shonlder and fired.

Loosing Tige from the leash, he let him free, and the noble dog was up the hill in a moment, and out of sight. We followed, breathless, and just at the summit found the dog lying by the side of the dead Deer, awaiting our coming. It was a fine, manly feat, that rush up the hill-side;
and it was a perfect shot, with heaving breath and quivering pulse, to send a bullet directly throngh the Deer's most vital part. My boy does not praise himself much, but I could not withhold mine.

The Deer bled and drawn, nnd dragged to a conspicuons place, we made ready to pursue our hunt.

Here let me pause to notice the thumping jump of this variety of Deer. Mr. Van Dyke and Judge Caton have both called attention to it. Instead of the long, swinging leap of the common Deer, they make jumps it which all their legs seem to come down together, and stiffened at the joints. I think this can be accounted for by their habitat-the scenes where Nature designed they should hwe. This is an utterly broken, often precipitous, country, wiare Nnture seems to have shown as much abhorrence of a piece of level ground as she is said to have of a vacuum. It is hardly an exaggeration to say that, in whole square miles of the wild, broken, volcanic region inhabited by the Mule Deer, one can not find a single half-acre of level ground-hardly a square rod. Steep hills, precipitous ridges and ledges, with a crumbling volcanic débris under foot at every step, it is plain that an animal like our Deer finds a much surer footing in a jumping, pounding gait, than in the free, clear run with which the Virginia Deer wings its cousse over the level prairies or through the level forests. Nature is a kindly mother, and she gives no gift withont a meaning, no distinction without its use. Would that we could feel it for ourselves!

Spirits are not fincly touched
But to fine issues; nor Nature never lends The smaliest scruple of her excellence; But, like a thrifty goddess, sle determines Herself the glory of a creditor, Both thanks and use.
Bates is in his element to-day, and shines in swift, powerful motion, and as a snap-shot. Here I take a back seat, and am quite content. It is meat we are after, as the main thing, and it matters little to which rifle it falls. The differing gifts are telling in the main end.

An hour more of slow, careful search, and no result; when suddenly Tige strains on his leash; Dash draws ahead, and stands a-point. Bates whispers:
"There's a Deer within twenty feet of us."
It bounds from our very side; rushes down a Deer-path for the woods below. I raise my rifle to fire when it shall clear some large tree-trunks, when Bates throws up his Burgess, fires a clear snap-shot, and the Deer goes headlong down the hill-side, with a broken neck. It was splendidly done.
"Yes," sald he; "but it was a snap-shot; I had no aim."
" N o much the better, my boy! A rifle leveled as accurately as that, without aim, at an animal on the jump, is a better shot than the best standing-shot can possibly be."

The Deer proved a fine two-year-old buck, in perfect conultion, and it made us glad.

It was now about two o'clock in the afternoon, and Bates said:
" We are about three miles from camp; suppose we make a hunt that way, and I can get, the horses, and get the meat to camp before dark."

We met nothing on the way; and h.e repeated the trip of yesterday, and I repeated the supper, over which we were both as glad as before.

The next morning, as we started out, Bates said:
"I don't like the appearance of the sky this morning. It looks as if there was going to be a fog, and that is no joke, in these mountains. All peaks and headlands are obscured, which are our guides at other times. The sun is hidden entirely, and for a hundred miles every place is like every other place, and a man is as safe to camp and remain still as to stir a step-safer, ordinarily-only they may hold for two or three days. But we will hunt, the forenoon, and be on the watch for the mist."

We were going on new ground, tip a high, sloping ridge that seemed to reach to the mountains beyond. We sep- arated, for once, to come together higher up, a mile farther
on. A half-hour of careful walking, for signs were plenty, and I came on a track crossing mine, that, at first, I thought was an Elk's; but I saw, on inspection, it was a buck's of the largest size. At the same time, Dash drew on from behind me, lifted his nose in the air, and began his cat-like creep that always told of game near by. I knew I was


A Portraht.
directly on the buck, but conld see him nowhere. It was now literally crawling with dog and man, when Dash suddenly came 'o a stand-still, with nothing in sight, thongh an absolute certainty of the game being within half-rifleshot of me. The tension of feeling was now almost painfu?. I left Dash on his point, turned slowly around an immense laurel-bush which. hid a front view, and the mighty game was before me. He was lying down in a body of grass, and
we saw each other at the same moment. Had it been a doe or a yearling, it would have sprung from its bed in an instant; but an old buck, either from a poirit of indolence or defiance, will often wait to take a steady look, which seals his doom. Raising my rifle slowly in another direction, then swinging it swiftly sidewise, I fired through the grass, at the point of his shoulder. He never rose. He rolled on his side, and when I came up-and it was not six rods off-his tongue was out, and his eye was glazing in death. He made one faint effort to reach me with his great horns, fell back, and died.

He was a trophy indeed-six or eight yeãis old by his antlers, in perfect condition, as rutting-time had scarcely begun, and yet his neck showed signs of the coming time. As 1 should judge, in averaging with the common Deer, he was from a fourth to a fifth larger than the largest of that variety. I was shooting, in those days, a 100 -grain Sharp's shell, 405 of lead, and I do not remember ever finding the ball in a Deer's body. This shot had broken both shoulders, the heavy spinal process between them, had penetrated that part of the lungs lying there, and had gone out at the other side as clear as it had entered at the first. It is the most deadly cartridge I have ever found, for a rifle.

Here was a job for me! It was like tackling a steer in a butcher's shop, and is really the butcher's part in hunting. My son was olr; of sight, and I must do it for myself. I knew how, bet I ulways let a comrade do it when I could, rendering such incidental help) as I might; but now there's no help for it. Rolling my sleeves up to my shoulders, I plunged in; and when twenty minites had elapsed, and I looked at myself, with my job comi, eted. I seemed to myself like a genuine man of the shambles. • This is the really unpleasant part of Deer-hunting; but it vould not be oi earthly nature if it had not its drawbacks.

Stuffing boughs between the thighs to keep out the mag. pies, and tying my handkerchief to the horns to keep of the coyotes, I rubbed off my stained arms to the shoulders as best I could (for I was fifteen liundred feet above any
water), rolled down my sleeves, took up my rifle, and resumed my hunt; Dash falling again to heel, his head always just far enough ahead of my leg to clear my scent, and so he would go all day long.

I had gone, perhaps, half a mile, when I caught a glimpse of white passing rapidly into some bushes. I ran ahead, and through the thicket saw the form of a Deer walking rapidly. I threw up my rifle and fired, but the brush plainly turned the bullet; for the Deer, a noble doe, broke through the bushes, ran directly toward me, and stood looking every way for the quarter the noise had come from. Her form was crouched, her legs were bent, ready to spring; I had barely time to sight up to her brisket and fire. She made a few great lunges, and fell dead, not a rod from me. A fine fawn rushed after and past her. I hastened on his trail, and he stood looking back. It was somewhat pitiful, bat the dam was dead, it was so much meat, and I took him in with a broken neck, not to spoil his flesh.

At the shots, my son gave a whoop, which I answered, and he came bounding toward me with every sign of alarm.
"Father, the mist is coming, and before we can get these Deer prepared, it will be so thick about us that we can not see ten rods. The sun is hidden already, and we have no compasses with us. Hurry!"

And hurry we did. We drew the Deer across a $\log$ for recognition, and started just short of a run. Before we reached my buck, the mist had come rolling down the mountain-side, obscuring everything at two rods' distance, and tuming the day to night.

Bates is a brave boy, but now he was alarmed. We had entered a thick growth of black fir, where we had to force our way, and where every landmark was lost, and we could not tell the direction in which we were going. Bates stopped, leaned on his gun, and, in a most serious tone, said:
"Father, we are in a bad fix. All depends, now, on my keeping my head level, or we may have to stay out days and nights. Please don't give me any counsel, or ubject to
anything I say or do, for it would confuse me, and then we are lost indeed. I will do my best, but there was never greater need."

I can see him now, his tall form drawn up, his features working with agitation, and his hunter's eye unsettled and wavering, instead of fixed in an intensity which often gave him actual pain for days after a hunt. I said:
"Bates, before I take up silence, let me say this: We arb now on an ascent, though very gradual; by keeping up it as long as it continnes, it must bring us to some ridgecrest or hill-top, which is our only chance for an outlook if the fog should break a little."
" It is a good thought," said he, "and may save us."
We worked out of the firs slowly, up into clearer ground; up still higher, into huge rocks which told of a summit near; then to the summit itself. No hunting now. Elk, Deer, Bear, might have freely crossed our track unscathed. We were busied about ourselves. No outlook, even from the summit we had attained; all was enveloped in fog as thick as night, although it was barely noon. Bates suid:
"I will climb that fir; perhaps I can see from above."
Sixty feet he went up the dark, rough trunk, and clung among the branches. No ontlook still.
"Bates, may I speak?"
"Yes, father, for I am all at sea!"
I never before or since heard him speak in the tone in which these words came down to me.
"Well, just beyond the top of the fir you are in is the faintest show of more light in the fog than elsewhere. If so, that is the sun, and that is south, for it is noon."
"Then," he said, pointing his tinger, "that is east, and there is our camp. Now, don't lose the direction till I get down, for I can't keep it up here."

He came down; I gave him the direction-it was all "nr hope. By keeping near objects directly ahead of us, and moving carefully from one to another, an hour brought us to a black cattle-horse standing at his stake, with head droop-
ing, and body dripping with the rain-like mist. He gave a faint neigh, and my son exclaimed:
"Father, it's Jack! It's dear old Jack, and we are safe home!"

Then, grasping my hand, he said:
"Father, Clod bless you! you didn't bother me to-day !"
To show how serious the matter was, the other two of our company got lost, and wandered off west; after laying out all night, they fell in with some Indians, who fed them and set them right. They had to travel forty miles to reach the ranch and cabin that day.

We had now all the meat we could carry. We were anxious above measure for our lost comrades; so, as the mist gave way next morning, after securing our buck, doe, and fawn from the hills, we started home. Our suspense was breathless as we neared the cabin and looked for some sign of occupancy. My son's partner opened the door, and Bates exclaimed:
"Oh, Porter, I was never so glad to see you before!"
To show the force of Bates' caution to me not to advise him or debate with him, Porter said his companion totally confused him with suggestions, doubts, opposition, till finally he had to take his own way, even if he left the other to die in the woods.

The scene has changed. Another summer has gone; another November has come. My stalwart boy has gene East to get him a wife; his partner and the carpenters are building him a house, and I have undertaken to provide the meat with my rifle. And it is still with the Mule Deer that we have to do. Of all the camps I have ever made, this was the most delightful, and has the most vivid and lasting remembrance. At the head of a great cañon running six miles down to the Burnt River Valley; my umbrella-tent pitched under a noble pine, around whose base swept the cold, clear mountain stream from which my water-supply for drinking and washing was derived; other pines in all directions, clothing the shallow valleys putting down into
this larger one; a great, fallen dry pine near my tent, furnishing me a back-log for a month, while abundance of dead branches and dry alder cover the ground; at the head, and beyond, other ravines-rare hunting-grounds, especially over the divide, where is an immense cañon, five hundred feet deep, and clothed on its rugged sides to the very top with all food that sustains the Deer; on all sides, over the small foot-hills, grew abundant bunch-grass for my horse, who could always be picketed in sight; clear, crisp, open weather-for weeks together, the autumn sun without a clond. All that enters into the making a perfect camp and perfect sport existed there; and, in physical sense, life itself was a luxury, as the scene around and above was a glory.

A ranchman friend, living in the valley at the end of my cañon, was my companion for a day, as he was my guide to the spot. It was four o'clock when we had pitched the tent, arranged horses and wood for the night. Reed cast his eye up at the sun:
"Mr. C-_, the sun is an honr high; we have time to kill a Deer before night. I have seen whole bands from the very spot where we stand."

It seemed incredible to me; the woods were so open, so park-like and civilized, that it seemed to me much as if one should say that we could find a Deer on a farm within sight of Chicago. I was soon to be undeceived.
"Now, you take that swale coming into this from the west, and I will take the one to the east, and we will be in camp by dusk."

Absolutely, I took up my rifle as if I were going to look for a Deer in a highway or on a farm. I was yet within sight of my tent; my friend had just passed out of sight. I let my ritle down from my shoulder, and began to think which way I should look for a Deer, when right before me, at a few hundred yards, stood, broadside to me and looking at me, the most princely buck I ever saw! He had just come down the ravine, probably with his nose to the ground on a doe's track, for his head was but half-raised and turned sidewise to look at me. His massive, branch-
ing antlers stood proudly ont from his head, while his whole icrm was limned, as if by art, against the steep hillside at the foot of which he stood. I could hardly trust my eyes; under all the circumstances, it actually seemed an illiasion. I raised my rifle slowly, aimed for his heart, and fired. He made a wheel of twenty feet up the steep hillside, and was out of sight.

Could it be! At a hundred yards, dead-still, and miss an animal like that! And I felt like kicking myself, as I went forward, to think I must fall into my old training of early lift, and iit:a behind the shoulder, instead of for the shoulder itself, and dropping him where he stood. But there was blcod where he wheeled, and hair, as if puffed out on the opposite side. Courage! it was not a miss, then; I may get him yet. I sent Dash on his trail. With a rush he sprang up the hill-side, and when I had clambered np, he too was out of sight; Deer and dog both gone! Getting breath, I turned to the left, and there, in a little gully, lay dead my noble game, with my dog gnawing into his, back, in his instinct to fetch! I have Elk-skins and Deer-skins which are thus marked and bare.

The great doe was noble; but this is princely! No such creature, save a bull Flk, had ever fallen to my rifle. I bled him as he lay; then took him by the massive horns und slid him down the steep incline, to draw him at better advantage at the foot. The bullet had gone directly through his heart; he had used the one inhalation in his lungs, the one pulsation of his blood, for the burst up the hillock, then had rolled, dead, into the hollow.

My friend, hearing my shot, came up. He looked at the mighty game in astonishment.
"Mr. C——," he said, "I have lived in this valley fifteen years, and that is the biggest Deer I have ever seen! He will weigh a good three hundrel pounds when he is drawn."

We gralloched him, secured him for the night, and, sure enough, were back at the tent as the sun was dipping below the horizon. To this day, it seems to me as if I had shot a Deer in a street or a pasture.

By this animal, I saw that the antlers are no sure criterion of the age or size of a Deer. Those of this immense creature were comparatively small; I have killed bucks of not twothirds his weight with much larger antlers.

This was beginning our hunt in good fashion. We had liver for supper and breakfast; and there is no better meat to satisfy the appetite or to tramp on. Daylight saw us astir, and headed for the great ravine east of us. My

friend preferred to walk along the brow; so I took a lower line, though having more uneven ground to get over, while he passed all the ravines at their head.

I was repaid. After abont half a mile of toilsome up-anddown climbing, I heard Reed's gan to my left. I rushed up the incline before me, just in time to see two fine yearlings at which he had shot, and which now stood looking at me. I fired for the shoulder of the largest; he made three or four violent plunges, and went headlong and dead
against a large pine-log. The other passed out of sight. This was good. I bled and drew my Deer, laid him across a log, and started on a return hunt, and to get my horse to bring him in.

A couple of Antelope drew me out of the way, and it was afternoon before I got in, and just at the camp I met my friend, with my Deer and one of his own on his horse. He had shot a fine two-year-old buck, had come across mine also, and brought them both in. Such things, dear reader, make a man feel good-natured.

It was yet but four o'clock, and we laid ont for a regular meal. Reed was an adept at flap-jacks; I undertook the coffee, the tongue, the liver, the tenderloin, with Saratoga chips-and, above all, onions, for Reed said:
"I can eat onions till I can't see!"
The dogs had had their surfeit in the hunt; and when we had mused before the waning fire till dusk set in, had gone over the pleasant incidents of the day, and other days, and when we were rolled in our blankets, there were two men in that tent who had nothing to ask of anyone, and were at peace with the world.

Next morning we loaded our Deer on the two horses, and set out, afoot, for Reed's home, where I was to deposit my Deer for my son's partner to carry along as he came with lumber from the mill. I was loath to g back to my tent alone that night, and did not. My friend and his good wife insisted on my staying over the night. I did so. Putting my shotgun together, I got half a dozen widgeon from the river-a rarity to them, for they keep nothing but a rifle. With many a tale of the great outside world, and music on the piccolo, I managed to make my entertainment not a burden.

The forenoon of the next day saw me at my camp again, old George staked out in the bunch-grass, my lunch eaten, and the hunt for the day taken up; for it was meat, now, for four men and a woman, and I had undertaken to supply the larder. I felt the solitude a little at first, for Reed was a genial, intelligent man, and his company was pleasant.

This day was to show me the value of my dog. Almost overy day-indeed, every day-the wind swept up the great east ravine, and over its brow. Instead of going along the brow, where I was at all times liable to be seen myself, I kept back a little, out of sight, and left all to the nose of my dog. He answered to the trust. He was the most benutiful dog I ever saw-of far-famed strain, with every instinct of the high-bred Setter born in him. I never had to teach hin either to stand or retrieve; he did both by virtue of his blood and birth. It was noon as I now skirted the ravine just back from its edge. The wind came gently and freshly over the brow; the sun shone out brightly from the sky; the air was pure as the mountain stream beneaih it, and motion itself was a pleasure. All at once, Dash stepped out from me, raised his nose a moment, and stole toward the brow. There he stood, while I stepped beyond, and saw one of the sights that make a sportsman's nerves tingle, and set all his blood aglow.

About fifteen rods down the steep hill-side was a procession, in line, of two does, a large buck, and two yearlings or fawns behind. None saw me, and I had time for a choice. From the buck's neck, I saw that he was in his full run, and unfit for use. The does would be perfect. The two in front were walking rapidly, and I was waiting for them to pause, when, looking ahead, a much larger doe, and evidently the leader of the band, was standing, cropping grass. I swung my rifle ahead, and, in my old instinct and folly, fired low, for her heart. In an instant all was commotion. I fired again, without effect, when the whole band went out of sight. I went down for my doe. There was blood, there was hair, but no doe in sight. I followed in the line she was taking, but found no sign. I returned to the spot where she had stood, when I noticed the gentle face of Dash turned wistfully up to mine.
"Dash, where is she?"
With a bound, he sprang down the hill-side, and beyond him I saw my doe lying dead. She had made one vast spring of thirty feet down as the bullet struck her, and
fallen headlong and dead. It was a case of the heart again, for that organ was mere clotted blood when I came to draw her. It was again a fine animal, in perfect coat and condition; and again I was glad. It was hunting, it was shooting, it was meat; but, more than all, it was the fine work of my beautiful dog. I had time to go to camp for old George, to ride back for my Deer, to load it on and lead him to camp, before it was time for supper. It was again a satisfactory day; and I slept soundly over its success and its review.

I had occasion here to notice again and particularly the stiff, thumping jumps peculiar to the Mu ${ }^{\circ}$ Deer, and marking him from his congener, the Virginia Deer, with its free, graceful, elastic lope. The old buck was of immense size und weight, and carried horns that would have been a trophy little short of those of a bull Elk. While the does and young Deer were bounding around in easy springs that soon took them outside, the lord of the band wheeled backward with a few pounding jumps; then back again to the same point; then, with the same stiffened and ungraceful action, down the hill-side and out of sight. I could have shot him repeatedly, but the great, swollen neck proclaimed him in the midst of his season. I must sleep with myself at night, and could not do it in peace, thinking of the carcass of a great and noble animal shot merely for slaughter, and left, tainted already while living, to rot on the face of the hill.

There is one subject connected with hunting, and the forest and mountain, the very thought of which makes the blood boil, and one's whole better nature revolt in indignation. It is the wanton slaughter of our nobler game. For the paltriest pay, for no pay at all, in mere thirst for blood, in mere love of killing, the inhuman work has gone on, till Bison, Elk, Mountain Sheep, have gone down before the fell demon of greed and blood, and can only now be found in the loneliest, most inaccessible recesses of the mountains. The editor of the present work, in his "Cruisings in the Cascades," has given us a scene of this kind-
the biped slaughterer and the prostrate victims-a whole band of Elk; and it stirs every better element of one's nature to loathing for the creatures who disgrace their kind.

An instance occurs to me. I will give it in the words of the hunter who told it to me:
"Mr. C-, I have been a hnnter in the mountains all my life, ąnd have lived among rough men; but the hardesthearted, the worst man I ever met, was an Englisliman for whom I was guide and hunter in Western Colorado, a few years ago. He was full of money; had a splendid outfit of double-barreled rifles and shotguns, and all things needed for hunting, and had come clear from England to break the record on the greatest number of heads of game within a certain time. He hired me and three others to go with him, and we were all to play into his hands to kill all we could in a certain time. I am ashamed to say how many Elk and Deer were killed and left, all to rot as they fell-not even bled or drawn. It was money to us, and plenty of it, and I was poor; but, as long as I live, I shall feel that that Englishman was more a devil than a man. He was the only man I ever knew, of all the rough class even in these mountains, that enjoyed giving pain; and I will say that, anyway, for the honor of the rest of us. One day he had shot a Mule doe through the hips, and she lay wallowing on the ground, and bleating with fear as we came up to her. The Englishman stood over her, and laughed aloud to see her fear and her pain. Then he shot her in different parts of her body where it would not kill her, and laughed and ha-ha'd to see her jump at the shot, and flounder and cry out with the new pain. At last the poor creature stretched out her legs full length, her eye glazed, and with a quiver over her whole body, she died. And he burst out again in laughter, and shouted, ‘This is the greatest sport yet!' As sure as God made me, Mr. C-, I felt for a minute that the dead doe was the better creature of the two, and I felt almost ashamed that I was a man!"

Now, what penalty would be adequate for the deed of this butcher, this human fiend! I am a minister, and have
preached the Gospel for forty years; but I felt, as I heard the awful tale, that, laying law and Gospel aside-or, rather, carrying both with me-I would have been glad to be one of a company to strip this creature of his arms, pile them and him into his wagon, guard them to the nearest railway station, and start him East, with the assurance that if he showed himself in the mountains again, there would be one hunting-season, ut least, in which he would not be fit to shoot game for the crows, nor langh over the pains he had inflicted on a dying doe. I have since seen this statement in print; and I am only sorry that the rufflan's name could not have been secured and sent to the London Times and London Field, to be posted over England;* for, after all, at the bottom, Englishmen are, as a class, hamane, and love fair play for man and beast.

Even a fair-minded man becomes vindictive over this thing, in spite of himself; so that, in reminiscences, a scene like the one referred to from "Coquina's" book stirs the blood, and wakens all the disgust and the anger over again. Hunting Mountain Sheep, one day we came on a skinhunter's cabin of the year before. There, lying in a festering heap, were forty carcasses of this beautiful and rare animal, from which nothing but the pelt had been taken. I felt, on the moment, that if I should see a monarch ram butt the creature from a precipice, I should hardly feel regret that a human being had been killed.

Laws! We make laws when the game is gone. We leave the laws to enforce themselves, as if they were sentient, active beings. We leave execution of the law to private complaint, where it may lose one his neighbor, or a vote at a coming election. I have lived to see my beautiful prairies of Iowa denuded of their gronse, for the accursed greed of Eastern game-dealers and the glutton maws of those they break laws for, and throw conscience, honor, citizenship, to the winds. I have lived to see the prairies

[^2]swept, as by a besom, of their countless Bison, in the face of law, and of the higher and sacred law stamped on all animate nature. I have lived to see the Elk driven from the Mississippi to the most remote and loneliest recesses of the mountains, and only saved in the Yellowstone Park by the United States Army! Of all civilized nations, we are the slowest to enact laws when our persons and pockets are not concerned. Of all civilized nations, we ure the weakest to execute the laws we do make, when still our own persons or pockets are not touched. Our game laws are a mere empty form, and their execution is a farce!

Now, to return to the stiffened jumps and gait of the Mule Deer. That whole cañon-side, for five hundred feet down, was a steep slope of volcanic débris and sliding shale. To go down was a slide; to go up was a climb; and this answers fairly, as I have said before, for the face of the whole country. Can we not see that the stiffened jump of a Sheep or a Goat, that sets the feet firmly at every bound, is better for our Deer than the long, swinging leap that regards surface merely, and would leave the animal to constant slipping and many a fall?

The next morning I was to have a picture again, and one which time and years do not efface. I was ont early, at daylight; but a mile and a half along our cañon had brought no scent to my gentle companion, and so no need to look down into the deep, dark gulf which the daylight had not yet reached. The sun had just risen above the horizon, full, round, and red, and seemed three times his natural size, in the morning mist which yet hung over mountain and valley. I had come to a knoll, or mound, some ten or fifteen feet high, over the very brow of which the sun appeared as I have described, when right across the great, red disc stepped the form of a noble buck, and stopped. Had I had a camera, I should have been in doubt whether it was a case for the rifle or the camera. His noble antlers and upraised head and neck cleared the disc, but his shonlders were directly across it, and it showed bright and clear abore and below his body, behind his shoulders. It was wonilerful,
it was beantiful, and for a moment $\bar{i}$ almost forgot the business in hand. But this is a panorama that is not lastinga buck and a hunter looking one another in the face, not five rods upart. I had taken lim as much by surprise as he had ine, and, wits an old buck's usual manner, he paused for a moment to see what was up; it was only to learn what was down.

I raised my rifle slowly, but the moment it ranged on his body it met the snn-glare, and I could not see the sighthardly the muzzle. I lowered to the ground again, took sight there, raised to a leval, and fired. The buck wheeled, and was out of sight. Of course! Even abarn-door is not hit by merely pointing one's gun; and I worked in another cartridge, and started up the mound. Just over the crest lay the gallant stag, stretched out and dead. Niy gun, after all, had been leveled at his heart-one wheel, a fill, and all was ozer.

Now, just thinik of the variety of incident in liuntingone of the thifgs that give it constant charre! No two of the Deer I had shot had been killed under the same conditions; and this fine creature had fallen to me in a way that would not happen twice in a life-time. And here let me say, that I am writing actual facts, not fiction-things that actualy occurred, and peceisely as I state them. My puranit of tle Mule Deer has been under such favoring circumstances that I have nothing to invent or to make up in writing about him. I, yerhaps, onght to have stated this dufinitely before, but hope that it was not needed.

And was he not a beautiful creature as he lay there! He hau died iiterally withont pain, for the ball had broken no bones, and, passing through his heart, had given, probably, no uensation. This is always a satisfaction in onr killing. Thus far every Deer had been dend when I came up to it, and I hest no second shooting to do to put them ont of pain. It is a gwat relief.

After I had bled my Deer, I sat down to look at him, before che umpleasant second act. He was rolling in fat and of perfect coat and form, about five or six years old, juig.
ing from size and antlers and the number of points he carried. The rutting-senson had not fairly reached him yet, though the signs of its coming were not wanting.

On this Deer, the most striking markings, to me, have alwnys been the deep jet-black of the brisket and belly, and the rich cinnamon of all the legs from the knees down. Notice, too, the stouter, shorter legs and longer body than those of our common Deer-all designed for that peculiar gait and motion which so fit him for his home among the rough, volcanic hills. The short, stont legs bear the pounding jump; the pounding jump sinks the foot into the loose débris or sets it firmly on the rocks, and gives firm hold for the next jump; and the whole form bespeaks an animal aeeding sure foot-hold rather than grace of motion or speed. And this glossy, satin, steel-mixed coat is excelled by that of none of the genus Cervida.

I am three miles from camp. To go for old George and get my Deer to camp will fairly take up niy day. Once in camp, I rest for the remninder of the afternoon, content with my success and its singuinr incidents. I am lonely to-night. Our nature craves fellowship of its kind, and I have no admiration for hermit life, and the monastic, with its revolt against nature and its certain results, was always revolting.

To get my Deer down to the road, and get buck to camp again, took up most of my time next day, but my gnod luck was still to stay with me. After a hearty afternuon dinner, I still had an hour or two of light, and decided to use it. Just west of ny camp, haif a mile, was a shallow cañon, with but few trees, quite rough and rocky, and yet I had seen much sign of Deer there--some shrubs, perhaps, or alkali earth, of which they are fond; but I had never found any there in fact. To-night, as I drew near the head, somewhat carelessly, for I did not look for much, a large buck and three does ran out from a thicket, while I was yet four hundred yards away.

I hear and read a great deal about " pmoning your Winchesters or Bulhards at them" till you hit one, but it has
never been a kind of shooting to suit me. It is entirely chance, and where one animal is killed, more by far go away wounded to die. I like the fair, clean shot, when, if I hit, I kill; if I miss, the Deer can live on unharmed. For once, I thought I would try the "pumping" system. Raising my rifle some two fuet above the head of the largest doe, I fired, hoping that, somewhere, in the drop to the shoulder, I might hit her. The whole band gave a new spring at th, shot, and I elevated and fired again. Nothing dropped, and all swept out of sight.

It was getting disk, and I had turned for camp, when I saw, far up on the foot-hill to my right, a single doe moving in my own direction, but for the brow of the ridge. Shes passed over it and out of sight. It was three hundred feet, and a hill so steep that I must pull myself along by bushes part of the way to get up. But she may have stopped just over the crest, and by careful work I may get a shot yet. At any rate, the wooded, shallow canon over the ridge will make a pleasant walk heare. I take the climb. Toes, hands, and knees, bushes, the butt of my rifle for a brace-all come in requisition before I reach the top, just short of which I stop to get breath and wipe my steaming face. Gradually the breath gets normal, the nerves grow steady, and I move slowly to the top.

It is now quite dusk, and hut for the height of the ridge, I should not have light to shoot. As I reached the rounded crest and peered over, there, not forty feet from me, was my Deer, lying down in the deep grass for the night. I sighted for her shoulder, through the grass, and at the shot she rolled over on her side, dead. It was the very doe I had shot at first, for there was a wound in the neck, and she had stolen off alone by herself for the night, perhaps to die-a new argument against "pumping.' for it was the merest chance my getting her, as a fenther's weight would have turned me from climbing the hill at all, and, as with hundreds of others that are shot on the pumping system, the coyotes would have had her hefore morning. She was of the largest size, and a noble plece of game. When I
had bled and drawn her, the light was gone; I tied my handkerchief to one ear, as a precaution against the coyotes, and left her till morning.

The smoke of my camp-fire, with a yet flickering flame; the dim outline of my tent, with its little streamer at the top; old George at his picket-stake, munching at the bunchgrass, were pleasant, home-like signs in the gloaming as I came near. The lighted candle inside, and blazing fire outside for a cup of tea, made it still more like home; yet I was twelve miles from the ranch, and six miles from the nearest human being. In contrast with the wild, weird mosatains, with their gloomy shadows and moaning pines, that darkness coming thickly down on all, the blaze and the light were cheer and assurance, and seemed almost a human welcome back. There was chaos and darkness till the primal order came, "Let there be light!"

And now come my last day in camp, and my last Deer. The season has advanced till the ground is stiff, mornings, and often covered with snow. I ieel that my part is played, and it is time to get back to companionship and the appliances of comfort and rest in a more thorough shelter and larger comforts of a settled home. I have worked up the big cañon pretty thoroughly, and do not wish to hunt more there. I have noticed signs of Deer passing westerly, though there are no woods in sight; all in that direction seems bald, bare mountain-top and foot-hill.

But nothing can be more deceptive than the surface of this whole volcanic reglon of the Blue Mountains. You may start for a tramp or a ride ahend, where all looks open and rolling as a prairie. In half a mile, you come suddenly into a vast cainon, five hundred feet deep-forest-clothed on the sides to the very bottom, and intersected by other cañons in all directions, of dimensions almost as great as its own. These are unfailing resorts for Elk and our present Deer, who find abundance of the food they love, abundant shelter from danger, the stect) and rocky glens and hill-sides that are their delight. with always the pure, cold monntain stream at $t^{\prime} \mathrm{l}^{\circ}$ bottom, where by right they can
repair for drink, and be back to their foraging:grounds on the heights by morning. Such are our animals' haunts, habits, and home. Consequently, I was not at all surprised to come into one of these vast cañons, which would never be suspected eighty rods away, and where, probably, soine animals from the bands I had disturbed had come for reliof and shelter. It proved so. I had come into the cainon by a circuit on lower ground, and was passing carelessly uver a bed of shale, when I saw an enormous huck-doubtless the one of the day before-coming quartering past me. He saw me, wheeled for another cañon and disappeared. At this season, given a patriarchal buck, a band of does is not far off. In the summer, I should have mourned over this old fellow, with two inches of fat on his brisket, and weighing a good three hundred and fifty pounds. Now, I mourn him not, with his swollen neck, his tainted body, but welcome him in his tlight as my gnide to a band of does that I do want.

I crossed the divide, clambered down the shady side of the ravine where he had disappenred, and hat just reached the bottom and stooped for a drink from the unfailing canton stream, when, up on the extreme brow of the other side of the ravine, was passing swiftly $n$ band of does. They stopped. I was making a choice for a shot, when, glancing ahend, there seemed, through the thick brush, the mere form of a Deer far larger than any in open sight-so dim that it was a mere suggestion, and indistinct at that. If it * were a Deer at ull, I conld only hit her through the thick brush, and small limbs are proverbinl for deflecting a bullet. But my 100-grain Sharp was a power even for twigs, and s fur it had stood me in good stend; 1 had only missed once in all these weeks, and that was in doing the "pumping", act. I will stake it on the form and the Sharps, and fire through the brush."

Always, in these bands, there seems not only a ruling buck, but a leadhig doe, far larger than the rest. It had been my fortr're, thus fur, in nlmost every instance, to get this leading doe. It was so now. She was on the extreme
brow, one hundred and fifty yards away. Holding well up, I fired. The form was the leading doe indeed, and she came rolling almost to the foot of the hill, with a broken back. The knife ended her pains, buc it always gives me pain to use it for the purpose. This was the largest femule Deer I had killed in my hunt, and I was glad I had taken the risks. Such benuty of cont, such beauty of form, such perfection as game! Then look at those ears; nine inches long and seven broad, and yet as flexible and sensitive as though of the thinnest rubber! And the jet-black brisket; and the tufted tail, ending in its bunch of black-truly a Mule Deer!

To gralloch her, ward off magpies, Clark's crows, and Maximilian's jays, which are already on the ground, with impudent chatter at my long delay; to go for George, and get my game to camp-this filled out my day; and my hunt was done.

Next day, my good friend came up with two horses, to help me to his place with my traps and game, and gave me a fellow-lunter's greeting over my success. And it was to fill his own empty larder, too; and that pleased me. He stoyed with me over night, and we took the day for our work. He was an old packer; was thoroughly up in the mysteries of the "diamond-hitch;" took all the labor of packing on himself, and left the lighter work to me. I drank my last cup of coffee at my fire, took a last look nt the denr old spot where my tent had stood, and where still hay "the fragrant bed with hemlock spread," and bude a last farewell to the lovellest camp, I had ever known.

One final suririse and treat was yet before me. As we descended from the mountains, far below, and to a height of a hundred feet, rolled down the river a body of fog, so white, so dense, so mobile under a gentle west wind, that it seemed not mist, not fog, but an actual river of fonm. Far as the eye could reach, west or east, it still rolled on, as distinct from the prevailing mist and fog aid of as perfect form as a clond in the sk!: Here and there, as a romuled mass would eatel the refiention of the sun, it would be of a
roseate hue, in beautiful contrast with the snowy whiteness around it; and all still slowly rolled on, as if a very body of foam caught up in the air and moving on in unison with the river beneath. I never saw anything in Nature like it; I shall never see it again. And now we began to go down into the mist; as we descended, it grew thicker and thicker till, when we reached the road, we could not see my friend's humble home, two rods beyond it:

My hunt was rounded and complete. It had begun, the first evening, with the largest Deer I have ever killed or have ever seen. It had continned successful as to game; the weather glorious; the camping and scenery equally so; my health perfect; entire exemption from accident, and ended with the most beantiful phenomen on of Nature I have ever seen-a rolling, snowy, billowy, rose-tinted river of foam !


# THE MULE DEER OF SOUTHERN CALIFORNIA. 

By T. S. Van Dige,<br>Author of "The Still Hunter," "The Rifle, Rod, and Gun in Southern<br>California," etc.

70HE Deer of this region, though commonly called the Black-tail, is, in reality, the Mule Deer. It is found from the coast to the highest inland mountaintop. There is a theory among many that it goes to the coast in the summer and to the mountains in winter, while many others think directly the contrary. I can see but little evidence of either theory being correct. There are migratory movements of the Deer here, but rarely any of a nature so general as that. Once in a few years, Deer will be unusually plentiful, coming, undoubtedly, from Lower California, or from the high ranges that bound the Desert; and, in occasional years, they will be very scarce. There are also local movements-Deer suddenly leaving a considerable tract of country and becoming quite plentiful in another, several miles away-generally governed by the question of acorns.

The real explanation I think to be this: Both in the mountains and on the coast, the Deer have a period of retirement in the heavy brush, lasting from about the middle of April till the first of August, or even later. During this time they move but little, and when they come outside of the chaparral at all, it is mainly at night, and they return to it before day-break. The leaves and twigs of the brush are then young and succulent, so that they care little for water, and therefore few or no tracks may be found about a spring, although several Deer may be in the brush near by. This period is longer in the mountains than it is along the coast, and the Deer confine their movements still more to the brush.

Of conrse, some may be seen in either place, but in the mountains it will be quite accidental. In the lower hills, along the coast, it is not so difficult to see game; but in the mountains I have hunted a whole week, getting before daybreak on a point that would command a wide range of brush and open ground, and going again in the afternoon and remaining until dark, but, even with the aid of a good glass, could see no Deer. Yet there were plenty of fresh tracks on all the open places.

At other times, I have at daylight taken tracks not half an hour old, and followed them rapidly in a desperate attempt to overtake the Deer, whether I got a shot or not. But in a few hundred yards they would turn down into some deep, dark ravine, bristling with tremendous chnparral, or into some perfect sen of brush along some hillside. In either case, no amount of noise would move them. He who would hunt at this time of year-the time, too, when the bucks and yearlings are in the best conditionmust remember this habit of retirement.

They can undonbtedly be driven from the brish by dogs, bnt without them you would do little nlong the coast, and much less in the mountains. There are, however, a few sections in which they remain secluded a much shorter time than in others, but you will find few who cun tell you where they are. But you need listen to no talk abont the Deer being "all'at the coast," or "all gone to the mountains," as in each place they think they are gone because they do not see them. The fact is, that the coast is as grod as the mountains; Deer are always there, and an observant jerson can find the tracks of the same Deer there all the thme.

Some Deer will skulk and hide Jn the birish nt any time of year, and the Deer that ran away from you yesterday may to-day stand or lie still in brush uni let you pass within a few yards of him. So, too, a lleer ming suinin tirl hundred yards away und run like may Deer, then silidenly turn into a plece of birish mid hide there.

Deer sometimes lie amazingly close. I once tmokedn doe and two fawns about a mile and a half though binisl!
and rocks, when the trail finally entered some chaparial higher than my head. In a few rods I came to the edge of a deep ravine heavily clad with brush throughout. As it was quite useless to enter it, and as it was getting late, I turned abont.

At the same moment, a young dog I was training made a bound at the very bush at which I turned about, and out of it, not five feet from where I had turned, sprang the whole three, with a tremendous smash of brush, and were out of sight in a single jump down the hill-side. As I had been making plenty of noise for the last hundred yards, it being impossible in such bruslı to help it, these Deer must have heard me all the time, and they must certainly have seen me; yet an examination of the ground showed that they had lain still all the time, not even getting up until the dog roused them.

Time and again have I tracked Deer into a brush-patch of only a few acres, yet found it impossible to start them. At such places you may sometimes start them if you get upon a commanding rock and sit there patiently. Sometimes. after five, ten, or fifteen minutes, a Deer can not resist the temptation to take a better look at you, or move a little. Yon may see a pair of horns appear above the brush, or a long ear or two; or, perhaps, one may be suddenly discovered sneaking out on one side; or he may break cover at last, with a snort and a smash of brush, and go bounding away in long, surging springs; but if the cover is good, it is more likely that he will let you sit on that rock until he gets ready to move again, toward evening.

This is the worst trick this Deer lias, becanse you so rurely know when it is being played on you; and it is so linril to clrcumvent. Where the brush is not too dense and high, "good bird-dog is the most effective ally. A good one can be trained to point a Jeer as well as a bird. But I would udvise keeping them strictly to pointing, and under uo circumstainces fillow ine to run after a wounded Deer. And it is generally best to keep, them at heel, and let them

trusted to go ahead of you after he has caught one or two crippled Deer, and few that can be implicitly trusted even at heel. Dogs that are perfectly obedient about Rabbits and other things that generally make a fool of a common dog, often become perfectly crazy abont Deer. And if you don't march upon the game quite as fast as they think you ought to, or if you turn off the scent to go around, they will often conclude they know more than you do about it, and will take the job out of your hands, unless you tie them to your waist, and then they may break you half in two when you shoot.

I have known a few old dogs, however, who could be trusted to go ahead of you, and who would point a Deer just as staunchly as they would a bird. Over such I have had grand sport shooting Deer in the chaparral.

This Deer feeds mainly on the leaves and tender twigs of the evergreen brush that forms the chaparral; also upon various bushes found on more open ground, such as the sumac, scrub-oak brush, and even live-oak leaves. It feeds but little upon grass, though it occasionally nibbles green alfillerin or clover. But it is quite fond of barley and wheat, when green, and of the shoots of a long grass that grows on burnt ground. It also feeds on several low shrubs and herbs, such as wild buckwheat, wild alfalfa, etc.

In the fall, it becones a great ravager of vineyards and gardens. It eats almost every kind of garden-stuff; but melons, grapes, and oher good things, it loves especially. It is very fond of the white muscat grapes, of which the best raisins are made, and some of the most easy and pleasant hunting to be had in America is found in the low hills surrounding a California vineyard.

Where Deer are but little disturbed with hunting, they go but it little way buck from the vineyard to spend the day, often lying down under some shady brush or rock, within plain sight of it. Being well fed during the night, they have little feeding to do during the day, and consequently little roaming, hence their movements are much more regular than when feeding at large in the hills upon



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the native vegetation; and when the hills are not too rough or bushy, the labor required to find a Deer is often reduced to the lowest point possible in Deer-hunting, while the certainty of a shot rises to the highest point possible in that uncertain amusement.

No boy ever knows better when he is doing mischief than this Deer does; hence it visits the vineyard only at night, entering after dark, and learing with the first gray of dawn. Sometimes, Deer may be shot in the vineyard at night; buit they are then so extremely watchful that they can hardly ever be approached, unless with fire, as in regular fire-hunting, while lying in wait involves an amount of silence and frequent disappointments that is far more annoying than a vain search in the hills by day.

A more certriu and pleasant plan for a good hunter is to take, in the morning, fresh tracks of their departure from the vineyard, and follow them back into the hills, where they have gone to spend the day. This generally requires tracking upon bare ground, a thing difficult enough, but on the whole vastly more easy than it is represented by some writers, who would have us believe that the Indian alone can do it. But the strong probability of finding fresh tracks at once, and overtaking the Deer that made them if you can only follow them, more than compensates for all difficulties.

One of the most pleasant hunts of this kind that I ever had was at a vineyard near Bear Valley, in the county of San Diego, California. It covered some twenty acres of bottom-land in a little valley surrounded by low hills, forming a perfect amphitheater, of which nearly all parts were visible from the ranch-house-a large adobe house of the olden time, standing on the rising ground, by a spring, upon one side of the valley, and well-filled with comfors, hospitality, and good-cheer.

On a bright November morning, my friend $S$ _and I left the house after breakfast and went to the vineyard to begin our hunt. Everywhere upon the soft ground were abundant tracks of Deer; tracks vi every night for the past week
mingled with many scarcely five hours old. Here a Deer had sauntered down between two rows of vines without stopping, and there one had stopped and eaten half a dozen bunches of grapes before passing on. In the orchard, below the vineyard, havoc was visible upon all sides. Here, still hanging on the trees, were large, luscions Japanese persimmons from which a whole side had been taken at a single bite, and others lay' scattered upon the ground in a still greater state of ruin.

Oranges and lemons had been passed, apparently, in disdain, but the late peaches, pears, and apples had suffered, and the twigs of plums, apricots, and other decidnous trees had been freely nipped. Along the edge of both orchard and vineyard were hundreds of fresh foot-prints, where the Deer had come in and gone ont, some having jumped the fence of barbed wire, others having crawled under it. One would suppose that at least fifty Deer had been in during the night; but we had had enough experience before to canse us to reduce the calculation to a dozen, at the most. Some had gone ont, played around the adjacent slopes, and returned again, and some had passed in and out several times, and all had made many more tracks than were at all necessary.

Starting at the western end of the orchard, we made a circuit on the outside of that and the vineyard, so as to find the tracks that it would be most advisable to follow. Three Deer, including a large buck, had gone out on the west, but they had gone into a cañon that was quite brushy. As the wind was from the east, our chances of a near approach were so slender that we left that trail until afternoon, by which time the wind might have changed. On the south, two had gone out. After following these a few hundred yards, we found that they too had gone westward, and, as it was quite certain some had gone ont at the eastern end of the vineyard, we left this trail, also on account of the wind.

At the eastern end, we found that five had gone out-a doe, two large fawns, and two other Deer leaving foot-prints a trifle larger than those of the doe. These tracks were well mixed with those of each night for the past week; the
ground was well covered with grass, aboat an inch high, that the first rains had started. The Deer had played about here and there, making all manner of twists and turns. Altogether, it was no easy matter to unravel the tangle of trails.

We finally followed the trail into the main valley that led from the hills, on that side, to the vineyard. At the first branch of this valley the Deer had had a grand playspell. The fawns, especially, had jumped and pranced around in all directions, running np the slopes and coming down again with long jumps that tore up the soft ground in long furrows. Then the party had divided, the old doe going up the branch, while the fawns went with the other two Deer up the main valley.

Some two hundred yards beyond this, another branch turned southward. Into this the tracks went; and so, to our surprise, did the wind. Coming a little from the north of east, this wind would be quite sure to folle $w$ this branch of the valley; so we had to retreat as hastily as possible, in order to make a circuit and get out of the breeze, which would be sure to bear our scent to the Deer, and alarm them.

Retreating down the valley some two hundred yards, we ascended the hill on the west side of the little valley into which the Deer had gone, so as to be on the leeward side, and also be where we could see into the valley. But before we had gone a quarter of a mile the brush became so high, dense, and stiff that it was impossible to see anything over it, or get throngh it withont making a noise that would alarm the Deer before we could get near enough to them for anything like certainty in shooting.

Nothing remained but to back out and go around to the head of the little valley, and come down it, and thus have the wind in our faces. Nearly half a mile away, we could see where it ended by branching into several little ravines, with flat-topped ridges between, clad with brush, the whole forming a little brushy basin just below where the rugged hills broke suddenly away into a smooth, grassy table-land beyond.

A detour of nearly a mile then brought us to a high rock on the edge of this table-land, and there we sat down to take a look. Below us lay the basin, well filled with darkgreen brush over waist-high, among which was scattered a goodly assortment of boulders of gray granite. Carefully we scanned every bush and the shade of every rock, and turned a strong opera-glass upon every little spot of gray, brown, black, or white. Plenty of such spots there were; but, one by one, they changed, under the glass, into bits of shade, glimpses of granite through brush, or the skull of some long-dead ox, looking dimly gray through the fine, bright leaves of the lilac or manzanita.

The warm wind swept up out of the cañon into our faces, bearing with it the voices of the men gathering grupes far away below; but there was no sound of bounding hoofs upon the hard, dry ground; no crack or crash of brush, such as are often heard when the Deer takes the alarm and starts from his shady bed. Far below, but scarcely three-quarters of a mile away, shone the white walls of the ranch-house, with the broad vineyard lying in a dense mass of green before it; and beside it the ripening orunges were gleaming through the dark-green foliage of the trees. Miles away, and thousands of feet below us, gleamed a broad silver band beneath the western blue, where the mighty ocean lay sleeping its long summer sleep of peace, while between lay a wild array of tumbling hills, rolling table-lands, and valleys dark with depth. On our right, on our left, and behind us lofty mountains loomed through autumn's golden haze, some dark and soft with pine forests, others gray and rugged, being mere piles of boulders, between which ragged chaparral and scrubby oaks struggled for existence. And all between, still bright with golden stubbles, lay broad, sweeping plains and table-lands, rolling skyward in long waves of rich soil covered with yellow grass or scattered live-oaks.

On any of this our prospects seemed about as good as in the hills before us that lay around the vineyard. Yet it was certain that the Deer had entered this little valley
whose branching head lay just before and below us. It was certain that they had not passed out on the side on which we had made our detour, or we would have seen their tracks. Nor was it probable that they had crossed over into the head of the next valley beyond, for had they intended to go into that one, they would have been more apt to enter it by its mouth. That we had neither heard nor seen anything of the game proved nothing, for Deer that live much in brush have a habit of hiding or skulking in it, and may lie still, or even stand still, within fifty yards of a person, or sneak quietly off, without arousing one's suspicion of their presence. It was quite probable that they were not two hundred yards from us, lying down on the shady side of some little ravine or under some large bush.

About one hundred yards below us lay a noble boulder of granite, with a smaller one beside it, by which we could climb upon it. Its top was broad and flat, and formed a most tempting place to sit and enjoy the view and the breeze, if nothing else. It was hardly necessary for me to suggest that we should transfer ourselves to that boulder, for my friend had already chosen it as his next resting. place.
"Now," said I, as we stretched out upon it, "let's make quite a stay here. A Deer, even when hiding from you, often gets uneasy after awhile, and can not resist the temptation to have a good look at you. If you sit long enough within view of one, you may finally hear the brush crack, or may see the tips of a pair of ears arise out of the brush somewhere, or a pair of horns, perhaps, come surging __"
"That isn't a pair of horns over there, is it?" he interrupted, pointing away on the left.

About one hundred and thirty yards apon the left, two points, some three inches long and twelveinches apart, were just visible above the chaparral. To an untrained eye, they migr have passed for the ends of dead sticks, often seen in such brush, whose weather benten ends often look gray and shiny; but there was a peculiar hue and glitter about these points that made them like the face of an old friend
dimly caught amid the crowd, while their distance apart and direction left no room for doubt.

My rifle was sighted for that very distance, and was a very accurate one, whereas I knew that $S$ - had not tried his for a long time, and did not know exactly for what point the sights were set. I handed him mine, and told him to fire about a foot below the centel between the lower ends of the two points.
"No," said he; " you try them."
There was no time for parley or further interchange of courtesies. At any second the points might disappear, to be seen no more that day. Moreover, it was a difficult shot, involving too much guess-work as to the precise point to strike, and a head being too small a mark for that distance, even if distinctly seen; but firing by guess at the supposed body would have been still worse, as it was impossible to say which way it was standing.

Drawing a fine sight a foot or so below the center between the points, I fired. What a whirl of gray and white above that distant brush followed the report of the rifte, as the Deer sprang upward and turned around with almost a single motion! Up he came again in a shining curve of gray, his whole outline forming the top of an arch over the brush. Bang! went my companion's riffe, and bang! went mine, aimed about where I thought the glossy hair would descend into the brush. The smoke for a moment rolled across our line of view, then in an instant was swept aside by the breeze; and there, just about the place where our Deer had disappeared, stood a statue of beamy gray. Now we could see it plainly, for it stood upon a knoll, perfect in outline, with head proudly erect; long, tapering nose and great flaring ears pointed directly at us. The bright morning sun shone from its dark, iron-gray back and glittered on three or four points upon each horna perfect picture of a three-year-old buck.

Both rifles rang out almost together. Through the smoke we dimly saw another whirl of white and gray, but before either of us could fire again it was gone; but in a
second more, there rose from the brush in a little ravine beyond just such another pair of horns, with just such another curve of beamy gray behind them. Again our repeaters poured dire intentions upon the scene, but in a moment the gray was once more gone, fading over a ridge amid a maze of brusli.

But there was no time to think or indulge in speculations or regrets; for scarcely had the brush closed over the slippery beauty, before a crash of brush about a hundred yards ahead of us made us turn about with something akin to haste. There, surging through the chaparral upon a slope across a deep ravine, were the two fawns. They looked nearly as large as the bucks, as, with the gay bound of the Mule Deer, they rose high above the brush from the impulse of their springy legs, striking ground with all four feet at once, and bouncing from earth again as though it was an India-rubber cushion. Now with a long jump to one side, then with a short jump to the other side, rising ever high in air, with all four feet grouped beneath them, ready to beat the ground simultaneously with a heavy thump as they descended, the fawns sped swiftly away.

Ball after ball tore up the dirt around, above, and below, and hissed and sang through the air beyond, until they suddenly wheeled and plunged into a little ravine filled with brush. Just ahead of them, a big Wildcat was running, evidently under the impression that he had fallen on dangerous times. As he reached the top of the slope, he yielded to the temptation to stop and see what was the cause of the uproar, evidently having been started by the noise only. He sat upon his haunches, with brindle back turned toward us, and turned his gray face backward over his shoulder. In a second more, the cat and the dry dirt beneath it flew about two feet in air, as a heavy ball from my friend's rifle struck the ground by the root of its stubbed tail. It went over the ridge in a somersault of brindle hair, and we were again alone.

We had made plenty oî noise and smoke. In fact, few rocks have ever seen such a cannonade in such a short space
of time. Yet apparently nothing had fallen, and there was a painful dearth of evidence that anything had been hit. Taking first the tracks of the fawns, we found them leading away in long jumps, tearing up the ground with every leg intact. It seemed almost useless to go to look for the others; but we went, more from sound principle than from hope. Within ten yards of where we had fired at the first Deer, lay a three-year-old buck, dead, shot through the shoulder. And now the question arose, had we been shooting at only one during the first part of the programme, or had there been two Deer? A little circling around revealed a track leading away in full run, and following it about a hundred yards, we found another three-year-old, dead, with two bullets in him. The second had evidently risen almost into the place vacated by the first one, and the first was the last one we found.


## THE VIRGINTA DEER.

## By Walter M. Wolme ("Shobhone").

,HIS animal is so well known to students of natural history, and there is so much literature extant concerning it, that little remains to be said. It is doubtful, indeed, if any facts can be stated that will be new to science; and yet, as this volume will be read by the youth of this and succeeding generations, many of whom may not previously have studied other works on the Cervida, it is deemed proper to. give here a brief technical description of Virginianus, with such other facts as the writer has accumulated in hunting and studying it. This species can not be described more tersely or accurately than in the words of the Hon. John Dean Caton, and I therefore take the liberty of quoting from his valnable work, "The Antelope and Deer of America," the description of this animal, which is as follows:

About the slze of the Columbla Deer, with longer legs and longer body; head lean and slim; nose pointed and naked; eyes large and lustrous; ears smali and trim; antlers have a spruading posterior projection, and then curve anteriorly, with posterior tines; neek long and slender; body long for its size; tail long and lanceolate In form; legs straight and long.

Lachrymal sinus covered with a fold of skin; tarsal gland present; metatarsal gland small, and, beiow the middle of the leg, naked and surrounded by white hairs; outside of these there is usually a band of dark-brown hairs, which are surrounded by long reversed hairs of the cnlor of the leg.

Two annual pelages. Summer coat, from bay-red to buff-yellow; winter coat, a leaden gray, greatly variant. Deciduous antlers, and confined to the males.

The Judge then gives the following observations as to its habitat, range, etc.:

This Deer has the widest range of any member of the family, in any part of the world. Its range is from the Atlantic to the Pacific, extending finto Canada and British Columbia on the north, and penctrating far into Mexico on the south. It may be found to-day in every State and Territory of the (185)

Uuited States. It luhabits alike the dense woodlands and open prairies, the high mountuins and the lowest valleys, the arld platus and the marshy swamps.

As we might well expect, from its whle distribution and varied range, we find several more or less distinctiy marked varieties of this species, all of which have well-defned indicha which determine their speelflo ldeutity.

From its wido distribution and great numbers, it is quite famillar to nearly all Americans, and is almost the only one known to most of them.

In form and actlon it is the most gracefu! of all, and has been more frequently domesticated than any olher; yel rarely have persistent attempts been mado to reduce it to complete and permanent domesticatlon. When young it is a pretty pet around the premises; but in a few years it becomes dangerous, and so is generaily got rid of. In lits markings if is less stabie than either of the other species. In shades of color there are wide differences among individuals in the tame neighborhood, while fugitive markings are frequentiy observed which are present only for a single year, and some individuals have per canent markings which are wanting in others. In summer pelage a large majority are of a bay-red, and with a great diversity in shade, while others of the same herd will be of a buff-yellow; between these extrenes almost every shade may be seen.

In a given neighborhood there is a great difference in the size of individuals, but there is a permanent difference in size in different localities; the smaliest being found ln the southern part of the range bordering the Gulf of Mexico and in Northern Mexico, the westerly ones being the smallest of all, where they have been classed by naturalists as a separate species, under the name of Cerous Mexicanus. In their northern range and in the mountainous regions of the West, the white portion covers a larger surface of the body than in other regions, where they have been ranked by many nuturalists as a separate species under the dame of Cerrus lucurus. By hunters these have been calied the Long-tailed or White-talied Deer, the latter bame having been used by Lewis and Clarke, while in truth their talls are no longer than those found in other regions. From the larger extent of white frequentiy, if not generaily, found on them, we might possibly be justified in assigning them the distidetion of a variety, though this peculiarity is by no means universal, for many individuals can not be distinguished from those found in Illinois or Wisconsin. I have one specimen, from Northwestern Minnesota, with all the legs entirely white to several inches above tho hocks and knees, with occaslonally a tawny hair interspersed among the white. The white on the belly, too, extends up the sides farther than is usualiy obscrved. This is exceptional, though not very uncommon in the Northwest, but I have never seen it in their middle or southern range. I have never found any black on the tails or faces of the northern variety, while it is common on more southern and eastern varielies. This accords with a law-which, however, is not universal-by which we are ird to expect more white on the same species of quadrupeds or birds which are permanently located in the North than on those located in the South.
'The antlers of the Virginia Deer are peculiar, and easily recognized. The curvature described is more abrupt than on any other species, while the posterior projection of the tines from the beam is peculiar to thls Deer, except that

It is sometimes observed on exceptlonal antlers of the Mule Deer and the Columbla Deer.

The Virginia Deer is the wildest, shyest, shrewdest, and the most difficult to hunt, successfully, of all the species of Cervides on this continent, and though many thonsinds of them are killed every year, yet many thousands more


On Guard.
escape the hinnter's rifle where, under like conditions, either the Mule Deer or the Columbia Black-tail would have been successfully stalked and killed. Few naturalists, even, who are not sportsmen as well, realize the difficulty of approaching this animal; and no one who has not hunted it can realize the degree of patience and skill that the man must possess who, generally speaking, can go into the forest
and kill, by still-hnnting, a Virginia Deer. No one who has not tried it can ever know the weary hours of cautious, stealthy treading through woods, thickets, and over hills, the intense strain on the senses and the nervoas system, the great concentration of intellect on the work in hand, of the man who successfully copes with this denizen of the shadows. No one who has not felt it can realize the chagrin, the keen disappointment, that the hunter feels when, after hours of stalking on the fresh trail of a buck, in the new-fallen snow, he hears a whispered thump! thump! away on the hill-side, and looks up just in time to see one sway of the great white flag as the quarry disappears over the ridge. No animal living has such eyes, such ears, and such a nose as the Virginia Deer.

In the Indian sign-language, the name of this animal is indicated by a gentle wave of the uplifted hand from right to left and back again, and so familiar is the motion to the eye of every still-hunter, that any member of the craft, though he might never have heard that there was a signlanguage, would know at once to what the motion referred.

I wish it were possible to correct in the minds of all sportsmen and students, at once and for all time, the many erroneous notions that prevail among them concerning the existence of distinct species or varieties of this Deer. Recently, a number of communications were published in one of the sportsmen's journals, in which the writers claimed that a distinct variety of Deer exists in portions of the Rocky Mountains, which they termed the "Fan-tailed Deer." They based this classification on the fact that the tails of certain White-tailed Deer in that region were much wider than those of the White-tailed Deer in other portions of the country-that is, that the hair on the sides of the tail was longer, and grew straight out, instead of down, as in the case of the eastern variety. Some of these correspondents further claimed that this Deer did not grow as large as Virginianus.

In many sections of the country we hear native hnnters assert that there are in their vicinity two species or varieties
of Deer-the swamp Deer and the upland Deer. Some of them tell us that the swamp Deer has longer legs and a longer, more sleuder body than the upland Deer. Others, again, give us exactly the opposite statement. Still others tell us that they have killed what they term crosses between these two varieties. In the Far Weat we occasionally hear of crosses between the Mule Deer and the Virginia Deer.

In Michigan and Wisconsin, albinos are killed occasionally, and many native hunters believe, religiously, that these constitute a distinct species; that should a white buck and a white doe mate, the result would be a white fawn. But all these theories are knocked in the head occasionally by some one seeing or killing a white doe with a fawn by her side of the usual color, or vice versa. In two instances that have come to my knowledge, a doe and two fawns have been seen together, one of the latter being white and the other two members of the family being of the regulation color. Albinos, in any species of quadruped or bird, whereever found, are simply a freak of nature, and not the result of heredity. Size, color, length of legs, and shape of body may, and do, vary widely in specimens of the Virginia Deer, as in many other wild animals, without constituting distinct varieties or species. These variations are due only to individual characteristics, and not to natural and fixed laws. It would be as absurd to say that all horses must be of the same size, shape, and color, as that all Deer of this or any other given species must be so.

The vit:lity of the Virginia Deer is a subject of wonder to men who have hunted it. In this respect it ranks second only to the Antelope.

The regroes of the South frequently erect scythes or sharp stakes in their runways, knowing that the Deer, in leaping over some log or fence, will be so mutilated that he will drop within half a mile. Thus many a cabin, withont labor on the part of its occupants, is kept supplied with venison.

Market-hunters have well-nigh exterminated the Deer in the Adirondacks. When they think that they are safe from
the observation of game-wardens, all the dogs that will follow a trail are brought into requisition, and the Deer are driven into the water, where, perfectly helpless, a club, ax, or a rifle completes the work of butchery. In the winter, "crusting" is followed by these mountaineers, and when the weather is too warm for venison to keep, it is jerked, and then sent to market. The "Jack-o'-lantern", method, in favor among some hunters, is scarcely more commendable. The Deer is given no chance of escape, but is frequently only wounded, and left to crawl off into the bushes and die. Give a Deer a chance, and he will run or fight as the emergency requires. When he does fight, he is no mean enemy.

The Virginia Deer was the first game hunted on this continent by the whites, and though, like the Buffalo, he has been driven from many of his native haunts, he is• not in like danger of becoming extinct. Adequate and wellenforced laws will preserve him in the East, and there is little danger of his being run out of either the Lake Superior or Lake Michigan region, or from the lower Mississippi States. His pursuit calls into play all the mental and physical energies of the sportsman, and there is nothing nobler in the chase than either of the legitimate methods of hanting this beantiful animal.

Sportsmen in different sections of the country have their own peculiar methods of hunting the Deer. A rifle is ridiculed by the men who hunt in the cane-brakes of Louisiana, and a shotgun is an abomination in the Adirondacks or in the Rocky Mountains. As a rule, along the Atlantic Coast and in the South, hounds are employed in hunting Deer. In the West they are regarded as useless. It makes no difference, however, where the tyro goes for his sport, he ninst get over the "buck-fever" before he can become a successful sportsman, or really enjoy the chase. The mere killing of game lues not entitle a man to the freedom and privileges of the craft.

Several years ago, the writer was introluced to a miner in El Dorado County, California, who, from the amount of venison he brought into market, was esteemed a veritable

Nimrod throughout the whole region. He offered to give me all the Dear-shooting I wanted if I would go with him, so I took a half-day's ride with him to his cabin in the mountains. Near his house was a bed of white clay that had been exposed by hydraulic miners. On the bluff above this was a large pine-tree, and in this a platform or box had been built. I inquired as to its use, and was told that $I$ would find out before long. There was yet no sign of dawn when we started out with our rifles, the next morning, and what was my surprise to see that the Nimrod carried a pair of blankets with him. Did he intend to spend the next night in the wilderness, or did he intend to blindfold his game and lead it home? Neither. He simply went to that pine-tree, climbed up to the box, by means of pegs that he had inserted during his leisure hours, and, wrapping the blankets about him, dozed as contentedly as though he were in bed. As soon as it was light, a couple of Deer came down the trail to the clay-bed, where they had a "lick." They were not thirty yards from us as we peered over the top of the box, and as our rifles cracked together, both fell in their tracks. That was enough for me. Such work is not sport, but butchery.
The woods of Northern New York and New England are practically hunted out. Sportsmen from the large cities, provided with all the comforts and appliances of civilization, visit these resorts, and they are bound to secure some trophies, regardless of either method or law.

Good shooting may be had in Minnesota, where Virginianus is so abundant as to be, in many places, a nuisance to the farmer. Deer infest the young wheat-fields and vegetable-patches of the Scandinavian homesteaders, who lie in wait for them with old-fashioned muzzle-loading muskets heavily charged with buckshot. The Deer do their feeding principally at night, spending the day-time in the thickets. As soon as acorns are ripe, they travel on the ridges at night and live among the jack-oaks.

Mr. J. H. Beatty says: "The bucks moke 'scrapes' in the open woods, which they visit at night to see if the does
have crossed,* and follow any trails that may be found. As the cold weather and drifting snow drives them from tie open districts, they work back into the heavy pine timber and immense tamarack swamps. Here they collect in bands, and roam about, feeding on kinnikinic, hazel-brush, oaks, pines, tamarack, and a species of fungus which grows in. the swamps. In the spring they return to their old haunts, in an emaciated condition, to recruit and have their fawns."

In the dense brush of these northern swamps a shotgun will possibly secure more Deer than a ritle, but so many wounded animals will get away from the shotgun-hnnter, only to die a lingering death in the swamps, that, after all, the use of the rifle seems preferable. Its successful use requires more skill, and it is the true sportsman's weapon when in pursuit of big game.
'Phe "Swamp Deer" of Minnesota and the little "Red Deer" of Florida are identical except as to size, and the variation in this is simply the result of environment.

One of my most enjoyable Deer-hunts was on the Red River, in Ronthwestern Arkansas. Deer, Bears, and Turkeys were plentiful there in those days, and I presume are yet. We started out early in the morning-the Dactor, myself, two freedmen, who were born hunters, and a magnificent pack of such hounds as are to be found only south of Mason and Dixon's line. The horseback-ride of five miles, through the rolling, low-timbered country, was enough to whet the ardor of any hunter. We saw plenty of gobblers, but they were not the game we were after, and as they hid themselves as speedily as possible, the temptation to shoot was soon removed.

As we neared Creighton's layou, we struck a number of trails that were too cold to allow the dog.s to follow them. Suddenly, one trail turned from the bayou toward the river. The indications were that the Deer had gone early to water. This we were soon assured of, for after the trail turned

[^3]from the stream, the dogs opened freely. We were satisfied that if we could keep up with the pack, we could get a shot as the Deer jumped from its bed. The sun was already quite hot, and it was none too early for the Deer to take his customary rest.

Suddenly the trail led into a little open glade, where were fallen trees and tall ferns. I had just time to formulate the idea that our game was here, when the hounds plunged into the brakes, and up sprang a magnificent buck. Before I could dismount, the Doctor's bullet whizzed past me, and the buck dropped, stunned, but far from dead. The hounds were upon him in an instant, but had he not been so furious, he could have escaped from them. Then began a terrific battle, between horns and hoofs on the one side and sharp teeth on the other. The combatants shifted positions each second, and at first we could get in no fair shot. Finally, one of the largest of the dogs got a fairhold on the Deer's throat, and as he tossed back his head preparatory to striking, both of us fired, and the buck fell without a struggle. One of the dogs was so badly cut that it had to be killed, and another was severely injured.

After this diversion, we set to work to carry out the programme of the day. We were to have a regular drive. Near the bayou were two runs. The Doctor took his stand at one, and I at the other. The freedmen took charge of the hounds, and easily divided them into two packs, as they
e accustomed to being hunted in this way. It seemed an age that we waited there, and I began to think that if the hounds had started any game they had driven it in some other direction.

At length I heard the faint cry of the pack. They were coming our way. I had plenty of time, and stepped out to look up the trail when I found nyself facing a buck that was trotting leisurely down to the water. He saw me as soon as I saw him, and wheeled like a flash; but he was not more than fifty yards away, and before he could reach the underbrush I fired, and he dropped. The hounds were coming nearer, so I did not dare take time to cut his throat.

A few noments, however, convinced me that they were on the other run, and that the Doctor could look out for that part of the field. I reached my buck to find him stone-dead.

In the meantime, two reports had rung out from the Doctor's stand, and I was decidedly jealous, as I supposed he had certainly secured three Deer to my one; so I left my game where it was and started to find him.
"Hello, old man, what have you got?" I shouted as I came in sight of my partner, who was keeping the hounds from a spotted object that lay quivering among the ferns.
"A measly fawn," was his reply.
It turned out that a doe and fawn had been driven down, and the Doctor had vowed he would never kill a doe. His first shot had missed the fawn, and he was mad at himself for having had to fire a second time. It must have been that the buck I shot had not been started by the dogs, but had heard them in the distance, and imagined that he had plenty of time to escape before they struck his tracks.

Jeff had now reached us, but of Zeb and the other pack we had heard nothing. We would have anywhere from ten minutes to half an hour's notice of their approach, so the time seemed most opportune for the lunch which was on our saddles. We did full justice to the cold chicken, sandwiches, and hard-boiled eggs while Jeff was dressing the game, and then our helper, having helped himself, started away with the pack. We lighted onr "Lone Jack" and "Perique," and resumed our stands, awaiting further developments.

The exercise of the morning and the sultry stillness of the forest at noon made me drowsy. It seemed safe to indulge in a little siesta. The hounds would surely awaken me in time to get a shot if they came my way, so I sat down, and, leaning against the tree in the warm sunlight, was soon out of Arkansas and away up among the Green Mountains, where I caught my first trout and killed my first Deer.

How long I dreamed I can not tell. Suddenly there was a confusion of bays and yelps, and, as I opened my eyes, a streak of dun and white flashed by the tree. I pulled up
my rifle, fired without taking aim, and, as the hounds swept by, I heard the splash of the Deer as he plunged into the bayou. The packs were together, with Jeff and Zeb close behind. I told them to follow the dogs, and then, getting my horse from the thicket where he was tied, joined the chase, accompanied by the Doctor, who had heard the noise and come over to see what had been the restilt of my shot.

Far across the bayou the voices of dogs and men were growing fainter; but our horses were fresher than either Deer or dogs, and we hoped to be in at the death. Before reaching the water we saw blood, which gave us hope. The bayou was shallow; nevertheless, we were well soaked when we emerged on the opposite bank. And now there was no longer a beaten track to follow. Stout creepers threatened to sweep us from our steeds; fallen trunks invited a fall; marshy holes were all about us; but we kept on-rifle in one hand, reins in the other. First a branch knocked off the Doctor's hat; a moment later, mine followed suit. White foam crept out from beneath the saddle-blankets. So we rode, regardless of everything but Deer and hounds.

The swamp was finally passed, the hill was climbed, and we were riding along the ridge, when the noises that we followed stopped. Then came the fire-cracker-like report of Jeff's revolver.
"It's all up with us," said the Doctor; "we may as well let'em walk the rest of the way."

The horses were in for sport, however, as well as we and the hounds, and would not slacken until the end of the chase.

It was a hot late-summer afternoon. Down among the creepers, in a little glade, lay the Deer. The dogs were resting under the trees. With loosened girths and dripping flanks, the horses wandered in the shade. Our freedmen were lazily smoking away the mosquitoes. The day's hunting was over.

I had held low, and the ball, inflicting a slight wound just above the knee, had ranged forward so as to expose a
portion of the intestines. Had the Deer been allowed to lie down and give nature a chance, he might have come out all right. As it was, the odds were against him, but he kept pluckily on until his viscera began to drop ont, and then the hounds soon had him.

We had a twelve-mile ride back to the plantation, crossing that vile bayou, and leaving the colored men to attend to the game and hounds. But, tired and hungry as we were, we delayed eating until we could get a juisy cutlet from the fawn, and then we were ready to make the same trip on the morrow.

As already stated, the range of the Virginia Deer is bounded on the east by the Atlantic Ocean and on the west by the Pacific. I have met him in various portions of the Far West, on the plains, in the mountains, in the great river valleys, and among the foot-hills.

It may not be amiss to reproduce here portions of an article which I recently contributed to Sports Afield, descriptive of one of my hunting-trips in Western W yoming, on which occasion we killed several Deer, in addition to Antelope and Mountain Sheep. The story runs thus:

The last round-up of the year was over. The last trainload of cattle bearing the $G$-square brand was on its way to Chicago. The corral was deserted. Narboe and the boys hid gone to Green River, and I was alone. I was blue. We boys who have rustled about mining-claims and cow-camps, living on fat bacon, wrapping our blankets about us at night and lying on the cold ground, with the starry dome for a canopy, with the howl of the coyote for a lullaby, know what it is to be blue. It was Christmas-tide, and as I watched the smoke of the receding engine become fainter and fainter, and finally lose itself in the haze of Red Desert, there was a big lump in my throat. I wanted excitement; so I turned to the shed, saddled Old Calamity, mounted, and with my $40-00$ Bullard across my lap, rodenot eastward, but westward down the saline waters of Bitter Creek.

It was a dreary day-cold, cloudy, and cheerless as my own thoughts. Ther were but two section-houses in the twenty odd miles to be traversed. Once in awhile a great gray sage-cock would dart across the trail, and on the summit of a distant hill I saw the branching antlers of a Blacktailed Deer. A pair of green-winged teal arose from the surface of a brackish pool, and I wondered what they were doing in such a God-forsaken region. Then the cañon grew more narrow. Its northern side was a precipice of naked rock. Here and there a hole in the wall and a blackened dump showed where prospectors had sought for coal, but now everything was the personification of desolation.

It was past noon when I reached the station, sectionhouse, and corral that are named, on the Union Pacific's time-card, Point of Rocks. Here the hills broke, and a road -scarce more than a trail-led northward to the valley of the Sweetwater and to the beauties of the Yellowstone. From this point my route lay northward into the heart of the game-preserve. It was too late in the season for the regular teamsters. Two weeks ago the last wagon-train had started for Lander, Atlantic, and South Pass. It would be April or May before they returned. Fortunately, Frank Moffat, the station-agent's brother, and Si Johnson, his partner, were at the depot, and the next morning were going twenty miles northward to their lonely ranch, to look after their cattle. A hunting-trip was quickly made up, and I rejoiced at the thought of going into, to me, a ierra incognita. By the aid of a musty pile of yellow-covered fiction, and the cheerful conversation of the cowboys, the afternoon and evening passed quickly away, and we started early the next morning for the mountains.

A long and dreary ride lay before us, and it was too cold to devote any attention to the grandeur of the desert scenery. About five o'clock we reached Moffat's ranch, where a hundred or two gaunt steers were gathered about a bog-hole, and a shed half-sunk in the hill-side sheltered half a dozen range horses. The cabin was built at the edge of the mesa, where it caught the full force of the bitter
wintry winds. It was built of railroad-ties and mud, warm enongh in its way, but somewhat close, owing to the fact that its one window was nailed in position. A sheet-iron stove occupied one corner, a bunk one end, a table one side, and the remainder was more than comfortably filled with saddles, harness, ammunition, and provisions. Boxes served as chairs, but, after a supper of bacon, fried potatoes, hot bread and molasses, it proved a very comfortaible place for a game of " high-five."

We were again on the way early in the morning, riding northward in the face of a stiff, cutting zephyr from the summits of the Wind River Mountains. It is never very warm before sunrise at an elevation of seventy-five hundred feet, and on this Christmas morning the cold was almost unendurable. We were clad as warmly as was consistent with freedom of movement, and our pockets were full of cartridges.

Northward, still northward; the rising sun showed Table Rock and Old Steamboat to the left, Sweetwater to the east, while far ahead the mighty peaks of the Wind River Range shone like icicles above the clouds. We passed a wallow in which four Buffalo were taking their morning drink. Away they went over the alkaline waste, and we did not pursue. They were the last Bison that I saw, and probably the last that I shall ever see outside of an inclosure. Possibly they are the same bunch that were captured last summer on Re? Desert. About nine o'clock we came to a steep slope.
"Duck your hesd," said Si; "we always see Antelope here." .

Sure enough, we reached the crest in time to start a bunch of seven within a hundred yards. We were off our horses :and got in a couple of shots before they were out of range. "Durn our skins," was all my companion said, as he remonnted, which was suflicient evidence to me that we had thrown away our ammunition.

Away we went after them, and had ridden, perhaps, half a mile, when a sheep-like " $\mathrm{Ba}-\mathrm{a}-\mathrm{a}$ " on one side made us pull np. There lay a young doe shot throvgh the hind
quarters. How she had managed to run so far was a mystery. Si cut her throat, and soon the quarters were dangling from the saddle-horns, as we galloped northward. Later in the day, another band was found, and several more were killed, loaded up, and then the homeward trail was struck. But the sport of the day was not over. When within two miles of the cabin a magnificent buck started from a sheltering arroyo, and before he passed over the hill a ball whistled over him, which considerably nccelerated his speed. We considered the chances as ten to one that we would never see him again; but he cuuld not run a bluff with impunity, so we cached the Antelope-meat and started in pursuit. After a hot ride of an hour, we started him from another cañon. This time he doubled on his trail, and dashed for the point where he was first found. We had no idea that he would stop this time, and our horses were so tired that we leisurely retraced our way, content with the prospect for supper. How long we had struggled over rocks and through sage-brush I can not tell. Suddenly, Si almost fell from his horse, and lay flat on the ground. I followed suit. There, just ahead, on an elevation, we could see a pair of branching antlers, showing that the stag was wary. Si rested his Winchester on a rock, and I was to crawl nearer if possible. I had gone perhaps thirty yards tlirough the sage-brush, when I heard a shot; a ball whistled over me, and I raised in time to see the monarch of the glen plunge headlong into a cañon. When we reached the spot he rose on his fore legs and shook his horns defiantly, but his backbone was broken, and a grace-shot through the head made him our game.

Then homeward with our load, in the early gloaming. For supper we had the juciest and most tender Antelope and the toughest venison I have ever tasted, and after a pipeful of "Lone Jack" I lay down to dream of another Christmas in the semi-tropical forest of Orizaba.

We all have stored ar ay, somewhere in the archives of memory, records of these red-letter days. They may have
been spent by the trout-streams of boyhood, by the pools of Miramichi, or among the Elk and Antelope of the Far West. We. look for another such day to-morrow. And in after years, when our eyes grow dim and our steps falter, we will look back upon these red-letter days, and, in imagination, live them over again, enjoying the sport with all the zest we felt when we really listened to the murmur of the waters, the baying of hounds, or the sharp report of the rifle.


## A DEER-HUNT.

## By Waf-bah-mi-mi.

HE voice of brave "Venus" was heard on the gale, And the fierce howl of Driver came close at her heel; The sharp yell of Patch told the story of game, As down the "swamp-runway" the grand chorus came! The fear-stricken quarry, in proud antlered pride, Fled onward, with snow-flakes of fonm on his side. On, onward he sped-over brake, and o'er brier. Each bound to his doom brought him nigher and nigher; And louder behind him swelled full on the breeze That matchless refraia through the old cedar-trees. 'Twas clear as the notes of the bugle, which thrill The spirit of Eche o'er valley and hill.
Tell me not of the music which instruments nake, Though harmony trembles in every wake;
Tell me not of the sound of a lute in the grove, Though that lute be attuned to the cadence of love; Tell me noi of the chorus that sweils o'er the bowl, When wire sparkles brightly and mirth thrills each soulNo melody rivals the magical sound Of the deep-toned and heart-stirring voice of the hound, When flerce on the trail, with proud fire in his eye, -He follows anch wind of the scent in "full cry!"
But close came the music to where Ronald stood, With uostrils expanded, impatient for blcod;
His oll double-barrel, that oft had been tried,
Was rzady; his eye glanced on every side.
The breaking of twigs gives hin warning, when high, With a bound o'er the bushes, the buck meets his eye: Full sixty yards of did he burst on his view, When up went his gun-tried, trusty, and true; Out rang a riport on the cool evenirg air;
We looked tor the quarry-in death lof lay there!
The bullet had pierced him direct 'twixt the eyes.
"Twas gailantly done. A magnificent prize
Was that stately old Deer, as he drew his last breath, Full-length on the runway. Then fa at the death, With a grand, sweeping chorus, the noble degs came, (201)

And rushed with a bloodthirsty roar at the gamel 'Twas worthy the sportsman, and worthy the gun, The fall of that noble old buck on the run.
The sound of that rifle, still true to its aim,
Brought each man from his "stand" for a view of the game.
The pipes were drawn forth, and then over the slain
The run and the shot were enacted again.
The balmy fall evening was curtained with haze,
The tree-ton were tinged with the sun's sinking rays,
The leave, of the forest were silent and still.
The mighty old hemlock that stood on the hill Moved not from its roots to its branches on high, Which towered in majestic relinf 'gainst the sky.
'Twas a beautiful scenc, but the shadows of night From eve's dark'ning sky were commencing their flight. The quarry was shouldered, and glad was the tramp, As we carried our trophy away to the camp.
Ol, give me the startling sound of the gun-
The rousing refrain of the hounds at cull runt Oh, give me the sight of the Deer on the bound Over valley and hill, as he spurns the ground! Oh, give me ti_, blaze of the camp-fire at night, When day and its glories have vanished from sight! When friends and companions are seated around,
With the sky for a roof, for a bed but the groundThe steam of the tea-kettle curling aloft Through the ether of Paradise, balmy and soft; The potato-pot boiling and snorting with ire; The frying-pan hissing aloud on the fire;
And an appetite keen from the glorlous run, Awaiting the moment when "Supper is done."
Compared with such charms, a palace would be, Though gilded and gorgeous, a pison to mel


## THE GRIZZLY BEAR.

By W. S. Raineford, D.D.

$5(4)$
3人)
UCH works on natural history as I have been able to consult, give most inaccurate and misleading accounts of the Grizzly Bear; and having captured, hunted, and yarned with a great variety of Western Nimrods who had hunted, or professed to have hunted, persistently, this monarch of all American game animals, I am convinced of the absolute inaccuracy of such lore as they usually supply to the public. I have hope, however, that though this article is of necessity written in haste, it may prove useful to some who are anxious for themselves to make the Grizzly's acquaintance.

I believe Lewis and Clarke, in their history of their adventurous journey across this continent, in 1802-04, were the first to give to the public an account of the Grizzly Bear. They met him on the upper waters of the Missouri River, and his size, ferocity, and tenacity of life made a great impression on the minds of the explorers.

There can, I think, be no doubt that the Grizzly is one distinct species in itself, and the habit, among hunters in the West, of speaking as though there were three or four different species of gray Bears, is a mistaken one. Local authorities, in the regions where the Grizzly is found, will tell you that the true Grizzly is rare, while the Silver-tip or the Roach-back are common. But while the Grizzly exhibits great variety of color, there is nothing in the structure or the habits of these different-colored Bears to constitute a separate species.

It can be proved, beyond all manner of reasonable doubt, that all species of Bears found between the Big Horn and the Coast Range Mountains, east and west, and Alask\& ( 808 )
and Mexico on the north and south, occasionally breed together. This, of course, will account for all varieties of color. I myself have shot three young Bears going with one sow, one almost yellow, one almost black, and another nearly gray. I have seen ordinary Black Bears (Ursus Americanus) with year-old Grizzly cubs shaped differently from the mother, unmistakably owing both their shape and color to the parentage of the male Grizzly. As to shape, too, there is the greatest difference in specimens. Some Grizzlies have a formidable hump-like lift back of the head, extending to well over the shoulders. This gives a Bear what they call in the West a very hard expression, and an ugly customer he looks as yon would care to meet. Again, in some this hump is scarcely noticeable, and the back is almost as straight as in a Black Bear. So in paws. While all Grizulies are wider in the heel than the Black Bear, there is a noticeable difference in the tread. Some are much broader across the heel than others, the foot squarer. I once killed two well-grown two-year-old Grizzlies together, who had double instead of single tusks, in both upper and lower jaws. This, I fancy, is rare; for my guide, who has killed over one hundred Grizzlies, has never seen bat one like specimen.

I have pretty well satisfied myself, then, that there are only two distinct species of Bears at present to be found within the geographical limits I ha: e indicated-the Black and the Grizzly; and these, perhaps, being driven together by the pressure of civilization, are likely to undergo considerable modifications, if they survive during the next twenty-five years.

The range of the Grizuly has, of course, as in the case of all other large wild animals, been of late years greatly restricted. When I made my first hunting expedition to the West, in 1868, it was not uncommon to find specimens on the plains, at a distance of many hundred miles east of the monntains. In 1881, when I made my second trip, the Big Horn Range, and the lesser ranges running out as spurs to the east of it, were full of Bears. Now, so far as I can
learn, Bears are not common in that region. So in the South and West. In the unoccupied regions of Southerr California, and northward, in the parallel valleys of the coast ranges, twenty years ago, the Grizzly was frequently to be found. In that region, last spring, I discovered for myself that large Bears are now rare, and all Bears uncommon.

Wonderful stories have been told of the huge size and great ferocity of the Alaskan Grizzly; but skins from that region do not seem to be much larger than those procured from other places, and I have only seen one unusually large skull of a bear killed there. Of Alaska, however, I can not speak personally, as I have never hunted there.

It has often been claimed by frontiersmen that Bears change their range during the fall months, and move down from the higher and less accessible regions, in search of fruit and berries; but I think this migration is a good deal exaggerated. Whether it is that, in late years, in a great many of the valleys where fruit abounds, cattle have been driven in, or whether it is that the approach of man makes the game more shy, I do not know; but larger Bears weem seldom to leave their lonely haunts among the mountaintops, or, if they do, make but short journeys downward, from which they return in a day. Smaller Grizzlies and Black Bears do seem to push their way close down to the cattleranches, in their search for fruit; but the time is past when a hunting-party, on their greenhorn trip, can kill, as some friends of mine did, ten years ago, more than a dozen Bears within one day's march of the cattle-ranch.

In food, the Grizzly prefers variety. He is fond of meat when he can get it; and thus he is generally to be found not far away from a large band of Elk. If you strike a good Elk country-that is, one in which the Elk have been for some time-you are pretty sure to get good chances at Bears. But failing meat, he makes out very well on nuts, acorns, etc.; and the fattest Grizzlies $I$ ever killed were those that had been feeding for weeks on the pine-nuts that the industrious mountain squirrels stow away in such great plenty in the
little colonies on the upper hill-sides. Where the nut-pine is plenty, you may also expect to find Bears.

If I attempt to speak of the size of the Grizzly, I presume I shall quickly find myself on difficult ground. Personally, I believe there is a great deal of exaggeration as to his size. There are one or two authentic instances of Bears of enormous size and weight being exhibited; but these took kindly to civilization, and became fat as prize-pigs. In the wild state, I should say that a Bear weighing nine hundred pounds was a very large one indeed. The largest I ever killed measured from nose to heel, as the skin was pegged out, not unduly stretched, nine feet three inches, and I should say that Bear would have weighed between eight and nine hundred pounds. I saw, in California, the skin a Bear that had become quite famous for his size and cunning, in that region of the Sierras where he had made his home, and this skin measured over ten feet. The Bear himself, I should think, must have weighed a thousand pounds. One other skin I recollect to have seen measured nearly eleven feet, though this skin seemed to me to have been a good deal stretched; that was the largest I ever saw. But if we are to be guided to our conclusions by hunters' talk, you must believe that thousand-pound Bears are common, and every man who pretends to be a hunter claims to have seen several Bears that weighed a great deal more than that. I can only claim to have killed eighteen; but, as I said, I would not put the weight of my largest at more than eight hundred and fifty pounds; nor does my guide think that, of the much larger number he has killed, any weighed over nine hundred.

Some good authorities have held that the Range Bear of the Rocky Mountains, as the Grizzly constantly is called, is much smaller on the main chain and its spurs than the Bear found in California. I think this is at least doubtful. There are certainly a great many small Bears in California, and very large Bears are as scarce there as anywhere else. I do not donbt that occasionally the milder climate and the more plentiful food of one of those California valleys
produces a monster indeed; but size, in such cases, would depend on circumstances more than on any peculiarity of breed. In the same way, on the plains, to the east of the mountains, large Bears have sometimes been found; but, at present, I think there is little doubt that the loneliest parts of the central chain are the best places to find Bears of a considerable size.

The sportsman often notices claw-marks of Bears on trees, as he is riding by, as high, or almost as high, as his head, and, thoughtlessly, he is apt to guess at the presence of an immense animal who can stretch himself to euch a point on the tree-trunk. When "Ephraim" first comes out in the spring, he always, as hunters say, measures his winter growth and rubs his claws down a bit on some big, rough pine's side. But when this takes place, he is usually standing on from three to five feet of snow, which, by the time the hunter gets there, has melted away, and thus several feet have got to be taken off that Bear's height.

If what I have here said seems heretical to some of my readers, as to the Grizzly's size, I fear what I have to add, as to his ferocity, will also meet with a doubtful acceptance. There can be no doubt that constant contact with white men, armed with modern weapons, has wrought a change in the nature of fera natura. In India, the Tiger no longer charges as he used to charge in Captain Rice's thrilling book. Sometimes he charges still, but more often turns tail. The instinctive dread, born, no doubt, of bitter experiences, has descended from parent to child, and he is no longer the fearless savage that earlier accounts declare him to have been. So with the Grizzly; the first white men he met were armed with smooth-bores and flint-locksinadequate weapons with which to deal with him. For fifty vears, there was no great change in the weaponing of the uunter. He carried, as a rule, a muzzle-loading rifle of small caliber, using a light charge of powder; and as fur was plentiful in the country, and the Grizzly's pelt was worth little or nothing, and was difficult to pack, Ephraim was left severely alone. The miners, too, and early explorers
of his haunts were not after Bears, but gold, and did not trouble him much. During these times, he was, no doubt, a surly customer, and did not trouble himself to get out of the way. But since the war, things have changed. Men swarmed West, armed with repeaters. The power of the rifle was steadily on the increase, and the pressure of civilization felt more and more in the wildest parts of the land. The result of these years of attack is most evident in the habits of the Grizaly Bear as he is to-day. I do not for a moment mean to say that he is not a formidable adversary; but I do say, without hesitation, that the danger of his attack, in the present day, has been grossly exaggerated.

I remember meeting some hunters in 1868 who had killed a large Grizzly. They had got him in a gully between them, a man on each side and the Bear down in the middle, and they had put thirteen Henry bullets into him. Both of them had been nearly ciawed before he gave up the ghost; and this experience of theirs, at that time, I am disposed to think was not an uncommon one. But there was just an illustration of the inadequacy of armament with which to attack such game. All who have handled the old Henry Model will remember just what the gun could and could not do. It was an excellent weapon, when cut off short, for Buffalo-running, and a good Indian gun, and as such was greatly prized during those dangerous times on the plains. But the charge of powder was light, as was the lead, and in front of a big Bear it was, of necessity, a most unreliable weapon. Granted the sportsman is a fair shot, and a man of ordinary nerve, with a good weapon, and you materially alter the conditions in his favor. A fifty-caliber bullet, with a hundred grains of powder behind it, will stop almost anything; and a line-shot, that is, a shot in line of the spine, taking effect anywhere below the nose or above the hips, will drop a Bear in his tracks.

I account for a large number of the stories told of charging Bears in this way: The game is generally sighted on the side of a hill. He is making his way up some ravine, and the hunter stalks him from below. When fired at, whether he
is wounded or not, he will almost invariably turn downhill and try to get away, and in doing so, often nearly tumbles over his antagonist, who fancies the Bear is charging at him, when his sole intention is to get away as soon as possible. If wounded, he has a pecnliarly exasperating way of rolling over and over, like a ball, at great pace, roaring all the time. It is not easy to make a dead-shot at this sort of a bounding foot-ball, so a greenhorn is apt to wait, thinking that his Bear is mortally wounded, whereas, in fact, he may be only slightly scratched, and he will continue his rotary movement till he strikes a bit of more level ground, and then rapidly disappear. I might say here, in passing, that it is always better, and certainly safer, to stalk the Grizzly from above.

The only Bear that deliberately charged me, charged in the way I have described. I was planted in the middle of the gully as he was coming down, and seeing me in the way, and cutting off his retreat, he charged for all he was worth.

Still, making, as I do, an allowance for the hereditary growth of timidity in the Bear, his great strength and tenacity of life will always render him an opponent to be attacked carefully. You do not realize what that strength is till you see his magnificent muscular development when stripped of his skin. Remove his skin, and he is startlingly, houridly, like a dead man. His strength is enormous. A splendid short-horned bull, that had been imported, at great cost. by a cattle-raiser on Rock Creek, Montana, a few years ago, was found with its neck broken but a week after its arrival, and the tracks of a large Bear showed who had done the mischief.

My hunter, in 1868, saw a Grizzly attacking a band of three Buffalo bulls, and assured me that, as one of the bulls charged him, he saw that Bear break his mighty neck with one blow. I believe that story is true. And only four years ago, a large bull Elk, killed by our party, was carried away bodily, horns and all, the night after he was killed, by one monstrous Grizaly-carried over ground so rough and through timber so dense that we lost all track of the
carcass and the thief. The Elk must have weighed well on to a thousand pounds, and such a feat of strength seems almost impossible.

As you lean over the carcass of a large Grizzly, you realize the utter nonsense of attacking such an animal with a knife. Even as he lies dead, you may pick out your own place in his huge muscular chest-he on the ground, you above him-it will take the blow of a strong man to drive your knife up to the haft in the skin and muscle; and when you have done so, the chances are ten to one you don't go near striking a vital place. The muscles of the arms and chest are simply tremendons. I have seen a Bear, when wounded, knock quite a large piece out of the side of a pine-tree with a blow of his paw.

As to knives, few men go properly provided. Though experience ought to have taught them otherwise, I find that professional hunters are often just as badly provided as the tenderfeet they conduct. It is difficult to get a really good piece of steel. After trying a great variety of makes in England and the United States, I got a number of knives from Mr. Price, of San Francisco. I have used these knives now on four different trips, and they have given me satisfaction; but, though I gave careful orders as to their making, Mr. Price made the same mistake that nearly all cutlers do, and forged them far too thick. The blades are just six inches long, one curved and one almost straight, with solid handles, and leather thongs attached, to tie them to the belt. Knives sold as hunting. knives in our large cities are worse than useless. The best way that I know of to provide one's self with a knife is to buy a dozen or so of the ordinary skinning-knives, to be procured in any Western mining-camp or cattletown. They cost about fifty or seventy-five cents apiece, and in the dozen you may perhaps find two good blades. A good stone for whetting them sliould also be carried, for if you have any real work to do, it is necessary, again and again, to sharpen the blades while skinning.

I would earnestly advise the beginner not to go after Bears alone. Even If a man is sure of his nerve, a cartridge will sometimes stick or miss fire. Circumstances have made it necessary for me to lunt a good deal by myself, and most of my Bears I happen to have killed when alone; but I would always prefer to take another man with me. A friend of mine, an artist, tells me that only two years ago he came near being Killed by a sow, whose cubs he shot, while some distance from camp. He was painting when the Bears hove in sight. He shot at a cub, and thought he killed it; then shot the other cub and knocked it down; and then he shot the mother. When the first cub tried to crawl away, he shot it again; ditto the second cub. Then the mother woke up, and seeing him attacking her children, she went for him. He had only two cartridges leftin his repeater; he hit her with both, but did not succeed in killing her; and if it had not been for his dog, who attacked her behind while he bolted, she would have torn him to pieces; and, as it was, he did not get any one of the three Bears. He was no tenderfoot either, but a thorough liunter, and a man who has killed a good deal of game in the West.

Personally, I have no feeling against trapping Bears. The Grizzly is fast becoming extinct; he must inevitably succumb to the ranchman's poison and the hunter's trap. I would sooner, of course, stalk and kill one Bear in the "open" than kill twenty in the trap, and it is many years since I have shot a trapped Bear. But in view of the way in which all furred game is taken-in view, also, of the fact that all the Territories offer rewards for Bear-scalps-it is simply nonsense to talk about trapping Bears as being either unsportsmanlike or cruel. In the long run, I think it will be found that forty-pound traps are the best. Smaller traps usually scare the game, and seldom hold a big animal. They are rather dangerons things to set, and a pair of strong iron clamps should be used to screw on and hold down the springs, on their being handled. It takes a little longer, but, unless you have had considerable experience in setting traps, it is worth while to take trouble to avoid
the danger of losing a finger, or perhaps having a wrist crushed.

As to the best weapon for a trip: Good weapons in great variety are now to be had, and had cheaply. The improved Winchester, $50-110$, is an excellent "saddle gun." Personally, I prefer the Bullard; the action is so silent, and the shooting of such weapons as I have used can not be surpassed. But I an ready to admit that the Winchester, though not so silent in its action, is a stronger rifle, and more convenient on horseback. It is somewhat lighter, too; and since all who are determined to follow their game up and kill it in sportsmanlike manner must be prepared to leave their ponies at the foot of the mountain-not on the side-every extra ounce to be carried is a burden.

Almost as important as the rifle is the field-glass. Don't spare money to get the best that is to be got; and if you are a party of two or three, let one carry a powerful stalk-ing-glass. Especially if going after Sheep or game that is sighted at a distance, it is all-important to be able to make out the size of a head before you face the arduous climb of several thousand feet. It is disappointing work to mistake a poor head for a good one, when you are at the foot of a mountain and your game is near the top, and, after long hours of toiling, yon get within shot, and find your coveted trophy is not worts the taking.

Be careful, too, as to your "shoeing." The higher ranges of our mountains, though nci clothed with ice and snow to the same extent as are the cips, present some features of peculiar danger. The conglomerate formation, which is almost everywhere found in them, makes walking often perilous. However near game may be, never hurry; do not go up a place where you are sure you can not get down. I believe the danger from falls is far greater than any other danger the hunter has to meet; and I know from experience this danger to be considerable.

As to outfit, two things are all-important-good ponies, plenty of them, and good packers. Good guides are hard to get; good packers are just as hard. For a trip into the
mountains, a hundred pounds is load enough for a pony. Don't burden yourself with great variety of provisionsbacon, coffee, flour, dried apples, and oatmeal, with a few potatoes and onions, carried from the nearest settlement, are all you ought to want. A couple of Dutch-ovens will supply you with the best possible bread; and a large lean-to made of canvas is less cumbersome and as weather-proof as a tent.

As to hunters, Frank Chatfield, Charles Huff, and Sam Aldrich are men that I have proved good and true. Their address is Dillw ath, Gallatin County, Montana.

My first hunting expedition included a trip from St. Paul (then almost the western terminus of the railroad) to Vancouver Island, and during that long journey I never saw a Grizzly. One day, coming on the fresh trail of an immense fellow, the Indians promptly refused to take any part whatever in investigating the neighborhood; and as I was a most untrustworthy shot, and had only a donble-barreled muzzle-loading rifle, all things considered, perhaps this action of theirs was an evidence of their proverbial sagacity.

My next essay was undertaken thirteen years after, in 1881. We had-my friend and I-a magnificent trip; rode all over the Big Florn Mountains, and killed plenty of game -indeed, we could not help it. In those days the mountains were full of Deer, Elk, and Bears, too; but somehow none of us ever saw a Grizzly. I can not to this day understand our want of success. Six trips I have made since then, but I never saw half the amount of fresh Bear-signs which we saw on the western slope of those mountains, on a stream named on the maps Shell Creek. Had I known as much as I know now, I could have made a much larger bag than the one I made on my last trip, when I had extraordinary luck, and killed eight Grizulies in three weeks, our party accounting altogether for twelve Bears, two only of the twelve being. trapped. I think this is the largest authentic score I have heard of as being made, in late years, in so short a time.

The first real Grizzly we did see (we once shot a mule in mistake for one) was in a trap. In the eastern woods, Bears
are commonly trapped by baiting a pen, built of logs, with fish or offal, and setting before it a spring-trap of from fifteen to twenty-five pounds. I need not now speak of traps built of logs only, where a dead-fall is used; none of these are sufficiently strong to hold or to kill a moderate-sized Grizzly. To these steel traps, as they are set in the East, a strong chain is attached, and this ends in a ring; tirrugh the ring a strong stake is driven, and sometimes this is fastened into the ground. By this means the raptive is held until his hour arnives. Out West the same trap is used; but instead of pinning it to the ground, a long chain is attached, and the end of this chain is made fast around a $\log$ with a "cold-shut" or split-ring, such as you put your pocket-keys on, and which can be fastened by hammering. As soon as the Bear springs the trap, with either fore or hind foot, and so is fast, he begins to make things lively all around, slashing at the trees, biting at the trap, and dragging the log. This, of course, is an awkward customer to pull along, especially if it is made of part of a young, tough pine-tree, with the branches left on. It leaves a trail that is easily followed. Sometimes the Bear will take in the situation very soon, and set himself to demolish, not the trap, but the thing that makes the trap unendurable. I have myself seen a pine-tree, some fourteen feet long and eight or nine inches in diameter, perfectly tough and green, so chewed up that there was not a piece of it left whole that would weigh five pounds. In this case we were able to trail the Bear by the trap-chain, and kill him farther on.

The best way to fix a trap is the simplest. Scoop a hollow by the carcass of a dead Elk, and, drawing up a pine, fix the end of it firmly to the trap. The branches of the tree half cover the dead game, and can be easily so arranged that naturally the Bear will, for his convenience, approach on the side where the trap is set. Some old Grizzlies, however, are extraordinarily cunning, and though they can not have had any extensive experience with Bear-traps-for none have been taken into the West till within the last eight years or so-yet seem to divine just where those dangerous
hidden jaws lie beneath the innocent brown pine-needic: and bunch-grass. They will spring it again and again, and then feast to their heart's content. One great fellow did this three times at the same carcass, and, as we could not induce him to come during daylight, we liad reluctantly to give him up. After carefully examining the jaws of the trap, which each time held a few gray, coarse hairs and such small traces of skin as you see on a horse's curry-comb, we came to the conclusion-and I think the correct onethat the old fellow deliberately sat down on the whole concern.

My first Grizzly was trapped on the head-waters of the east fork of the Yellowstone, with.i some few miles of a mountain called the Hoodoo. That country is now too well known and too much hunted to afford good sport; a blazed trail leads up to it from the Park. Travelers who want to see an Elk are almost invariably advised to go up there. It is a sort of jumping-off place. None of the Park guides (I think I am correct in saying) know how to get out ef it unless by returning as they came-at least they did. not two or three years ago. In 1883 there was considerably more game in that region than can be found there now. Our party, the morning after getting into camp, separated; I went for Sheep on the high ground, for there was plenty of sign, and my friend, taking an Adirondack guide we had with us, hunted the lower woody slopes. Toward evening I got back to camp, pretty well tired, having killed a ewe, for we wanted meat; and presently the rest of the party came in, almost too breathless to speak. They had seen a drove of Beurs, so they said-five of them-"and," added the Adirondack guide, "two were big as Buffaloes." He had never seen a Buffalo, and drew on his imagination for their size. This was exciting with a vengeance. Thev reported any amount of Bear-sign on the slopes leading to the river. It was just before dark that they had seen the aforesaid family, which, unfortunately, at once winded them, and so quickly tumbled down the ravine, as only Bears can tumble, and were lost in the cañon. We were poorly off for bait, but
killed some Porcupine and half-roasted them (under these circumstances, I would have my readers remember that Porcupine emit a powerful odor); and to these delectable morsels we added parts of the Sheep. Still, it was a poor bait. Bears will not, as a usual tling, come to a small carcass.

We waited and waited, day after day; all the Sheep cleared out of the neighborhood, and we, not having at that time one gool hunter in the party, could not trail up any of the small, scattered bands of Elk that kept, as they generally keep during the end of August, to the thick tit.. '3er. Our grub gave out; our last morning came; and, save for that one brief moment, none of tra party had ever seen a Grizzly. Ail our impediments were stowed away, and nothing remained to pack but the forty-two-pound traps. While the final tightening of the mules' aparejos was being done (we had a Government outfit on that trip), our guide rode off to see if the luck had turned. He was to fire one shot if the trap had been carried away. Fancy our feelings when, thirty minntes later, a single shot rang out on the early morning air. We made time to the ridge where the boys had seen the Bears, and where the traps had been set iruitlessly for a week; and there, sure enough, he was-a fine fellow, too. He could not have been fast more than half an hour, for lie had not gone far, but was " making tracks," dragging a great log after him, when the hunter saw him; and in an hour or two, at that pace, would have been well on his way down the cañon. Soon as mankind came in sight, he took in the situation, and began to roar and growl. A Grizaly's roar can be heard a long way in still weather. I must, in all truthfulness, say that that Bear seemed to be thinking chiefly of his family. He made no charge; he wanted very badly to go home; and I ended his career with an Express bullet.

Not much sport in that, so it seems to me now. And yet, after longing and longing even to see a big Bear, and never seeing him; after finding, sometimes, the ground near our camp all torn up over night, as we used to in 1848; sifir
having had three Bears cross the river I was fishing in, on Sunday morning ( $O$, charitable reader, a quiet little stroll by a silvery, purling, singing mountain-stream, such as was Shell Creek, could not offend even the shade of Izaak Walton, though it were taken on Sunday!)-yes, I went down that stream not mure than three miles, and in the two or three hours I spent in filling my pockets with the trout, no less than three Bears-good-sized Bears, too, by their tracks-crossed the stream behind me, and between me and camp. After such a long time of probation, it was more than exciting to see here, at last, the real thing-an unmistakable Grizzly. There actually was such a thing as a Grizzly in the flesh, though we had begun to doubt it; not so big as a Buffalo, truly, now I came to see him in daylight, but weighing, I should say, fully six hundred pounds.

The largest Bear any of us ever saw was a Cinnamon that came within an inch of killing one of my men-a good hunter and first-class guide-Charles Huff. I may refer to the big Cinnamon, too, as an instance of the danger that sometimes attends trapping tine Bear. He had set his traps near Sunlight, Gallatin County, Montana, in the spring, and was unable to visit them for a week. When he got to tiue bait, trap and log were gone. After taking up the trail, i: soon found the romnants of his log chewed to matchrwod; the Bear, evidently a large one, had gone off with the trap. He followed his trail as long as be had light, but found nothing, and had to return to camp. Next day, very foolishly, he took the trail again alone, leginning where he had left off. After a long march, he carne to the steep side of a hill; the Bear had evidently gone up there-on the soft, snow-sodden groưnd the trail was plain. Just as the man was beginning to ascend, there was a rush and a roar, and the Bear was on him. He had no time to put his repeater to his shoulder, but letting it fall between his hands, pulled the trigger. The Bear was within a few feet of him, and by a great chance the unaimed bullet took him between the eyes. He had evidently tried the hill-side, and, worried by
the heavy trap, had come back on his trail and lain behind a great heap of dirt, into which he had partly burrowed, waiting for his enemy. Among the débris of spring-tidefallen stones and uprooted trees-a Bear could easily lie hidden, if he wert mad and wanted to conceal himself, till the enemy was w , few feet. It was a terribly close shave.

All animals ، . $t$ times strangely hard to kill; this, I fancy, is especialiy crue of the Grizzly. Again and again he will drop to a well-planted shot, as will any animal; nothing that runs can stand up long after it has received a quartering shot-i.e., when the bullet is planted rather well back in the ribs, about half-way up, and ranges forward to the opposite shoulder. Such a shot, especially if the bullet be a fifty-caliber, will drop anything; but the point of the heart may be pierced, or even the lungs cut, and Bears will often fight.

We stalked two small Grizzlies in the "open" one evening. They were busy turning over stones, in order to get the grubs and worms underneath, and when we managed to get, unseen, within forty yards, at first fire each received a bullet broadside behind the shoulder; but, seemingly none the worse, they both turned down-hill, as Bears will when wounded, nine times out of ten, and made for the ravine, whence they had evidently come. This gave me a nice open shot as they passed, and No. 1 rolled over, dend; not so No. 2. Before he got a hindred yards away I hit him three times. My rifle was a fifty-caliber Bullard repeaterthe one I have used for years-one hundred grains of pow-' der and a solid ball. At the fourth shot he fell in a heap, seemingly dead. To save tronble, and for convenience in skinning, we laid hold of the first one, and dragged him about seventy yards down the steep incline, to where the second lay. We got within a few feet of the Bear, when up he jumperd, and, on one hind leg and one fore, went for Frank. The attack was tremendously unexpected and sudden. At a glance you could see that the poor, plucky brute was past hurting anyone, for one arm was smashed, and his lower jaw was shot almost completely away; yet I
tell the simple truth when I say that for a few strides he actually caught up to Frank, who made most admirable time; then I shot the Bear dead. We examined him carefully; he was a small one, not weighing more than two hundred pounds, and was shot all to pieces. Each of the five bullets I had fired had struck him; one hip and one fore-arm were broken; the lower ju:w was shot away; there was one shot in the neck, and ore through and through behind the shoulder. It is never safe to fool with a Grizzly; he may run away as fast as an Elk, or he may not.

There is something to me fascinating beyond measure in hunting the Grizzly, the hardest of all animals to approach, not excepting the Sheep. The extreme difficulty of seeing him or finding him in the daylight, and the lonely haunts he has now retired to, make him more difficuit to bring to bag than even the Sheep. None seems in better keeping with his surroundings than he. It must be a poor, shallow nature that can not enjoy the absolute stillness and perfect beauty of such evenings as the hunter must sometimes pass alone when watching near a bait for Bears.

One such experience I have especially in mind. What an evening it was, both for its beauty and its good furtune! - ihink of it still as a red-letter day, as

One from many singled out, One of those heavenly days that can not die.
More than two thousand feet below, the head-waters of the Snake gather themselves, and in its infancy the great river sends up its baby-murmur. Behind me, the giant heads of the Teton cut the rosy evening sky, sharp and clear, as does the last thousand feet of the Matterhorn. I was comfortably ensconced in the warm, brown pine-needles that smothered up the great knees of a gnarled nut-pine, whose roots offered me an arm-chair, and around me, for the space of two or three acres, the short, crisp greensward, that is only found where snow has lain for months previously, was spangled and starred all over with such blue and white and red mountain flowers as are nowhere else seen in this land.

I wish I had time and skill to write of those sweet mountain flowers. There is nothing quite so beautiful in any other Alpine land I know of, our mountains altogether outstripping the Swiss or Austrian Alps in the wealth, variety, and sweetness of their flora. I don't know anything of botany, I am ashamed to say, but we have counted nearly a hundred different varieties of flowers in bloom during one afternoon's tramp. Amid the lush-green of the rich valleys, great masses of harebell and borage and gentian carpet the ground. Here and there, beautifully contrasting with their fresh, vivid blue, wide plots of yellow, purple-centered sun-flowers stoutly hold up their heads, while on the border-land of these flower-beds of Niature, where the grass shortens in blade and deepens to an intense shade of green, the delicate mountain lily, with its three pure-white petals, fading to the tenderest green at the center, reaches its graceful height of some nine inches. All this one has abundant leisure to observe, as he sits well to windward of the bait-in this case, a dead Elk.

On this occasion, I occupied an unusually good point of vantage. My arm-chair not only commanded a little sloping prairie, but the heads of two deep ravines leading to it, and the crest of the ridge to my left, some three hundred feet above me. Hour after bc $\sim$ passed peacefully by. I tried to read Tennyson (I had a pocket volume with me), with but poor success, and so gave myself up to the beauty of the scene. I realized without effort what a blissful thing it might be-nay, sometimes is-simply to exist. Such hours do not come to any of us often; but when they do, with them surely may come an overmastering sense of that great truth Elizabeth Barrett Browning so tersely puts:

Earth's crammed with heaven, And every common bush afire with God; But only he who sees takes off his shoes.

Without cant, I trust, that evening I took off mine, as the old prayer came to mind: "We thank Thee for our creation, preservation, and all the blessings of this life."

I was in a state of stable equilibrium, bodily and mentally (if it ever is given to a rector of a New York church so to be), when a mighty rumpus arose from the edge of the dark wouds where our horses were lariated, two or three hundred yards below. On his way upward, a big Grizzly had been joined by a relative or acquaintance (history will never say which), and, as ill luck would have it, they both came suddenly on the horses, hidden and securely tied in a little hollow. From where I sat I could see nothing; but running down a few yards, I carne in sight of two sturdy fellows surveying onr plunging nags, as for one moment they evidently held a hurried consultation. The conclusion they arrived at was that they were out for venison, not for horse-flesh, especially when there was more than a suspicion of a dangerous smell around; in brief, they struck our trail, and scented the saddle, and so in añ instant were off. Of course, we had settled on a spot toward which the wind blew from the ravine (Frank was a quarter of a mile away, on the other side of the prairie), for Bears almost always come up at evening from the deepest hiding-places; and these Bears ran off, quartering up-wind, giving me a long running-shot, as they made great time among the tall, rank grass and flowers.

Sit down when you shoot, if it is possible. There is no better position than with an elbow on either knee; yon can shoot fast and straight, and the position is high enough to carry your head and rifle above small inequalities of the ground. I let drive, and missed-shot too far ahead, I fancy. Always shoot too far ahead, rather than too far behind. Nine times out of ten, a bullet plumped in front of running game will halt it for a moment; and so now it turned out. The leader reared up for an instant, and the instant's pause was fatal. The next bullet took him fair in the center of the chest. He had just time to give his solicitous companion a wipe with his paw, that would have come near wiping out a strong man, when he rolled over. -

Bear No. 2 concluded he had an engagement somewhere else, and was settling down to a business-like gait when he
too came to grief. There they lay, not fifty yards apart-- two in one evening. Not so bad-though in honesty it must be confessed that such shots were more than ordinarily lucky. Skinning a tough hide is a trying bit of work; buit how willingly was it undertaken! What time we made down the mountain, tying first our trophies heads left on-securely on the cow-saddles! What can not a good bronco do when he wants to get back to the herd! For a couple of thousand feet we led the hoises, and then fairly raced. What fun is a good scamper home when you have a stanch pony between your legs! The sure-footedness and hardiness of a well-trained pony are simply marvelous; give him his head, and if there is a ghost of a trail, he will take it. Many an evening did we race home against time, determined to get over the three miles of twisted and fallen timber before the last glow vanished. Once out of the timber, we could sober down, for all was plain-sailing. Three or four miles more-among old Beavermeadows, where every now and then we heard, loud almost as a pistol-shot, the Beaver smite the water with his broad tail, as he went down into his own quiet, clear pool-and the welcome blaze of the camp-fire promised rest, after refreshing and sufficient toil, as well as good companionship.

At present, the Grizzly is more commonly found in the Shoshone Range, in Wyoming, than anywhere else. Much of the country is very rough, parts of it almost inaccessible; but in most localities nut-pine is plentiful on the mountains, and Elk are more numerous there than in any other portion of the United States. Here, then, the sportsman's prospects of successful Bear-hunting are better than elsewhere. But since the spring of 1888, Territorial law has made it impossible for any man, who does not care to be a law-breaker, to hunt in this splendid mountain region. On March 9,1888 , it was enacted:

Section 1. Section 1251 of the Revised Statutes of Wyoming is hereby amended and reennacted to read as follows:
" Section 1251. It shall be unlawful to pursue, hunt, or kill any Deer, Elk, Moose, Mountain Sheep, Mountain Goat, Antelope, or Buffaio, save from Sep-
tember 1st to January 1st each year. And it shall be unlawful to capture, by means of any pit, pitfall, or trap, any of the above-named animals, at any time of the year. No non-resident of this Territory shall pursue, hunt, or kill any of the above-named animals by any means whutever: Provided, however, any actual and bona fide resident may at auy time pursue, hunt, or klll any of the sald animals for the purpose only of supplying himself and family with food; but it shali be uniawful to sell or offer the carcass of any such animal, or any part thereof, for sale, except as is provided in this chapter."

The effect of such a statute, I need not say, makes hunting in Wyoming impossible- ${ }^{+}$least, impossible to honorable men. The trouble is, that it does not reach the root of the matter. The men that destroy the game in that and other Territories are not the small parties of sportsmen who spend several weeks there in the fall. The advent of these is an unmixed benefit to the frontier community. Any properly equipped hunting-party must, of necessity, spend, during a six-weeks' trip, from $\$ 500$ to $\$ 2,000$ in the Territory, and in those parts where cash is scarce. Sportsmen who needlessly slaughter game are now fortunately rare. Cow Elk or ewes are scarcely ever shot, except when a party is hard-up for meat; and a few bull Elk and an odd ram falling to the sportsman's lot do not, to any serious extent, diminish the game of the Territory. No, it is in the late fall, when the snow drives the game in large herds down from the mountains-drives them to the doors of the outlying ranches-that needless and irrevocable slaughter is wrought. Then the game is poor, of ten scarcely eatable, and in the deep snow whole bauds of Elk and Deer are butchered, without chance of escape, by the ranchmen. All who live in the Territory know the truth of what Isay. The passage of such a law as this, then, is worse than useless, and its effect will be to stop Bear-lunting as well, though there is no prohibition in the law against their slaughter.

Occasionally, the Bear is seen and stalked in the "open;" but I should say that at least nine out of ten Bears that are killed are either trapped or shot in the early morning or evening, when coming to a carcass. When I say nine out of ten Bears killed, of course I have no reference to the wholesale poisoning that has totally wiped out, in large
sections of the country, all Bears and Wolves. Cattle-men have had constant recourse to poison, and hence, once cattle arrive in a country, even in small numbers, Bears soon disappear.

Some years ago, many Bears used to come down to feed on the dead'salmon on the upper waters of the Snake and Salmon Rivers. I believe Bears are somewhat plentiful in those neighborhoods still; but, for some reason or another, large Bears were not commonly found. In Southern Montana, Grizzlies are fairly common in the Granite Range, lying between the Northern Pacific Railroad and Clarke's Fork; but a great deal of hunting has been done in that region. In Colorado, Bears are becoming scarce. Even-in the loneliest parts of Wyoming, of late, Bears of any size have been hard to find. On my last trip, I hunted pertinaciously, many times going away from camp with nothing but my blankets and a little grub, and staying away for days; yet I only succeeded in killing one large Bear.

Perhaps some account of this incident may not be altogether uninteresting. We had been camping for some weeks in a green hollow, ulmost ten thousand feet above the level of the sea: A grove of nut-pines sheltered our lean-to, where men and hunters slept, and right before our tent a fairy fountain rose, spread into a clear pool, and then rushed down the valley. It was an ideal hunting-camp, and from it, with our glasses, we could cover a great deal of couniry. During our stay in that camp. we saw more than twelve Bears, but, though the immediately surrounding country certainly had not been hunted before for many years, these were unusually shy. We had no traps with us, and though several Bears came stealthily to what was left of the ons or two carcasses of Elk we had killed, they did not come in the daylight, and in vain I sat by them till late in the evening, or crawled noiselessly up to them in the early morning light. In spite of the protest of my companions, I determined to sleep out all night by one of the carcasses, which had been visited by mn unusually large Bear. I shall not in a hurry forget that evening. I rolled myself in my Buffalo-
rohe, and lay down between two pine-trees, in a dark hollow, fifteen feet or so to the windward of the bait, and arranged a light cord round the carcass in such a way, at about three feet from the ground, that if I should fall asleep, and while I was sleeping the Bear came, his pressure on the string would awaken me by pulling at my wrist. About two hours after sundown, I heard the stealthy approach of a large animal in the underbrush; but it was so pitch-dark that, though the noise did not seem more than twenty feet away, I could see absolutely nothing; and the Bear must have smelt me, for he went off. Toward morning I fell asleep, and must have slept about an hour, when suddenly I ielt something soft press on my head. For a moment I was badly scared, as I thought the Bear had mistaken me for the bait, and had stepped bodily on top of me. In my half-awake condition, I had mistaken a big squirrel-that, falling off the tree, hit me full in the face-for the game I was after. After the sun was up, I went back to camp, hungry enough, and rather chilled.

Next day 1 determined to explore a distant gulch that none of our party had yet visited, and taking one of the men and a couple of horses with me, with food for two days, we started off. When we made camp, we were about eighteen miles from our party, and found ourselves in a splendid valley, in which there was considerable Elk-sign. All that day and the next we saw a good deal of fresh Elksign, and some Bear-sign, but saw no game. Anyone who has hunted in the mountains will remember how many disappointments of this kind he has had. You sometimes find. tracks only a day or so old all around you, and yet the game that made them seems utterly to have vanished. Coming back to camp the second evening, we alnost stumbled over a Bear. We were walking along the edge of a deep ravine, and he was evidently coming out of it. Some twisting current of air gave him our scent, and we heard his " whiff! whiff!" and the rattle of the stones as he bundled down the descent. After two fruitless days, our coffee and bacon were gone, and nothing remained but a little oatmeal;
but as there was no meat in camp, I determined to try it one day longer. "Patience and perseverance will bring," they say, "a snail to Jerusalem;" and it certainly is the only secret of luck that a lunter can command in the West, to-day. On the third day, when going along an Elk-trail, many miles from our little temporary camp, in thick brush, about seventy-five yards away, I suddenly saw the fore legs of an Elk. Stepping a few feet out of the trail, 1 got a glimpse of his shoulder, just as he winded us and bounded down the mountain. Fortunately, the trees opened up a little and gave me a chance-shot. I was not certain whether I had hit him or not; but following a few yards down the hill, I saw him lying in a heap-a splendid bull. We took what meat we needed for ourselves and our friends across the mountain, and having blazed a trail for some two miles, so that we could on our return easily find him in spite of the dense timber, with light hearts we made our way back to camp. There a high time awaited us, for none of the party in our absence had succeeded in killing any game.

In the course of four or five days, I determined to revisit the carcass, and sit by it in the evening, hoping to kill a Bear. The Elk lay, as I say, in thick timber. It was between five and six in the afternoon when 1 got within half a mile of the spot. We picketed the horses, and approached the carcass carefully. When within fifty yards, I saw the sign of a good-sized Bear. The earth and the stones and roots had all been torn up, and it was evident that "Ephraim" was preparing a cache in which to secrete his find. The signs were fresh, and I knew that in all probability the Bear lay close to the carcass. The timber was so dense that when within twenty feet of the Elk I could still see nothing. And here we reaped the advantage of having blazed the trail. No matter how carefully the position where the Elk lay had been marked, it would not have been possible, without the blaze on the trees, to note the exact spot, and almost certainly our game would have been scared from the carcass. A few feet more, and through the brush I saw a great mound of earth. We measured it afterward; it was

more than twelve feet long and over five high-logs and stones all piled on top of the carcass. I had scarcely time to notice this before there was a rush in the underbrush, and the head and shoulders of an old Grizzly appeared within a few feet of my face. He had been dozing beside the carcass, and hearing, when I was very close, my cautious footstep, he rus'ced forward to see who was threatening his prize. It was as impossible for him to see us as for us to see him, till we were within a few feet of each other. Had the Bear rushed straight on, I do not think I would have had time to shoot; but that is what a Grizzly does not do, whatever men may say. He, like all his kind, reared up for a moment, to have a better look at us; and scarcely waiting to put my rifle to my shoulder, I gave him a "lineshot" about eight inches below his nose. He sunk down, dead as a stone. I never saw a live Grizzly so close before -the hair was fairly singed by my powder-and I certainly have no desire to see one any closer. This habit of rearing up gives the hunter, if he be at all cool and his rifle a good one, all the chance that he can require in his favor. Another curious thing about this splendid animal is that, except when close up to his enemy, he almost always falls to shot, even though the wound received may not be fatal. He falls and roars as the bullet strikes him,. and thus increases the odds against himself. This Bear, the last I have killed, had an unusually fine coat. He had the larges: head for his size I ever saw, and when the skin was pegged ont, without undue stretching, it measured eight feet six inches across the arms, from claw to claw.


## THE POLAR BEAR.

By Sergeant Francis Lung, of the Greely Aretic Expedition, and George S. McTavisi, of the Hudson's Bay Company.

5indHEN the projectors of the Lady Franklin Bay enterprise were planning their explorations in the polar regions. I was selected and detailed to accompany the expedition as a hunter. My long experience in hunting the big game of the Far West proved of great value to me in this service, and yet, in common with other members of the expedition, and with the Eskimos whom we employed to assist us, I had great difficulty in securing sufficient fresh meat to feed th" brave men who manned our ships, after we entered the rions of eternal snow and ice. Stili, the plan of providing a special defail to do the hunting proved a wise.one; for, without the fruits of the chase which we secured under such hardships and perils, none of us could have lived until the arrivai of the rescuing party.

Having been requested to write of the Polar Bear, I have condensed as much as possible the information I gathered during my three years of battling with icebergs and frost, and shall make such notes thereon, and describe surh of my varied experiences in hunting that animal, as I deem of the greatest interest to sportsmen and the general public.

Looking back over that period of three years, during which time we were exposed to the icy blasts of the polar regions, were compelled to live on reduced rations, and even to face starvation on an icy desert, I can readily realize that, without the most strenuous efforts in the way of hanting and of turning the resources of that inhospitable waste to the most rigid account, we should have found the end of our scant larder much sooner than we did.
(200)

Though my hunting was not confined to the Polar Bear, I learned much of the habits of that unfamiliar creature, and of his trickery, from coming into frequent contact with him. He makes his home among the ice-fields of the North, and is a restless animal; like the Gypsy, he lays down to rest unprotected from the howling blasts of winter, his bed being the solid ice and his shaggy coat his only shelter. About four hours each day is the longest time he allows himself for rest from his patient and persevering search for food, for his cavernous maw and his voracious appetite tax his skill and time to keep them supplied with fish and flesh.

In his hunt for game, the night as well as day is favorable to him, the reflection from the ice, at night, being sufficient light to enable him to sight and steal upon his prey. The Seal is the chief source of food for the Polar Bear, though he also preys on the Walrus and on various fishes.

On one occasion, I was ordered to Alexandria Harbor, in company with two Eskimos, to investigate the chances of pr,curing game there. We had been informed by the natives that this locality abounded in game, and being short of rations, it was deemed expedent to send a party there to replenish our meat supply. On March 15th, while at the Harbor, I started alone in search of a Bear. Having seen Bear-tracks the day before, I was unable to sleep during the night, my mind being occupied with brilliant schemes for a Bear-hunt in the morning, and 1 was extremely anxious to succeed in allaying the hunger of my comrades. However, success seemed not to attend my efforts. I tramped the entire day tlirough snow and over ice, endeavoring to find the trail of the Bear and to figure out the course he had taken. I found his tracks occasionally, but they were filled with snow, and at times entirely obliterated, so that it was impossible to follow them. Night coming on, and being discouraged at my fruitless attempt to secure the object of my dreams, I started to retrace my steps toward our temporary camp. On my retreat, I had to travel nearly half a mile out of my course, to avoid a large ice-floe, which had lodged there the previ-
ons winter, and which was piled to a height of nearly three hundred feet above the surrounding ice. I was advancing directly toward open water, in my efforts to obviate the necessity of climbing the ice-floe, and being in doubt as to the best course to pursne, hesitated a moment to reflect, when my attention was attracted to a dark object on the ice on the opposite side of the open water. I at once saw that it was a Seal; but being in a perilous position and out of rifle range, it would have been useless for me to attempt to secure him. While momentarily reflecting, being reluctant to give up the hunt with game in sight, I was surprised to see the familiar white form of a great Polar Bear one or two hundred yards in the rear of the Seal, and moving cantiously toward it. This increased my engerness to reach the scene of action, and, if possible, to get in a shot, for here was meat for all our party for several days. But I was absolutely powerless, and must simply see the game come and go, while I gazed in anxious curiosity at his strange movements.

The Bear crouched low on the ice, and crept in the direction of the Seal at an extremely slow pace, until he had arrived within, I should think, thirty feet, when, with a bound forward, he pounced upon his victim. A short strnggle followed, and the Bear was victor.

I am led to believe that the Seal can only see in front of him, and that he depends entirely on his sense of hearing to protect him from approach from the rear. The Bear being aware of the weakness of his victim, is enabled, from his color and soft trear, to pursue his tactics successfully.

It is claimed by some hunters that the Polar Bear is a herbivorous animal; but vegetation and animal life are equally scanty to the northward from Cape Sabine. So far as our observations went, we can not substantiate the writings of those authors who state that vegetation forms a part of the Bear's subsistence.

The White Bear breeds in the sonthern portions of the Arctic Circle, and their young do not accompany them when, in spring, they journey northward. Lieutenant

Lockwood, in May, 1882, noticed Bear-tracks going northeastward on the north coast of Greenland, in $83^{\circ} 3^{\prime}$ norththe highest latitude in, which signs of this animal have ever been seen. They are not vicious except when wounded, and will invariably take to water whell alarmed, if there be any in the vicinity. If the Bear succeeds in reaching the water, the hunter's opportunity is usually lost. Even a telling shot will avail him nothing, for should he succeed in killing the Bear, he can rarely recover the carcass from among the floating ice. The Bear, not being able to remain long under the water, alternately dives and reappears on the surface of the water in order to evade the hunter.

While at Cape Sabine, in latitude $74^{\circ} 32^{\prime}$ north, $19^{\circ}$ west, after our party had made the perilous journey, reaching the farthest north, and had returned in the hope that a relief party would be awaiting us, our scanty remnant of food was stored away in a rude stone house. We experienced continued annoyance from Bears breaking into our meathouse while we were asleep, and stealing what little meat we had.

On April 11th, Sergeant Brainard, one of our party, had occasion to visit Cemetery Ridge, a place a short distance back of our camp, where our dead comrades were buried. Returning, he was surprised by a Bear advancing toward him. Being unarmed, he hurried to camp, and being already sadly reduced by hard work, starvation, and exposure, fell exhausted in the tent, exclaiming, "A bear! a bear!"

We were elated at this prospect of obtaining food. Lieutenant Kislingbury, Jens Christiansen, an Eskimo, and myself seized the guns and started in the direction indicated by Brainard. We had gone but a few hundred yards when Kislingbury, weak from want of food, became exhausted, and gave up the chase. Jens and I continued, fully determined upon giving Bruin a hard task to save his life, should we come within rifle range. We moved briskly forward, scanning the ice-fields closely and eagerly, fearing lest he should discover us first, and thereby evade our attack.

Directly in our front was a large ice-floe. We consulted a moment as to the best way to overcome the difficulty of getting to the opposite side, when we discovered a fore leg of the animal moving cautiously up over the ice. An instant later, his head appeared, and then he saw us. Dropping suddenly back, he retreated, without giving us a shot. Knowing from experience the tactics that he would pursue, we at once decided to separate, one going south and the


Shipped.
other north. around the ice-pack. We knew that by this means one or the other of us could cut him off before he could reach water. which was about three miles away.

We pushed forward over the rough ice, occasionally sighting the Bear, which seemed to be making the best time possible. After we had gone a mile or more in a direct line, we noticed that the Bear had slackened his pace, but was still moving toward ice-packs and open water, which, if he reached them, would prevent us from getting him. We noticed, however, that we were gaining rapidly on him, and
having the advantage of a promontory of ice which would obscure his view of us, we redoubled our speed, when, arriving on smooth ice again, we found ourselves within easy rifle range of the Bear. Jens, the Eskimo, coming out first and being nearest to him, got the first shot, striking the animal in the fore paw. The wound made no perceptible change in the Bear's movements, except that he occasionally raised his paw and shook it. He kept on at a shambling trot, wallowing over the rough surface of the ice at the best speed he could command. Seeing that it now depended on me, and knowing that a few steps more would bring him to water, I took off my glove, dropped on one knee, and taking a careful aim, fired, striking him in the side behind the shoulder. He fell, but got up and started on, when I fired a second shot, which took effect just back of the ear, lodging in the brain and killing him instantly.

Thus ended a most exciting chase, which resulted in the addition of four hundred and fifty pounds of fresh meat to our stores, which prolonged our lives for several days, and without which probably none of us would have been alive when the relief party arrived.
F. L.
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My first introduction to a White or Polar Bear was in 1878, in Hudson Straits. One morning while our ship was sailing through floes of ice-fortunately not very heavy, but sufficiently dangerous to make us keep a strict watch, and to require us to give them as wide a berth as possibleI noticed, as one large floe passed our counter, a strange object on it, and calling the attention of the first officer, an old whaler, was informed that it was a sleeping Bear. Unfortunately for us, our Captain had been on deck all night, and had just gone to sleep, so we were not allowed to disturb him by discharging fire-arms, for his wrath would have been more potent than even that of a wounded Bear. The consequence was that both Bear and Captain were undisturbed.

Since then I have hunted and killed a number of Polar Bears on land, and have heard many strange stories concerning them from Indians and Eskimos. The result of some of my observations and experience I now commit to paper, for the benefit of those who have not had similar opportunities of studying this strange denizen of the hyperborean regions.

The White Bear is an amphibious animal, but seems more at home on icebergs and ice-floes than on land. The reason is obvious. Food of the kind that he prefers is much more easily obtained on floating ice than on land, so that the latter is seldom approached by the Polar Bear, save at the time when the females proceed to winter quarters in the interior, some distance from the sea-coast, for the purpose of hybernating and bringing forth their young. This occurs in the latter part of September or beginning of October. The male Bear accompanies the female until he has seen her domiciled, and then returns to the coast, usually in November or December. No sooner does he reach his former habitat than he proceeds out to sea to hunt and fish for his living. The she-Bears, with their cubs, return to the coast in March, April, or May. The usual number of cubs at a birth is two-sometimes there is only one, and rarely three. Females are lean in spring, and of course are more aggressive when taking care of their young than at other times.

White Bears, as a rule, try to evade the hunter; still, there are individuals that will attack first. Although the Polar Bear is synonomously termed the White Bear, they are not all white. Those that are most likely to run away from the hunter are pure white. From the smallest to the largest size, these White Bears are timid, and I have noticed, on their being killed, that they are the fattest. The most dangerous and aggressive kind, other than females with cubs, is the large-sized male Bear of a yellowish, dirty color, and an Indian usually leaves this kind alone, unless he has a companion, or has perfect confidence in his own nerve and his weapon. Another sort is the small-sized Bear, of both
sexes, neither white nor yellow, but rather dirty looking; and these are likewise the best runners.

It is an error to suppose that Bears, because of their great size, can not run swiftly. They are remarkably fleetfooted, and have often overtaken Indians in a fair race, and killed them. Their speed, however, depends greatly on the condition they are in. If fat, their rate of progression is slower; but if lean and hungry, their fleetness of foot is almost incredible. These last are, however, rarely met with on land. Those I have seen there were of the more timid sort.

Sometimes Bears advance to the attack, but on finding the hunter determined and bold, they wheel about and run away. Once they do so, their chances of escape are small, if the hunter be cool and a good shot, as they seldom sum. mon up resolution to face the hunter a second time, unless badly wounded by a bullet.

The general opinion is that White Bears are only vulnerable when shot behind the ear. This is a most absurd error. A bullet from a large bore, heavily charged modern riffe, if planted behind the shoulder, is equally effective on the Polar Bear as on any other large animal, and one in any part of the body is almost certain to bring him down and prevent his escape.

I have never weighed any carcasses of Polar Bears, but, as nearly as I could estimate, those I have killed would vary from two hundred to six or seven hundred pounds.

The food of the White Bear is principally Seal, although I have seen one eating grass; and several deposits I have examined showed plainly that they do not subsist entirely on animal food. I have also examined the contents of their stomachs, and they also attest this fact.

Their modus operandi of catching the Seal is as follows: The Bear having discovered a Seal asleep on an ice-floe, immediately slips into the water if he himself be on another ice-floe. Diving, he swims under water for a distance, then reappears and takes observations. Alternately diving and swimming, he approaches close to his victim. Before his
final disappearance, he seems to measure the intervening distance, and when he next appears it is alongside of the Seal. Then, either getting on the ice or pouncing upon the Seal as it tries to escape, he secures it.

Seals are not his only animal food, however, as I have frequently noticed his claw-marks on the backs and sides of the White Porpoise. In some cases, the Bear seems to have sprung on the Porpoise's back, but to have failed to retain his hold, no doubt owing to the Porpoise having dived, as the claw-marks extended from the fins clear down to the tail on both sides. In other cases, the Bear appears to have succeeded, at the first spring, in getting his teeth planted, thus paralyzing the Porpoise and preventing its diving until he has obtained a good mouthful. Porpoises, when harpooned in the back, always swim with the head out of water for some distance, and the bite of a Bear seems to have the same effect on them. This habit would probably enable the Bear to take several mouthfuls; at any rate, if he only takes one, it is sufficient to leave a large wound in the back of the Porpoise. I have seen several Porpoises thus marked, some of the wounds only partially healed up. The White Bear is also fond of tish.

In Hall's "Life of the Eskimo" there is an instance given of a White Bear having thrown stones from a cliff on the head of a Walrus that was lying on the ice beneath; and I have heard a similar story related by an Eskimo, with only this difference, that instead of stones the Bear is said to have used a large piece of ice, which he dropped from an iceberg on the sleeping Walrus, stunning it so that he could get down and seize it by the throat.

Although the Polar Bear eats dead animals, such as Seals and Porpoises, he will not eat a man who has presence of mind to simulate death. Numerous instances are cited, by Arctic travelers and Indians, in proof of this assertion. An old Indian who had been scalped by a Bear told me this story:
"Traveling by myself, I espied a Bear, and, putting fresh powder in the pan (he had a tlint-lock gan), I rau toward
him. The Bear also ran, but I got close enough to him to fire, which I did, and the Beur dropped dead, as I thought. Without loading-truly, I was a fool-I walked up and struck him on the head with the butt of my gun. Instead of being dead, he was only stunned, and the blow revived him. Getting up, he struck me on the head in return, tearing the scalp down over my face and filling my eyes with blood. I fell, and exclaimed, 'Go away, Bear, you have killed me!' The Bear then rar. away, and I lay quiet for a long time. Then, cleaning the llood from my face, I looked around cautiously, and saw him a long way off. 1 got up, and managed to walk to my teni: but (taking off his cap) you can see how he marked me, youicelf."

A young Indian, three years ago, when out hunting, saw a Bear and two cubs. Being of an adventurous disposition and desirous of proving his manhood, he attacked the Bear; but, unfortunately, his gun, a double-barreled percussion, missed fire, and flight was his only recourse. The Bear, leaving the cubs, started in pursuit, caught and knocked him down. Fear kept the Indian quiet, and the Bear, after turning him over and walking round him several times, growling, turned back toward her young. The Indian got up and ran, which the Bear no sooner noticed than she started in pursuit, overtook and threw him down a second time, giving him a severe bite in the shoulder. She repeated her growling performance, and the Indian lay still till she had gone a considerable distance. Then, getting up, he threw away his gun and ran to a tree, up which he climbed, just in time to escape the Bear, who a third time pursued him. She stood on her hind legs and shook the tree; but the Indian held on till she got tired and walked away, looking back every few minntes to see if he liad descended. When she disappeared, he crawled down, picked up his gun, and went home, a sadder if not a wiser man.

A third instance was told me: An Indian and his boy, twelve years old, were on the coast togetleer. They saw a Bear coming, and the father told the boy not to fire until
after he had done so. They both lay down behind different piles of drift-wood. When the Bear approached, the boy got flurried, fired, and missed. The father then flred hurriedly, and also missed. Before he could relond, the Bear knocked him down, seized him by the foot, and dragged him a few yards, but without hurting him. The old man kept still, and pretended to be dead, till the Bear had gone $a$ sufficient distance to allow him to reload his gun before it could return. As in the preceding case, the Bear, seeing the man get up, turned back; but the Indian was prepared, and shot him dead. "After which," said he, "I gave my son a sound thrashing for not doing as I told him."

Very few Bear-skins are obtained from the Eskimos, as they cut up nearly all they get, and use them for pads to enable them to hunt Seals more successfully on the ice. The Eskimo approaches the Seal, crawling, imitating its exact movements and its cry. As he is liable to slip on the smooth ice when dragging himself along, he prevents this by sewing a piece of Bear-skin to his clothing, over his shoulder, arm, and hip. The hair of the Bear-skin sticks to the ice, and by its aid the hunter can move much more regularly, and can arproach close enough to shoot the Seal dead; while, if compelled to shoot from a greater distance, he would be liable to simply wound it, when it would dive into its hole and escape.

The Eskimos have a superstition that if a White Bear kills one of their number, the dead man's relatives must turn out, follow, and kill the Bear; otherwise he is sure to kill someone else. A case of this double killing rarely happens; yet there are several stories of this kind current among the natives.

The Eskimos frequently hunt the Bear with spears; and when two skillful spearmen attack even the largest Polar Bear, it is an easy matter for them to dispateh him. One takes the right and the other the left side. The first hunter merely acts as a decoy, and pricks the Bear slightly. No sooner does the Bear feel the spear-point
thand he turns on his assailant, when the second Eskimo, who is close on the other side, then gives the home-thrust.

The Eskimos' do not often eat the flesh of the Bearperhaps never, except when pressed by hunger. The Indians eat it, and I once lived for several days on the flesh: of an old White Bear. It is tough, rather strong in flavgr, but palatable. That of the cubs, on thes contrary, is good eating, and I have enjoyed several good reals off them. Prejndice is hard to overcome, but hunger sometimes overrules it.


## A POLAR HUNT.*

(3)AY could not be said to have dawned when we awoke, for the sun had not been seen in three months, and we were in the midst of the polar winter. Yet the bitter cold of the Arctic morning, all the more keenly noticeable through the fires burning low, roused us from our slumbers.

It was too cold at night to undress; therefore, after a hasty breakfast had been demolished, all that had to be done in the way of a toilet was to don our fur costumes, of Eskimo manufacture, and, guns in hand, we left the ship. White Bears had bten seen in the vicinity of the ship, and now we were after their meat as well as their hides.

A superstitions halo seems to enshroud the Bruin of the Arctics. He is endowed, in the minds of some people, with supernataral attributes wonderful to contemplate. Indeed, he appears to savor more of the supernatural than the nitural. While he is undoubtedly a ferrible fellow to enccunter single-handed, yet, if a choice were given me, I shonld prefer an encounter with him rather than with a Griauly of the Rocky Mountains. But to our adventures.

Will (my chum) and I had been followed by half a dozen of the Eskimo sledge-dogs, and these careered about on every side, hundreds of yards away, clearly showing that if a Bear were snoozing anywhere in the $t$. anship (Jove! I'm forgetting where we were), he would run the risk of disturbance. Will carried a heavy English Express rifle-the caliher of which I. have forgotten-carrying in explosive ball, while my shooting-tube was a $45-90$ Winchester repeater, that threw on expansive bullet. Anything that this bullet

[^4]struck, in the animal line, had a large apertare made in its anatomy. Besides this, we each carried a Colt's Frontier revolver (warranted to floor you every time) and murderous looking bowies, for close quarters. Yes, we were out for scalps.

An ice-field is not a pleasant promenade; there is nothing billiard-table-like in its surface, and what with climbing 'bergs and getting over creoasses in the best fashion pos-sible-above all, the uncertain light-our progress was slow.

Hello! That dog seems as excited as it he'd strack a bone. What the dence is upl Will says a Bear, and adds: "I think we'd better go back to the ship; I-I-I'm cold."
"Nonsense," I say; "you'll have all the orew laughing at yon. Come on."

Yes, it was a Bear, standing back on an enormons 'berg, and striking out at the yelping pack that surrounded him with his awful-looking paws-a great yellow brute, with discolored fangs and cavernous mouth, from which issued clouds of steam-like vapor. I too wished I were at home.
"W-W-W.W-Will, are yon ready?" I managed to ask.
"W-w-w-wait till I get off my g-g-glove; d-n it."
"What's the matter?"
"I've blistered my fingers on the trigger-gnard."
"Any man." I said, with withering sarcasm, "who doesn't leruw enough not to touch iron when it's forty-five below zero, without a glove on, isn't qualified to pound sand."

He withered under my cutting words, and tried to brace up for the impending ordeal.

I looked at the Bear. There he still stood, and I thought it strange, for I'd given him lots of time to get away. There was nothing for it but to fire now. Will's eye was on me, and he was laying low to get even. I knelt down and aimed carefully, my companion doing likewise. It's a mighty different thing shooting at a target and drawing a bead on a Bear that can jast claw you to pieces and eat you after-
ward. I ached with longing for him to run away, bnt he seemed in no mood for running. It was mean of him not to, for I hadn't done anything to cause him to wait for me. One, two, three!
Bang! bang!
The Bear gave a low moan and sank on the ice, blood pouring from his chest, and the dogs worrying the inanimate carcass. We knew then that he was dead.
"I don't think much of Polar Bears, anyhow," quoth Will: "we're their medicine, every time. Didn't I just drop him!"
"You be hangeả," said I, indignantly; " $I$ killed that Bear."
"No, yon didn't; I killed him."
"Well, don't let us quarrel. Come and look at him."
On one side of the breast-bone a hole twice the size of one's fist conld be seen; on the other, the explosive bullet had done its work. We had both killed the Bear.
"Will, we're Bear exterminators from Chicago. Our mission on earth is to clear out the entire genus Ursus maritimus. Forward! march! Our task is but legun."

We kicked the dogs off the carcass, and scrambled on. The Bears seemed to know that two Illinois terrors were out, for they laid low, and for some time we could see none. After another hour's scrambling, we saw one waltzing in the distance, and the dogs sighting at the same time, soon brought him to a stand. This second Bear wasn't as big as the other, but he seemed far more active, and, before we got near, had managed to reach two of the dogs-with what result need not be said.

We were cool and collected. Why should we fear? Hadn't we just killed one Bear, off-hand! Will gave the signal this time; but, hang it! that Bear didn't drop. He charged throngh the dogs and came straight for us. I plunged in another shot, and missel; so did Will. The Bear was thirty yards away, and I had only two shots left, for I had forgotten to recharge my magazine. Will had none. Bang! Another miss, and one shot left! Will was
trying to hide in a crevasse. I wanted to badly, but conldn't, for I scale one hundred and ninety pounds, and take a big hole. The Bear was now ten yards away. Should I try my last chance? No; best wait until he was closer, and then one shot more. I knew the revolvers would be of no more use than pea-shooters against the brute.

How I wished I'd stayed at home, and not come on this fool's errand! I knew I had to die some day, but it wasn't nice to think of being masticated ly a big, dirtylooking, fish-eating Polar Bear. And then to have the Foxes gnawing at my bones, and fighting as to which should get the ones with the most marrow! Oh, dear! how I did want to go home!

I glanced at Will. He was pale as death.' The hole wasn't large enough to cover him, and the worm had turned. He knelt on the ice, knife in one hand, Colt in the other. As I looked, he fired a shot that I should think went about ten feet over the Bear's head, and the revolver nearly jumped out of his hand; but the intention was good, and I forgave him.
"Will," I said, " I've been mean to you sometimes, and you've played it low-down on me on several occasions, but now that we're going to be coffined together in a measly Bear, let's forget our differences, and forgive one another."
."All right, old boy," he answered; "adiell until we meet again-in the interior of the Bear."

The brute was but five feet from the muzzle of my rifle now, and as he came on, head well up, I aimed at the base of the throat, pulled the trigger, and the next thing was knocked over backward, with the Bear atop of me.

I have suffered terrors before. I have been in a railway wreck; have even acted as marker in a ladies' revolver shooting-match, and, after enduring many agonies of apprehension, have received a bullet in the leg from a fair champion's weapon; I have been asked "my intentions" by a muscular papa, but I never suffered before as I did there for a few seconds, which seemed to me so many hours. I
knew the Bear was dead, but Will thought he was eating me, and bullets from his revolver were plowing around in horrible fashion. It wos hard, to have escaped the Bear, and then to have one's friend let daylight into one!

At length I got my mouth clear of fur, and contrived to yell that all was right, and Will ceased firing.

After some hard work, he got the carcass off me, and I was free, though soaked with blood from head to foot.

My shot had taken effect in the center of the Bear's chest, and caused instant death, but the impetus had carried the body against and over me.

Will and I have a hide each, and you should just hear him tell of onr exploits on that memorable day.

## THE BLACK BEAR.

By Col. George D. Alexander.

THE Black Bear of North America resembles the Brown Bear of Europe more closely than that of any other of the Bear species. Our Ursus Americanus never attacks a human being unless provoked or wounded; the Brown Bear is more ferocious, and is often the aggressor. The formation of the head of the Black Bear is one of the noted peculiarities that distinguishes it from the Brown Bear. The curve of the facial expression from the top of the head to the nose is this distinction, not unfrequently rendering the shot of the hanter ineffectual. A bullet striking the front of the head of this Bear will, if not driven by a heavy charge of powder, almost invariably glance off, causing only a momentary stanning, from which it rises with increased ferocity; and unless the hunter is close enough to use his bowie or cane knife, he may be either fearfully lacerated or killed.

The Black Bear lives to the age of some twenty years in captivity; how much longer in its wild state, I am unable to say. It is extremely timid, dreading no animal so much as man. Its hearing is so acnte that the slightest noise, the mere cracking of a dry twig, catches its attention. It is seldom still, except in its bed or lair; the head in constant motion, to catch the least sound of danger.

The female produces two young in February, called cubs. The mating-season is in July and August. At three years old, the female is usually a mother. The male is not a monogamist, like the Lion or Tiger.

In size, the male is much the larger; when fully grown, is about three feet high, and often pulls the scales to some (247)
six to seven handred ponnds. The female never attains to such size and weight.

Once, in an overflow in the Arkansas bottom, I found three cubs floating on a $\log$, too small to have teeth large enough to bite. I supposed they belonged to two mothers,

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since I had never before found more than two following the dam.

The Black Bear is an omnivorons animal. When pressed by hunger, it will eat anything that is edible. It hibernates during a part of the winter; that is, if fat, it seeks caves or hollow trees in which to lie-sometime in the month of December, in sonthern latitudes, earlier in more northernuntil the'warmth of spring makes it come out in quest of food. During all this time, it lies almost dormant, sucking its feet like the Opossum and Raccoon, as it were to exist off its own fat.

In the wide bottoms of the Mississippi River and its many tribntaries, the male Bear will hibernate under large piles of cane, which, like a hog, it gathers in some dense cane-brake, where it is not likely to be disturbed.

When America was discovered, no animal of its kind was more numerous than the Black Bear, from Canada to the Gulf of Mexico, and from the Atlantic Ocean to the great plains east of the Ror Mountain Range. It frequented all the mountains, the thickets of the vast plains, and every creek, river, and bayou bottom. At the present time, its habitat is confined to some portions of the various ranges of mountains south of the St. Lawrence River, the Great Lakes, and, east of the Mississippi River, to parts of those portions of the Mississippi River and its tributaries which are yet unsettled, and where it has been able to escape destruction from hunters. Some few are yet found in the dense thickets of the Colorado, Trinity, and Brazos Rivers.

Still-hunting was the mode of killing the Bear by the early settlers of the American Colonies. Except in the Alleghany and Blue Ridge Mountains, but few Bears would now be killed by a still-hunter. In fact, they have become
so scarce' that it requires not only a good pack of Bear-dogs, but the very best start-dogs, to enable the Bear-hunter to be successful.

Forty-nine years have passed since I went on my first camp-hunt, in search of Bear, as a protégé under the most successful Bear-hunter in the Alleghany Mountains. Though no Bears were killed, and I saw no Bears, yet I acquired a vast fund of knowledge of the habits of the Bear, which subsequently proved of great advantage to me while hunting in the Far West.

To give the reader a correct insight into the mysteries of the Bear-chase, the habits, and modes of pursuing the Bear, I will relate what I learned from this noted hunter.

My room-mate at Washington College, Virginia, was a son of this old hunter. By special request of my father, I was granted a week's furlough to go on this hunt. Our camp was pitched in a part of the mountains bordering on the Cheat River, a locality famons for its many Bears and Panthers. A good, dry place was found under a largu, shelving rock, and close at hand flowed a clear, rippling brook, fringed with ivy and laurel-bushes.

After we had eaten our supper, I begged the old hunter to tell us some of his escapes from the she-Bears whose cubs he had taken while the mothers were absent, but which had returned in time to pursue him.
"Boys," said he, "it were best I should tell you how to still-hunt, and instruct you as to what you should do provided we find a Bear to-morrow. Probably we shall go by a cave where I robbed a she-Bear of her cubs, and got this scar, that I shall carry to my grave, in a hand-to-hand fight with her.
"Bears are exceedingly fond of all kinds of fruits and nuts, especially grapes and chestnuts. As soon as the spring opens, the female takes out her cubs and goes feeding with them early in the morning. After she has got her breakfast, she either goes back to the place where she brought forth her young, or to some thicket, there to lie until late in the evening. The best time to hant them
is early in the morning, or a short time before sundown. You must make a deadly shot, or you will not get that Bear, if shot near night. If the old she-Bear has to go some distance to feed, she leaves her cubs in their den, and on her return it is likely you may get a shot. You may find her while she is tearing to pieces rotten logs in search of insects.
"If her cubs are with her, the chances to get a good shot are better than if she is alone. The cubs are as playful as kittens, and while they are tumbling over one another, and grabbing at a bug or worm that the mother has found, she is not so cautious in looking out for a hunter. If she is alone, there is no animal I know that is more timid and suspecting. I have seen them rolling over heavy logs, tearing them to pieces, and almost at every moment looking aronnd to see if anyone was approaching. At the least noise they hear, they rear with their fore feet on the log, and listen intently, and then, if the alarm prove false, resume their search-it was only a Deer passing, too far away to be molested by them, but the noise was not that of man. Perhaps it was made by hogs rooting and grunting.
"How changed is everything! They rear again upon the log, turn their heads in every direction, to locate the precise spot where the hogs are feeding. They instinctively know how far off it is-they have located them. Now they step along so softly that it is difficult to hear the least sound of their feet; now they stop and listen again. See them crouching to the ground! They have discovered that the hogs are approaching, and feeding toward them. They have approached sufficiently near, and, with a bound, they rush forward and seize the largest.
"The Bear never makes a mistake as to the largest and fattest hog. No sooner is the hog caught than the Bear begins tearing and eating the squealing victim, regardless of how much it squeals, until it has gorged as long as it is possible to eat, when it ambles slowly away to some dense thicket, there to lie down until hunger compels it to return to the remains of the hog.
"The Bear does not keep watch, like the Panther, over its prey, to prevent other animals from eating or dragging it away. The Panther that has caught a Deer, after eating as much as it wants, usually seeks some tree near by, and there, extended at full length on a limb, keeps a close watch of the carcass, which it has covered with leaves, to conceal it from buzzards and crows.
"Again, I have seen the Bear return to the $\log$, after listening intently, and renew its search for insects, when I would imitate the bleats of a fawn when seized by some voracious animal. No more listening now; but onward, with terrific growls, it would rush to the spot, right up to the muzzle of the gun, to be stopped only by a welldirected shot. I am inclined to the belief that were the gun to miss fire, the Bear would, in such a case, attack the hunter.
" Again, I have, after the Bear had returned to its feeding, stepped a few steps on the dry leaves and twigs. There was no mistaking that ominous sound; no listening, no stopping; but, as fast as its legs could take it, through brush, briers, vines, or cane, it dashed, as if life and death depended on its movements, and wonld not stop until it had reached its place of safety. It recognized the sound as well as if it had seen the hunter.
"After the Bear leaves its winter quarters, it eats whatever it may find, not only insects, but young cane, craw. fish, roots that are edible, mast of all kinds, hogs, the young of cows and Deer, sheep, carcasses of animals that have recently died-if very hungry, not disdaining a meal from a putrid carcass.
"The Black Bear is exceedingly fond of honey, and rarely fails to get the honey when it has found a bee-tree. After night, it will leave the mountains and go to the. farms in search of food. Should he find a hive of bees, he will boldly carry it off, and, knocking it to pieces, eat the honey, regardless of the stings of the whole colony. On several occasions, I have caught them in large Bear-traps, using honey as a bait. Those traps were made of logs, in the
shape of a pen, with a falling top, all so strongly put together that the animal could not break out.
"When I have found them ravaging a corn-field, I have sometimes set a musket to kill them as they got over the fence. It is a Bear's habit to go Into a field and return at the same place. A knowledge of this enables the hunter to use either the gun or a large steel-trap, fastened with a heavy log chain to a log. When caught, its great strength enables it to get out of the field and drag the $\log$ to some distance in the forest, until exhausted. The hunter follows the trail, and shoots it the next morning, without any danger to himself.
"Later in summer, when the lakes or bottoms of the large southern rivers have dried down to shallow depths, the Bear takes to them, and, by muddying the water, kills with its fore paws the fish that rise to the top. They are remarkably fond of fish, and will not eat a spoiled fish as long as they can catch the live ones.
"As soon as the mast begins falling, they cease fishing, and take to the mast. The white-oak acorn is a favorite food. I have killed many a Bear while 'lopping.' This is an expression used by hunters to denote that the Bear has climbed a tree loaded with acorns, and is breaking down the limbs. The hunter hears the noise, and, by cautions creeping, gets sufficiently near to shoot the Bear before he is discovered. Should the Bear hear him, he will fall to the ground, and run off, apparently not the least hurt by the fall.
"As soon as the chestnuts ripen, is the best time for the still-hunter. This is the best season for finding Bears in search of chestnuts; and not far from us are a number of chestnut-trees, where I am in hopes of finding some Bears 'lopping' to-morrow morning. You boys go to sleep now, for long before the stars disapptar I will rouse you to eat your breakfast, and then to follow me, as silent as death when we approach the trees. As we go along, I will show you by what marks and signs I manage to find Bears when still-hunting."

According to his promise, we were roused, and in Indian file we accompanied him. As soon as it was light enougil to see, the old hunter pointed to a rotten $\log$ torn to pieces, and the ground rooted up as if done by hogs. I said to him that I thought it was hogs.
"Look here," said he; "don't you see that broad track sunk in the soft ground? Is that like a hog's track?"
"No," said I; "that is a nigger's track. Some nigger has been here digging worms to catch fish."
"Wrong again. Look! you don't see the long, prominent heel and broad bottom, like a negro or a human being. Can't you see the marks of the claws? The nigger's feet have no claws. No, that is Bear-sign; and it is a big Bear. It did this work last night. Be silent, and perhaps we may find it 'lopping'.'.

As we silently followed, the old hunter pointed to a beechtree which a Bear had climbed, and the scratches looked as if recently made. Soon I saw him pointing to leaves turned over. Going to the place, he scraped away the leaves, examined closely, and whispered, "A Bear did that."

Ere long, we went by a chestnut-tree, and he pointed to a pile of burs near the foot of the tree, where a Bear had gathered the chestnuts and eaten them at his leisure. This pile lie examined closely, and then said it had been done several days before, but it proved to him that the Bears were now "lopping."

Presently he stopped. It was now light enough to see quite plainly. He listened for some time; then, pointing in a certain direction, whispered: "It is a Bear; he is lopping about a quarter from us. Don't say a word; be sure not to cough or sneeze, but follow in my tracks, and, above all, don't break a dry twig-if you do, the Bear is lost to us. Should I get close enough to slioot, both of you run up to the tree, to prevent him from coning down. Should it fall, both fire into it, aiming behind the shoulder. I will be up with you, and before it can rise I will use my knife."

Unfortunately, before we got in shooting distance, my room-mate, who had caught cold, was compelled to cough,
and that lost us the Bear. We heard it fall out of the tree and run. "No use to follew," remarked the old hunter. "We must either seek a different portion of the mountains to find another Bear, or turn our attention to killing some Deer and tukeys. This liear will tell all the Bears in its mage about us, and before to-morrow morning there will not by a Bear in five miles of this place."

Thus I lost the sight of a wild Bear, and did not see one until 1844 found me on the banks of the Mississippi River, where it was easier to kill a Bear than to find a squirrel at the place where $I$ am now living. But 1 treasured ap the many remarks of the old hunter as regards still-hunting.

Coming to the West, I found some Bear-hunters employing dogs to find and bring the Bears to bay. It was much easier, nad far more interesting, to use a pack of cood Bear-dogs than to go tramping through thlek forests In seavel of sign, or to lie in wait to kill one that has taken to the corn-field, or is going to the hog-pen to carry of a fat porker.

There is no doubt in my mind that the Black Bear's proper domain is is cold country, and that it grows to a much larger size in the Alleghany and Blue Ridge Mount. ains than it attains in the thickets of the Brazos River, provided it lives a life undisturbed by hunters and the inroads of civilization.

The cubs follow their mother from the time she leads them from their winter quarters until shig hibernates the following winter. The mother frequently returns to the place where she brought forth her young, to rour another litter. The yearling cubs seek a hibernation not far from the mother. The second year, the cubs keep togeiher, and dr not forget their mother. I have often seen the wother with her two small cubs anil her cubs of the year before feeding together in sloughs, in search of craw-fish nad succulent roots. When three years old, the female usually becomes a mother, and lives by herself, while the mule wanders to another place, apparently forgetful of its mother or sister.

Only once in my experience in Bear-hunting, in the West, did I witness a mating of Bears. This occurred on Cypress Creek, in Arkansas, in the ronth of July. While out watching for an Otter in the cieck, my attention was attracted, by growling, to a part of the creek bottom where the woods were thick, with many large beech-trees fringing the bunks of the creek. I recognized the noise, and silently made my way to the place whence it came. The sun was just rising. I discovered four large Bears, and one not so large, which I knew to be a female. The four inales were growling, knocking one another with their paws, while the female stood a few steps away, as unconcerned as it is possible to imagine, yet slyly taking in, with one eye askant, the maneuvers of the males. For several minutes, I saw the males testing their strength and ability by rearing as high as their fore paws could reach on the body of a gigantic beech, and then making lung and deep scratches upon it. Each in turn would do this. As soon as one made the trial, he would scrateh back with his hind feet, just as dogs do when meeting another strange dog. The female commenced ambling off, satisfied, ns I supposed, which one was the superior, and to which she would transfer her love.

Though it was not the season to kill a Bear, yet the very black. glossy uppearance of the largest male made me envy his steece. I wanted it for a rug in my bachelor home. Before this old fellow cond get out of sight, a "ell-directed shot from my double-barrel rifte dropped him dead in his tracks. The skin I kept for several years, until the moths destroyed it.

I have learned from experienced Bear-hunters that they have often found cypress-trees in sloughs with deep somathes, made liy male Bears in the mating-season, after gnawing the tree with their teeth. A fimons Bear-hunter, now living near me, informed me that on the Neenock Lakes of Bossier l'alish, around which in former times was an almost impenetrable cane-brake, he saw a cypress-tree that had been gnawed so much by Bears as eventually to kill the tree. He informed me that the Coddo Indians told him
that this tree was gnawed in the mating-season, they claiming to have seen the Bears at it, and that the female granted her favors to the Bear that gnawed the highest.

There is no precise time for the Bears to libernate. An old Bear will not hibernate until it is fat, or the weather becomes very cold. I have found Bears feeding or traveling as late as the middle of January, in the Sonthern States, and I have found fat, old Bears bedded under piles of cane as early as the middle of November.

In the early ' 40 s , the time I came to the West and settled in Mississippi, the Bear-hunters met with no difficulty in killing Bears by still-hunting. In fact, this was the best mode for those who made it their occupation, either for food or profit. The settlers in the wide botteins of the Mississippi River, the St. Francis, White, Arkansas, and Ouachita Rivers, of Arkansas; the Yazoo, Sunflower, and Big Black, of Mississippi; the Red River, of Louisiana, and Sabine, Neches, Trinity, Brazos, and Colorado, of Texas, preferred to still-hunt the Bear. Hunting with dogs made the Bears more iimid, and drove them farther back into the dènser thickets.

The Bear-hunter saved the hams and shoulders for his family, or sold to trading-boats that were found on all these rivers. The skins were dried and sold, but the sides and all the fat he could collect from the entrails were tried out and the oil brought a high price, in those early days. The fat of the Bear, like that of the Opossum, has not that greasy, fatty taste of hog's fat, but is very palatable, and a great quantity can be eaten without producing nausea of the stomach.

But few Bear-hunters used dogs for hunting Bear in those early times-only in cases where one hunted more from the love of $i t$, and the intense excltement it produced, than for pecuniary profit. To me there is greater excitement in hunting Bear with dogs thau in any other method, and so it is with many others.

There is as much difference in the pleasure and excitement of hunting Bear and Deer with dogs, and in that
derived from still-hunting, as in running Foxes with a fine pack of hounds, and in stealing on a Fox to shoot it before it gets to its hole in the ground.

In this climate, Bear usually hibernate some three months of the winter. When pursued-by dogs, it is very difficult to make a poor Bear take a tree, or be brought to bay by the very best team of dogs. If very fat, it dashes, when started, through the densest thickets it can find, with a noise equal to that of a horse-cart when the horse runs away with it, snapping the cane, vines, and briers in its way, like pipestems; turns not a line from a straight course, unless meeting with some impediment it can not surmount, and does not stop until it reaches the densest part of the thicket, where it will stand to bay behind a clay-root, until the pack of dogs is wearied out, or a hunter arrives to kill it.

When his dogs have either treed or brought a Bear to bay, an old Bear-hunter uses a great deal of caution, and 'puts in practice the very best mode of stalking the Bear. He knows that if the Bear should either hear or smell him, it will fall out of the tree and run off, or leave the clay-root and make off to another thicket. Hence, to get in shooting distance of a Bear at bay, he must be certain of the direction of the wind, and take that approach to the Bear with the wind blowing from the Bear to him. He must cnt every vine and stalk of cane in his way, make nct the slightest noise to give the animal the least intimation of his approach, until he is up sufficiently near to use his knife, if his team of dogs are able to pull the Bear down for a moment, and if not, then to make a sure and fatal shot with hisgnn or riffe.

A favorite weapon of mine, the last ten years that I hunted Bear, was a No. 10 double-barrel Greener gun, of ten pounds weight, which I loaded with a patched ball to fit the barrels. I found this weapon shot, atshort range, as accurately as the best of rifles. This gave me the advantage of a double shot. With cne barrel, generally, I could knock the lear down, and before it could rise fo kill my dogs, I could put the muzzle against the head, or its side, and a seconl shot produced instani death. To make assur-
ance doubly sure, I followed it up with the use of my caneknife.

I have hunted with several packs of Bear-dogs owned by famous Bear-hunters. These packs generally consist of from twenty to thirty dogs-a team sufficient to pull a big Bear down for an instant, and only an instant, when, if not killed by the knife or gun, it wonld rise, slake off the dogs as a huge Mastiff would a Fice, and then several of the pack would be killed in less time than I employ in writing this sentence. A trained team of Bear-dogs will not rush on a large Bear to pull it down until the hunter gets up to them, and with yells urges them on the growling, snapping, euraged brute. The best Bear-dogs I ever owned or hunted with were pure thorough-bred black-and-tan Deer-hounds. They proved the most reiiable for striking cold trails, and the very best fighters. I generally crossed upon the Scottish Lurcher the black-und-tan Hound, and often this cross upon a good fighting cur, for the bulk of the team. The Collie crossed on the Ilound made a splendid fighter.

Bull-dogs and Bull-terriers were of no account. I have seen powerful Bull-dogs turn tail and run home at the sight of an enraged Bear. A cross of the Bull-dog on a cur or Hound always resulted in the death of the dog. The hunters wanted dogs, not to hold on, like Bull-terriers, but, on the order of the Greyhound or Wolf-hound, to snap and spring back, and never to give up fighting in that manner until the Bear was killed.

I have known a llound bitch to fight a Bear for fortyeight hours, until a hunter came to her assistance und $\therefore$ illed the Bear. It was over thirty miles from where the Bear was started to where it was killed. No other brem of dogs would have followed a Bear so long.

The best gun that the early Bear-hanters of my time used was a first-class double-barro! shotgan, No. $1:$ in bore, with thick harrels, using a ball that fitted them, to be aatched as in a smooth-bore rifle.

A cane-knife, from eighteen to twenty inches long, of the best metal, and weighing not less than fon to five jounds,
was u vade mecum-an indispensable weapon for a Bearhunter. The double-barrel gun (all were muzzle-londers in those days) might snap, but there was no discount on a good cane-knife-so called, because it was used for cutting cane.

When possible, a donble-harrel ritie was used. Not many hunters could procure a first-class double-barrel rifle. I found the majority of hunters using the Miss ligger. My own weapons were a Manton double-barrel mazzle-loading shotgun, No. 12, thirty-two inches long, weighing uine pounds, and a Wesley Richards double-barrel rifle, carrying forty balls to the pound, thirty inches long, and weighing ten pounds. I used a knife, a genuine bowie, with un eighteen-inch blade.

At this time, my weapons wonld be a Winchester Express rifle, a Colt's revolver (army size), and a bowie-knife. The rapid destruction of the big game of America is due to that powerful weapon, the Winchester Express. During the big overflows of the last fifteen years, the Black Bears have been nearly exterminated by hunters in canoes threading the mazes of the Mississippi bottoms and its big tributaries. Their victims were perched in trees, which they could see a long way off, and canoe-loads were slaughtered by this deadly weapon in a day.

The dogs I shonld recommend to the novice, in getting together a pack for Bear-hunting, would be, first, the genuine thorongh-bred black-and-tan Deer-hound. It is the best fighter, the best "stick-to-him" dog I ever hunted with, and decidedly the coldest trailer. I would want some half-dozen of these, and at least fonr of them bitches. I luve found the bitch the best trailer, the best fighter, and the best stayer. I had a hitch that once followed a Bear for forty hours, until some hunter killed the Bearhow minch longer she would have followed is itle to say.

Having secured the hounds, I would urge the liunter to get several Scotch Lurchers, to ctoss upon his black-andtans. Next, about a dozen of the best entrs and shaggy. coated mongrels that he coald secme, and especially two or threr gennine wire-haired Scotch-terriers. These last are
essential in very dense cane-brakes. They can get under the cane and pinch a Bear so tight that it is forced to tree or bay.

With such a pack, and one reliable start-dog, the young Bear-hunter can yet find good sport in Coahoma and Bolivar Counties, Mississippi, Ashley County, Arkansas, and along the White and St. Francis Rivers. A few Bears are yet to be found along the Ounchita, Red, Trinity, and Brazos Rivers. Occasionally a Bear is found crossing the dividing ridges between these rivers. Sometimes the Texas cowboy has the pleasure of roping one, crossing a prairie from one river bottom to another.

Last summer I discovered the tracks of an old she-Benr and her two cubs, that had been fishing in a lake in the Red River bottom, in Red River Parish. Several years have passed since any were seen in that parish before, and undoubtedly these wandered from the Sabine River, in Texas, across the hills to Red River.

In regard to still-hunting the Black Bear, having tested both modes of hunting, I can only give my own experience. Right here I would say, that it would be at this time a rare accident for a still-hunter to find a Bear in our southern country, in tilis way, except in overtlows.

In early times, when Bears were numerous, the stillhunter could watch certain places where the Bears crossed from one thicket or cane-brake to another-it being their habit, like Deer, to use the sume points at which to crossand get a shot some time during the day. Again, he might find a "stepping-place," which I will later deseribe, and get it shot. Or he might succeed in stalking one while feeding on the pecan-mast, or water-oak acorns. Should he desire only to kill a Bear ravaging the corn-fields in the roasting-ear stage, by watching the gap where they crossed the fence, the chances for a shot would be good. At that season the Bears are too poor to be eaten. Though this is interesting, yet it is only cold-blooded assassimation.

How can it compare with the fieme baying of n noble pack of dogs, the augry growls of the enaged Bear, with
wide-extended mouth, head in constant movement, now turning around to snap the little terrier that is pinching its hind legs, now rushing on some lapless hound that has ventured too close, which it kills with a blow of its fore paw, as it reaches out to draw its victim to its gnashing teeth, for that bite, the coup de grace that ends its life. Conscious that its victim is dead, the Bear hurls the lifeless body aside, or tramples upon it in the fierce struggle, never to be touched by its teeth again. Now it snarls, growling louder, when it suddenly dashes on another dog. It is the hunter's favorite. Perhaps he has approached just in time to hear the bones cracking to giblets in the powerful jaws of the monster.

Witness the fury of the balance of the pack, which, animated by the presence of their master, at his fierce shout, dash upon the brute, regardless of talons and teeth, tearing it down to the ground in an instant, and, before it can rise, see that hunter, with riffe in left hand, his long, gleaming cane-knife in right, with the spring of the Tiger, bound forward and bury the knife to the hilt through the heart of the Bear, and then bound back. See the great beast, the moment it is struck, hurl aside the dogs as mere flies, and rising with a roar, dash forward in the direction whence the blow was struck, reckless of what may be in its way, until it drops stone-dead.

In all good humor, and with due regard to the tastes of the still-hunter, I would ask, can there be any comparison in killing a Bear in this manner with that of stalking and shooting it down in cold-blood? One might as well compare the shooting down of an approaching enemy, by the unseen skirmisher, with that of the deadly conflict in a hand-to-hand charge, either with the glittering bayonet or the flashing broad-sword. As to which leaves the more enjoyable feelings in the human breast when the struggle is over, and comrades are seated around the camp-fire, there can be but one answer.

As for my:elf, give me the pack of resolute dogs, baying an old male of ten years, backed against a clay-root, rather
than all the still-hunting ever done by Indian or white man!

Unless the young hunter possesses great nerve, I would caution him against shooting a Bear in the head. Oftener than otherwise the animal is missel, or only stunned, and the hunter may lose his life, or be fearfully maimed. Let him shoot behind the shoulder, about two inches to the rear, and near the center of the body. He must be cautious in approaching the game. It is best to shoot the Bear in the head as it lies on the ground, lest it may rise and kill him.

His chief object should be to make shots that shall produce instant death, or such prostration of the vital organs that it can not injure either himself or his dogs. He should ever have in view the safety of both himself and pack.

Dogs are more apt to be killed by wounded than unwounded Bears. Hence, old Bear-hunters are always fearful of letting a novice get the first shot at a Bear at bay.

With the exception of killing a Bear at bay, the next most interesting and exciting lunt is in the stalking and shooting one at its "steppings." When a hunter has found one of those places, with proper caution he can invariably get a shot; whether he is successful depends on his nerve and on his being a sure shot.

It is an interesting sight to see a Bear "stepping." None but very fat Bears make them. A week or two before going into winter quarters, the Bear selects some marshy gronnd, or a slough, along the side of which it can muke a promenade night and morning before belding. The place must be soft enough to permit his feet to sink at least a foot or uore in the mul; and his steps are the sume distance both going and returning, just us regular us the steps of a veteran sentinel. After the Bear hins sidedet the hhee, and stepped for some fifty to seveity-fire yumb, he hirms and retraces the same steps until satisfied.

The the is elther in the morming, mhont laylight, if just before sunset. I have fonmd them oftener muking their promenade in the moring than in the evening. They simin
to take great delight in it. Only once huve I observed two Bears at it at the same place. It seemed great fun to them to step immedhately behind one another, the larger in front, in the sane track, which soon becomes a foot or more deep, and presents the same appenrance of steppings as those of a drove of hogs in muddy hnes.

These Bears would push one another around as they got to the end of the track, and each would endeavor to be the first to resume the round, the foremost looking behind it, to see what the reur one was doing, several times before it got to the beginning-point. Once I saw them rear up like two dogs at play, with fore paws over the other's shoulders.

When a Bear comes to these stepping-places, it appears very timid-looks in every direction to discover some animal, and sometimes cronches to the ground to listen better. Then, if satistied by heuring no noise and observing no unusual object, it sniffs the wind in every direction, to locate a scent, and when entirely satisfied that all is right, begins its promenade. When tired, or when it is time to seek its luir, it trudges slowly awny.

To be successful, the hunter must be assured of the side on which the Bear comes to its stepping.grounds, and then be certuin to be there sufficiently long before the Bear will come to the place, not to be scented ly it. He must be cautions to ascertuin the direction of the wind, and take that position on the side of the steppings near enongh to make a deadly shot, and yet not too close, lest the Bear scent him. That position should he near the opposite end of the steppings from which the Bear begins to step, so that he may take alvantage of the momentary halt that a Bear makes as lie turns aromid to retrace inis steps; mad with a double-hitirel No. 12 hammerless gm, grasped as if in a vise, stock firmly pressed to shoulder, forcfinger ready to tomeh the left trigger at that particular moment, and with uif omee and a quarter ball, driven by three and threefourths dmous of powder, with a rising am, about two to thren Itrines buck of shomider, fuir ine hers below backbone, lim will anampedy drop the hair demil in ita tracks; or, should
the hunter prefer the rifle, let him use a Winchester rifle, and an Express ball prepared for thls special work. For what particular purpose the Bears take these regular steppings, I hive never been able to determine. I have seen none but very fat Bears at it.

A poor Bear, in the Sonthwest, seldom, if ever, hibernates. I have found them feeding every month of the winter. It is the opinion of many hunters with whom I have conversed about the steppings made by fat Bears, that it was done for the purpose of preparing their systems for the libernation of three or more months.

It is now only a question of time, and that very short, when the Black Bear will be exterminated, unless some may be preserved in captivity in zoological gardens. Take the fifty years of my experience with Bears-estimate the vast number that existed in the United States at the beginning of the year 1840 with the sparse number in 1890 -and one may reasonably conjecture that forty years hence it will be almost impossible to find a wild Bear in the same space of territory. At the present time, Bears are still found along the Appalachian Range of mountains, in the wide and unsettled parts of the Mississippi bottoms and all its tributaries, and also in the Trinity, Sabine, and Brazos bottoms. Right here where I am now living, twenty-five years since Bears were abundant; two years since, two Bears were killec! on the opposite side of the river; hut now, I firmly believe, not a Bear could be found in a radius of one hundred miles, their extermination being due to the advance of railroads, that cansed the country to be settled, and to the rapid improvement in fire-arms and ammunition.

I append here accounts of several hants in which I participated in my early life, and which accounts I contributed to the American Field, some years ago, unde" my own initials.

Solitude is more company to me than society. When I want genuine comfort, freedom from all care, give me my
office-room, without a human being in sight or on the premises; nothing around me, in the form of living objects, save my mute and faithful dogs and my handsome Maltese cat. My thoughts are my companions, affording more real enjoyment, for the time, than the society of even my most cherished friends. There are times when the sight of a human face is positive misery; when spoken words, whate'er their import, grate harshly on the ear; when conversation becomes repulsive, and when I would rather walk the depths of some vast forest, alone, communing with Nature in her varied garb, than listen to the speech of the wisest of philosophers, or the witticisms of friends.

Such is my condition now-this cold December nightas I stir the fire and look with deep regard on my affectionate dogs-the handsome Beauty, the dignified Black Maud, and the frolicsome Dan's Trump-that are crowding closer to the fire as the cold wind howls through the key-hole, and the rattling snow and sleet beat against the window-panes. The sash and shutters vibrate, and, raising the window to close the shutters, the furious wind drives into the room a mass of sleety snow, and the lamp is extinguished. I return to the fire, and gazing npon the bright, glowing coals, my mind reverts to such a night just fortyone years ago, when I was lying under a tent on the Ouachita River, in Arkansas, with three boon companions. In memory I go back to the previous night, when seated about the hearth-stone of one of the most excellent ladies it was my fortune ever to know-no one save her only child, a most ardent sportsmian, her niece, and myself being her company. It was a lovely night, just a week before Christmas. Mrs. Candace Taylor-such was the name of this lady-brol the silence, as we had sat for a few minutes each buried in theughts and plans of the coming festivities, remarking:
"Brother Mary and his wife will be here from Tennessee next week, and I want some Bear-meat for my Christmas dinner. I presume they have never eaten a piece, and I want to show them what good eating a piece of fat Bear-

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meat affords. Howell, my son, can't you and Colonel Ago down to the Ouachita to-morrow, and, with Mr. Littlejohn and Albert Williams, kill a Bear for me?"
"Nothing would suit me better," replied Howell. "I have been thinking of it for some time; and if you and Agnes (that was his wife's name) can stay here alone for a few days, we will be off to-morrow morning just as soon as you can get our eatables ready. I know Colonel Awill go, as he has been talking for some time of joining me in a Bear-hụnt."
"You and Colonel A- get ready to leave at daylight; Agnes and I will order the provisions cooked to-night. You shall not be delayed by us."

This settled the matter. I ordered my horse, rode to my office, and packed up everything necessary for me to carry on such a hunt. I cleaned up and put in order my fine double-barrei Manton, sharpened my cane-knife, melted the lead and ran a number of bullets to fit the bore, cut the patching out of thin buckskin, and, lastly, filled my canteen with the best of old Bourbon, to keep me from catching cold; for, though it was then so warm, I anticipated a spell of intensely cold weather before we should return.

The next evening found the party seated around the camp-fire on the west side of the Ouachita River, which was then low enough to ford at the old Coleman Ford. We had two tents-one for the whites, the other for the negroes. Howell Taylor had a large pack of black-and-tan hounds. Parson Littlejohn had several good hounds, and some shaggy half-cars-excellent fighters. Albert Williams had about a dozen mongrels, all of which were good fighters, and one or two good start-dogs. Howell had one bitch, called Kate, that would rather run a Bear than eat a piece of venison. She could trail up a Bear that had passed two days before, would run it for forty to fifty hours before quitting it, and 1,3 equally good on Deer.

This sensible animal seemed to know just what kind of game her master wanted her to run. At home, if he wanted to go 'Possum-hunting, all he had to do was to

- have the negroes who accompanied him show their axes to old Kate. It was enough; she was seen no more until she had treed the 'Possum or 'Coon. Did he want to hunt turkeys, of which there were numerous flocks in the surrounding hills, he had only to show Kate a turkey before leaving the house, take neither horn nor any other dog along, and he would be assured Kate ran nothing but a wild turkey that day.

Our party were all smokers. Volumes of smoke were issuing from the door of the tent as one after another related past experiences in Bear-hunting, and thus we whiled away the greater part of the night. Littlejohn was an eloquent preacher, who loved to hunt as well as he did to preach; Taylor was beginning to study for the ministry; Phillips was, I believe, a member of the church, while the only sinner in the party was myself. Prayers were fiually said, and we had just lain down to sleep, when the sky darkened, the wind roared, and a perfect Texas " norther" set in. Rain fell in big drops; then it turned to snowing and sleeting. A more sudden change I never witnessed. The shivering dogs crawled into the tents, and piled or cuddled on the bedclothes, in spite of all our efforts to keep them out.

At no period of iny life do I remember a colder and more disagreeable night. As to sleeping, it was out of the question until tired nature gave way, and we sank into fitful and unrestful naps.

About the break of day we were roused by the whining of old Kate. After we found it impossible to keep out the dogs, they had been allowed to stay in the tent, and the flap had been pinned down too tight for them to get out. Howell got up, and remarked: "Scme varmint must be passing by, from the signs old Kate is makirg, and I believe it is a Bear."

Opening the flap of the tent, he let her out, and gave her a stirring "hie on." But she needed none, for, with a bound and a note that told us plainly it was a Bear, she rushed down t':e road, with all the pack at her heels. Not a hundred yards out, the whole pack gave tongue. It was an
exciting time. We were all up-negroes and whites-in a moment, as excited a party as one ever sees on a Bear-hunt.

Phillips, an experienced Bear-hunter, who knew the whole country, rushed out of the tent, listened awhile, and then said:
"It is. a Bear, sure enough. The warm weather has caught him out of his den, and he is now making for the big cane-brake at the mouth of Cypress Creek. We are bound to kill that Bear. It is going to be a long and severe chase, but we shall kill. Come, let us eat a bite; drink plenty of coffee, for you will need it all to-day. Fill your pockets with lunch while the negroes are saddling our horses, for that Bear is to be killed, no matter what occurs. Howell, you and Littlejohn are better prepared to die than that sinner, the Colonel, and myself; for if you drown, you will be sure to go to the happy hunting-grounds, while it is extremely doubtful about us. Now, you must ride for life down the bank of the river, until about eight miles below here, to the crossing. You can not ford it now, but you nust swim your horses across, and then, if you are not drowned, ride like Jehu up Cypress Creek to the big brake. Yon wil! be in hearing of the dogs all the time, and if yon don't get a shot, the Bear will cross the river to this side, and make for the cane-thicket at the mouth of the Little Missonri River. Perhaps the Colonel and I may get a shot at it on this side. If we do not, it will run the thicket, and after awhile cross back. Then you can kill it as it swims back to yoll on the east side."

These instructions were rapidly given as we gulped down our breakfast. It was an awful time to be out on a Bear-chase, especially as long a one as we expected this one to be, for none but a poor Bear would be out of winter quarters at this time of the year and in this storm.

Even now, as I sit peering into the fire, I can see the persons whom I have represented, as plainly as if alive, and as if it were'but yesterday. All have long since passed from earth, and have gone to their long resting-place, whither I am fast traveling. I alone am left to recall the scene, and
to muse over it. Sixty-seven winters have whitened my locks, but I am a youth again this cold, bitter night, as eager to join in a chase of this kind as I was on that memorable morning. Yet I am sad. Why should I be their survivor by so many years? I, whom if death had taken 'twere no loss to the world nor society, while those who have gone had so much at stake-so many friends to whom their departure was a grievous calamity. What would have been their feelings could each have unveiled the future, and have locked twenty years ahead?

I close my eyes, and still their faces are seen on every side. The wind still moans in fitful gusts-now it is a fierce howl-and louder rattles the sleet against the panes. Can there be some unseen spirit near, even in this room, who calls back from the murky shadows of the past this weird scene, and impels me to put on paper the recollections of that day? Or has the soul of my comrade in battle, my boon companion in sports of the forest, come back to earth, and is he now holding silent communion with my own spirit, almost emancipated from its dull clog of mortality? And does he bid me record the events of this chase, the most memorable of his short life? Ah! it must be so. Involuntarily I seize the pen, to write the thoughts that come trooping from the reservoir of memory, too fast for anything but an electric pen and an eager hand to record.

Taylor and Littlejohn have mounted their horses, and the snow-flakes have hidden them from view as they hurry, with the speed of the wind, to get in hearing distance of the pack, which has now crossed the river.
"Take your time, Colonel," said Phillips, "and eat a-plenty. It will be a long way in the night before we again see this camp-fire, in my opinion. We are going to have the severest chase ever seen in this bottom. I had no idea of starting a Bear until we got to the forks of the rivers. That Bear is poor; and I believe it is a barren female, else the old hussy would have been in her bed, sucking her paws and thinking of the babies she was to rar. As it is, she will never take a tree or go to bay.

She will run and whip off the dogs all day, and it is so cold they will stop at night. If we kill her-and I vow she shall die-it will have to be done alead of the dogs, while she is crossing back and forward from the two big brakes."
"Mount," I replied. "I have eaten all I want, and . Tke has put us up a good lunch-sufficient for all four of us. Besides (showing him the canteen), I have got something to warm the inner man, if we should feel like freezing."

A dash down the road revealed the trace of the dogs and Bear.
"What a whopper it is!" said Phillips, who led the way, I following at a break-neck speed. Some two miles below, we saw where the Bear had left the road and crossed the river, at one of its widest bends. No dogs were in hearing. I wanted to swim our horses across, and follow after them.
"N $\delta$," said Phillips. "No use to do that: before we could come up with them the Parson and Howell will have crossed, and will be ahead of us. Perhaps they may kill; but 1 think the Bear will cross back to rnn to the forks before we can get opposite the mouth of Cypress. Hurry up, and ride for all you are worth, to get there ahead of it. These dogs mean business, and so must we if we are to be in at the death."

Four miles more brought us to where the Parson and Howell had swum their horses across.
"How is this?" said Phillips, as we pulled up to listen, and examine where they had crossed. "I thought I told them to be sure to go to the ford, and then ride up the creek, so as to intercept the Bear. It is now evident that when they got here they heard the dogs fighting the Bear on the other side, and not being able to wait to go down two miles farther, they have crossed, and, no doubt, are not far behind the dogs. Let us make for the ford as fast as we can ride, and wait there. If the Bear attempts to go up Cypress Creek, then we will have to swim across, and endeavor to get up with the dogs."

A dash of a mile more, and Phillips stopped suddenly. He had caught the sound of the baying of the dogs, and of the voices of Littlejohn and Taylor. The roar of the pack was plain; and not far behind them we could hear the yells of the two hunters.
"They must have gone stark-mad, to be hollering to those dogs," exclaimed Phillips, as he muttered to himself words I did not catch-but no doubt they made the recording angel blush for their irreverence. And then he added, louder, "The Parson has forgot where he is, and thinks he is preaching to a lot of mourners at a camp-meeting. He will never kill a Bear at that rate. Ride, Colonel; I hear old Kate half a mile ahead, and she is just pinching and pushing that Bear for all he is worth. The Bear is aiming to cross at the ford, and if we can get there in time we can get a shot before it passes the road."

It was true. Old Kate was at least three to four hundred yards ahead; and it was a ride for life and death for us to be there before they crossed the river, which we undoubtedly would have done, but for having to make our way around a number of large trees that the wind had blown down that night right across our path.

This gave the Bear the inside track, and we had the melancholy satisfaction of hearing Kate's fierce voice as she plunged into the cane on the right. She and the Bear had passed before we got to the ford, which the rest of the pack were now swimming.
"Let us stop here until the dogs all cross, and when they see me they will pursue the Bear with renewed courage," said Phillips.

Just then I saw the Parson and Taylor dash down the bank, right into the water, behind the last dogs. What cared those gallant hunters for ice, snow, and swimming water in a time like this! Up the bank they came, as wet as water could make them, and still yelling.
"Stop that infernal noise," shouted Phillips, as he dashed forward to head them off. "Stop that noise. If you had not yelled so, you would have got a shot long ago,
or the Colonel and I would have killed the Bear while crossing here. It will never stop, nor return here, unless all noise ceases. I will follow the dogs, and endeavor to head the Bear from runuing up the Little Missouri. Parson, you and Howell take down the Ouachita, and if you hear the dogs fighting close, make for the dogs; but, for God's sake, do no more yelling. And you, Colonel, stay back, and if you hear the dogs returning, dash back to this place. The Bear will cross back, if it is not shot."

With these injunctions, he was soon lost to view, and I shouted to the Parson and Howell to "hold on for a moment." Pulling out my canteen, I said, "If there ever was a time in your lives that you needed spiritual revival, it is now;" and I handed it to them. A deep swig by both, and soon they were out of sight, while I rode slowly down the road. It was only a few miles down to the junction of the two rivers, which was almost inaccessible, on account of the bluff banks below.

Half an hour elapsed, with the roar of the pack all the time ringing in my ears, and if any man thinks it was easy for me to sit there and listen to it, he has never ridden to hounds when they were in red-hot pursuit of a big, hungry Bear. After awhile the sound died away, and I could hear nothing of dogs or hunters. It was growing fearfully cold; the snow was at least three inches deep, and the woods were fast becoming an iceberg. A more disagreeable day a lot of hunters never endured.

It recalled to my mind the memorable time in the life of the immortal Davy Crockett, when he had to climb a tall sapling, on the banks of the Obion River of Tennessee, and slide down it, all night, to let the friction warm him to the point of not freezing.

Late in the afternoon, I thought I heard the sound of a gan, and after some time the notes of old Kate could be distinguished. The Bear was evidently making back.

Then I heard nothing more for an hour, when another gun broke the blast of the storm. Soon old Kate's note came plainly, followed by those of the whole pack. These
sharp barks denoted that they were in close quarters, and that a death-struggle was going on.

They were coming nearer and nearer to me. It was too much for a hunter to stand and not be allowed to participate. Putting spurs to my horse, I dashed ahead to meet the dogs, regardless of the instructions of Phillips, and thereby I lost the chance of killing the Bear. The sleet was so heavy that I must have made a world of noise. This caused the Bear to turn and give Parson Littlejohn the chance of putting in a good shot. The cane was so thick that the only damage he did was to break a fore-leg, low down, which did not impede the Bear's flight a great deal; but it made her more savage than ever, and several of the curs were soon left dead on her trail.

I attempted to head the run, but got caught in a vine, and while I was disengaging myself, I saw Taylor dash by me, liatless, and regardless of every impediment, intent on stopping the Bear from crossing the river, or killing it as it should cross the road.

Quickly cutting the vines that held me, I galloped behind him, and saw Bear and dogs crossing just ahead of him. The fight was so close that he could not shoot, for fear of killing a dog. Down the bank plunged the Bear, with old Kate nipping her hind legs, and the balance of the pack at her sides and around her. Oh, but she was furious! Her angry growls could be heard above the roar of the dogs, and then a fearful shriek told that some dog had been bitten, or struck by her paw.

Into the water plunged the Bear, with dogs pulling at her as she swam across, and Howell, on his gallant gray horse, Felix, swimming so high that the water did not cover the skirts of the saddle. Several tinnes I saw him raise his gun to shoot, and then take it down. I was right behind him, my horse swimming, not like Felix, but so low that I was wet to the neck.
"Don't shoot!" I shouted to Howell. "If you kill her, she will sink, and we will lose her." But as she rose to ascend the bank, he could not restrain his impetuosity, but
fired, wounding the Bear and killing a dog-fortunately not old Kate. Before we crossed, the Parson and Plillips were in the river, urging their horses to swim as fast as possible; and by the time we had got a hundred ynrds ahead of them, both had crossed, and were coming at full speed behind us.

It was no use for me to try to get ahead of Howell. The Bear was evidently weakening, and the dogs were growing more and more furious. A dash of a quarter of a mile, with Howell not fifty yards ahead of me-he right behind the dogs-and the old Bear plunged into a cave-root, and turned for her final stand.

In a moment, Howell was on the ground. Reckless of everything, he rushed almost into the jaws of the beast, and fired a fatal shot into her side, just behind the shoulder, the gun almost touching her body. She sank to earth, and before she could have risen, he buried to the hilt in her heart his glittering bowie-knife, and gave a long yell of triumph.

By this time, the Parson, Phillips, and I were up, and, dismounting, we all united in a genuine old Bear-hunter's yell, and hugged each other, just as men and comrades do after a deadly and successful charge of a battery.

Then the question came up, "What must we do with the Bear?" The sun was nearly down, it was ten miles to camp, and a river, deep and two hundred yards wide, to swim-we were wet, hungry, and the cold was growing more intense every moment. The Bear proved to be a barren female, as predicted; but she was not poor, being, on the contrary, in good condition for that time of the year.
"What shall we do?" was now the absorbing question, and it was quickly decided to let her lie there until the next morning, when she could be taken to the hills, skirting both the Ouachita and Cypress Creek. Our wagon could be crossed over at the Coleman ford, and driven down the Camdell road to a point where the Bear could be taken to it. There was no help for it, but the river had to be

crossed again-no fun in it this time, as the cold water baptized us again nearly to our necks.

Horse-flesh was not spared on the eight-mile ride up the river, and in less than one hour avd a quarter we were in sight of our camp-fires. Phillips was in the lead, and as he saw the cheerful blaze, shouter back:
"I guess those negroes recoll"wed what I told them this morning, that if they did not have a rousing fire, and plenty of coffee, hot as conld be made, I would duck them in the river until nearly drowned."

It was a rousing fire, large enough to cook a whole ox, and was made out of the best of seasoned hickory-trees. We were nearly frozen before we got there. Our clothing was a mass of ice, and long icicles were hanging from our hats, while our beards were covered with ice.

It took us but a moment to dismount and drink a quart of strong coffee. Soon the negroes had stripped off our clothing. By bathing in cold water, and by hard rubbing, we were prepared for dressing and eating. The lunch I had taken had been so saturated in crossing the river that I threw it to the dogs-at the killing of the Bear. Now we fell to, as if we had not eaten a mouthful for a week. Never did I enjoy a meal more. After the inner man was thoroughly satisfied, and our pipes lighted, each had to relate what he did and saw during the day. I must remark that we were not unmindful of our horses, that did us such noble service all day. No sooner had we dismounted than a negro stripped each horse and rubbed him dry, walked him back and forth that he might not be too suddenly cooled and then each was blanketed and tied near the huge fire. The dogs that survived the chase were abundantly fed, and given straw to lie on, near the fire; but old Kate was permitted to occupy a bed by the side of her master. Five dogs were missing-four killed by the Bear and one by Taylor.

After we had lain down, Phillips said he headed the Bear before it got through the big thicket on the Little Missouri, and had a chance to have killed it while fighting
the dogs, but both barrels of his gun missed fire, and before he could pick powder into the tubes and recap, the Bear made off; that he succeeded again in cutting it off from going up the river, and got a shot, but his horse was so frightened by the sudden appearance of the Bear that he missed. However, he accomplished his object, and drove the Bear back toward the Ouachita, where it was met by Littlejohn, whose shot broke a fore leg.
"Tell us, Parson," I said to Littlejohn, "why did you and Taylor cross the river before going down as far as the ford?"
"Oh, that was because we heard the pack fighting on the opposite bank, and supposing the Bear was at bay, Howell and I could not stand it, but were compelled to go to the relief of the dogs. By the time we crossed, the Bear had moved on, and we followed on the tracks, as fast as we could, through the big cane-brake. While I was making my way through it, I came across a fresh track of a large Bear, and following it a short distance, $I$ saw its bed, where it had bedded for the winter. It was a much larger track than that of the one we have killed."
"That is glorious news," remarked Phillips. "We will kill that Bear to-morrow, in less than half an hour after we start it. As certain as we are alive this night, that Bear will return to its bed. It has only been frightened by the dogs, and, I doubt not, it did not go a quarter of a mile before it stopped, and finding the dogs had gone out of hearing, it has returned, and is at this moment sucking its paws and thanking its stars that the dogs did not get after it."

As Phillips was our leader on this hunt, we resolved to follow his plan the next morning, which was to send the wagon and negroes to the Camden road, and direct them to go to Nix's place, near the Cypress Creek bottom; for Colonel A - to go with them, and to get Nix to show him the hollow leading from the road to the Ouachita bottom, and for both to take stands on the run Bears usually made in crossing from the Ouachita across the hills to the junction of Big Tulip and the Cypress Creek.
"Nix has often hunted Bears with me," said Phillips, "and knows all the runs of the Bears. As Colonel A- has not yei, had a shot, I propose to try his nerve to-morrow. It is the shortest route for us to get to our dead Bear, to cross the river here and go down until we strike the tracks of yesterday, and then follow on until we come to the bed which the Parson found. Should the Bear not have returned, old Kate will trail it up; no discount or odds to be taken on that Bear-we are bound to kill it. It is now turning warmer; the snow has stopped falling, with every evidence that we shall have as pretty a day as the past has been blustering and cold."

This plan being adopted, we were all soon sound asleep, and slept until the negroes roused us to breakfast, before the stars had disappeared. In less than an hour, and before the rising sun gilded the tops of the trees and flashed its rays on the icicle forest, I had arrived at the Camden road with the wagon, and the negroes drove at a sweeping trot to John Nix's house. It was not more than seven miles distant, and I got there before the family had breakfasted. I ate a second breakfast with John, and told him the occurrences of the day before and our plans for this day.

In a short space of time he was ready to accompany me. We galloped down to the bottom, not a mile distant, and took our stands.

I did not have to wait over half an hour before I heard the whole pack break into one continued roar, bearing direct to me. Then I thought they were going to pass me, and, as directed by Nix, I rode about a quarter into the cane, until I struck a slough, along which the Bears frequently ran when pursued by dogs. This slough separated the two dense points of the big brake. Stopping, I heard them coming directly toward me. Dismounting, I tied my horse, and, cocking my gun, stepped a few steps into the cane, so as not to let the Bear see me should it run down the slough, and yet be able to shoot either on the slough or in the thicket.

It was plain the dogs were up with the Bear, and fighting all they could. The noise the Bear made with its growls,
and snapping of cane, and the cry of the dogs, gave me the buck-ague terribly. I was afraid the Bear would not pass by ine. But a few minutes elapsed, however, before I saw the cane and snow and icicles snapped and pushed aside, and not ten feet from me rushed the tremendous, savage beast. I don't think he saw me. I fired the left barrel, loaded with an ounce-and-a-half ball, into his side, just back of the shoulder, and as he sank to the shot I jammed the muzzle of the gun to the eer and fired the second shot, bursting nearly half of the head off. Old Kate had him by the hind leg before I fired the second shot, and the balance of the pack were np before the last smoke cleared away. Three long blasts of my horn announced my victory, and in a few minutes the Parson, Taylor, and Phillips dashed up, with Nix a short time after them.
"Just as I predicted," said Phillips; "this old Bear had gone back to his bed. Old Kate winded him at least two hundred yards before getting to the bed. She did not open, but broke for the bed, with all the pack following her. I am confident the Bear had heard ns, and had left the bed before the dogs got to it. It was so fat it could not run far before the dogs came up with it, and then it was a fight from there on until you shot. I feel assured it would not have gone a mile further before turning to bay, and some one of us would have got the shot had you not headed it."

The run was short, and the ending glorious. There was nothing more to do now but get our two Bears together, skin, quarter, and divide, and then to return to our respective homes; and thus ended the most trying, the coldest, and most successful hunt I ever made in Arkansas.


## THE BUFFALO

By Orin Belknap ("Uncle Fuller").
ROM the savannas of Georgia to the shores of the Great Lakes on the east, and from the waters of the Gulf of Mexico to the plains of the Saskatchewan on the west, the American Bison (Bos American:s) rommed in numbers countless almost as the blades of the grass upon which they fed, when the destroying European first met the eastern vanguard of their mighty host. From the brine of the Atlantic to the cliffs of the Rocky Mountains, wherever the camp-fire of the wandering Indian shone in wigwam, lodge, or tepee, within sight of its curling smoke was found the strange ruminant, the robe, flesh, and sinews of which constituted tho principal source of his wealth, and the possession of which rendered him the most independent of savages, and the best fed human animal on the globe.

The amazing numbers and wide distribution of the Bison greatly facilitated the early exploration and development of the interior of the great continent.

The rugged Scottish pioneers of the Selkirk Settlement, on the shore of Hudson's Bay - whose only communication with civilization for more than one hundred years was by means of the single ship which made its annual voyage from Europe to those lonely shores-found, in the grazing herds which dotied the adjacent plains, a plentiful source of the flesh diet so necessary in that high latitude; while the hardy noyageur of the Hulson's Bay Company, on his commercial mission to the savage tribes of the far Northwest, carried with him into the frozen regions, in the form of pemmican made of the dried flesh and fat of the Bison, the only food that proved to be nutritions enough to (4.0)
sustain him amid the fatigues of his cold and harassing march.

The Leatherstockings of the American frontier, in their far westward wanderings; the Mormon enthusiast, in his search for the latter alay Zion yet to be established on the shore of the lonely inland sea, and the swarms of goldhunters hurrying to take possession of the new-found El Dorado of the Pacific, all hailed with delight the first glimpse of the shaggy herds; while the band of explorers under Fremont, gaining at length the freedom and plenty of the Buffalo-range, when Carson had killed for them a Buffalo cow the fat of which was two inches thick, made a great feast, and until long into the night held high carnival in honor of reaching the land of plenty, where gaunt hunger no longer crowded for a front seat by the hunter's camp-fire.

Nowhere else on the earth had so large a game animal been distributed in such vast numbers over the face of a continent. In the language of an old hunter, the plains were "one vast robe!" And surely never, in all the records of our planet, was chronicled another such a story of multitudinous slaughter, of any part of the brute creation, as is contained in that of the extermination of the American Buffalo. They have vanished from the face of advancing civilization as mist-clouds vanish before the rising sun. A little handful of their number, wisely protected by the fostering care of the United States Government, yet find an insecuse retreat among the mountain fastnesses of the Yellowstone National Park; yet the mighty herds which but a few short years ago swarmed innumerable upon the great plains are to day extinct. Their bleaching bones have long since been gathered for fertilizers, and the furious minstorms of the plains are fast obliterating all traces of their old wallows.

Yet the American Bison was a hardy animal, and, until the coming of the European, was more than a match for Wolves, Bears, and for the myriads of Indians who fed upon him. The color of the Buffalo was a dark brown, verg-

ing upon black; his muzzle, horns, and hoofs, black; his liead and shoulders massive in size-the shoulders rising in a hump a foot or more in height; his hips low and small, but well rounded; his tail shorter than that of the domestic ox, slim and smooth, tipped with a tuft of long, black hair; his legs, below the knees, wonderfully slender for so huge an animal; and the weight of a fully developed male probably not less than two thousand pounds.

His horns were short, and large at the base, tapering rapidly to a point, and curved in the best shape for attack or defense, as many an untrained horse found to his cost; and these formidable weapons were, in the case of the male, almost completely lidden in the mass of long, curly, black hair which enveloped his head, neck, and shoulders, and which gave to him, when seen in front, a peculiarly Lionlike and very formidable appearance.

The female, in shape of body, resembled the male-high at the top of the shoulders and low at the hips, but destitute of mane, and with her body covered, as were the hind quarters of the male, with a coat of short, thick hair, underlaid in winter with fine, soft fur. The scent of the Buffalo was very keen, and his speed almost equal to that of the horse.

Among his numerous natural enemies, the Indian and the large Gray or Buffalo Wolf worked his greatest destruction, although many different animals preyed upon the weak and the defenseless of the herds; and Daniel Boone is said to have once shot a huge Panther while the fierce brute was clinging to the back of a Buffalo, in the days when Kentucky was yet the "dark and bloody'ground" of the savage.

With the advent of the Euronean came improved weapons and greater intelligence to the work of destruction, and the extermination of the Buffalo began. The half-breed Indians of the Red River of the North, who for many years hunted Buffaloes, and fought the Dacotahs on the plains to the southwest of the Selkirk Settlement, were among the first to reduce Buffalo-hunting to a system, and
for generations safely depended upon this animal for the support of their families.

Each hunter was outfitted with one or more ponies to be used in running Buffaloes, and with a strange kind of home-made, two-wheeled cart, made wholly of wood (not so much as a linch-pin of iron in all the train), and drawn by a single ox working in shafts. Their primitive caravan, quite independent of roads, moved freely in any direction across the broad plains; and as the cart-wheels were never greased, their coming was heralded by a most unearthly screeching. At night, the carts were drawn up in the form of a circle, and after the oxen and ponies had grazed, they were driven inside the inclosure and the gap closed, rendering a night stampede impossible.

When Buffaloes were sighted, the mounted hunters approached them armed with flint-lock shotguns loaded with ball, and with a powder-horn with a large vent (im order that powder might run rapidly from it), from whici: the stopper had been removed before the chase began, and with the mouth filled with musket-balls just small enough to roll freely down the gun-barrel. When their fire had been delivered, the hammer and pan-cover of the gun were drawn quickly back, the muzzle of the gun elevated, the open powder-horn inverted, and its contents permitted to run freely into the gun-barrel until the hunter judged that a sufficient quantity had run in, when the horn was dropped and allowed to fall into its position, right end up, by the hunter's side. The muzzle of the gun was then drawn up to the hunter's lips, a bullet dropped into it, and the wild, rough rider was ready for another victim. All this had been done with the horse racing at top speed. By keeping the muzzle of the gun elevated, and only depressing it at the instant the quick aim was taken and the trigger pulled, it was no uncommon thing for half a dozen Buffaloes to be slain by a single hunter in one mad race.

Five good milch-cows were vainly offered for the first Sharp's carbine ever introduced on the Red River.

A most singular accident occurred, many years since, during the march of a party of these half-breeds in search of Buffaloes. While the long line of slow-moving carts was crawling over the plain, a large bull Buffalo was seen on the left, running rapidly toward the caravan, at rightangles with its line of march. . His course was down the wind, which blew strongly, and consequently he neither heard nor smelled the carts until close upon them. The men scattered along the left side of the train, supposing that when the Buffalo should see the caravan he would swerve to the right or left. They were amazed, however, to see that the huge bull, detecting at last the immediate presence of his foes, and seeing at the same instant a gap in the close line of carts, charged straight for it, to go through the line. At this a loud cry was raised, which attracted the attention of a man on the other side of the carts, and seeing the gap, he also attempted to run through it, to learn the cause of the unexpected uproar. Just as the Buffalo entered the gap, the man, slightly in advance of the opening, ran around the tail of the cart, and caught sight of his dreaded foe at the very instant of the impending collision. Instantly lowering his massive head, the great bull, with a vicious upward stroke of the terrible black horn, caught the poor fellow under the chin, and, with instantly broken neck, he was hurled high in the air, to fall limp and dead upon the ground, while the great brute galloped away over the plain, leaving the companions of the fated man too stupetied with horror to avenge his death.

Three principal causes of the extermination of the Buffalo followet in regular order. First, the introduction of the liquor traffic among the Indians of the plains, thereby stimulating the slaughter of the Buffaloes, and the dressing of robes with which to purchase this fiery curse of the Indian race. The unscrupulous liquor-trader sought the gathering-places of the western tribes, and, at the frequent risk of his own life, conducted his infamons traffic,
when a small tin cup full of liquor was the regular price for a pony or a robe. As the orgies of the savages grew more frantic, and as their drunkenness deepened, the watchful trader, becoming a cunning workman in the cause of temperance, slyly inserted first one, then two, and finally three of his fingers into the little cup while measuring out the liquor; and the potations of the stupid Indians grew less in quantity as their wealth decreased. Finally, after having stripped the camp of its last robe-often the last covering of the bed of the Indian mother and her children -the greedy trader, urged to sjeed by the fear of vengeful pursuit, hurried night and day toward civilization, eager to place as great a distance as possible between his load of ill-gotten spoil and its legitimate owners before the stupor of their intoxication had subsided, and they had become fully aware of the depth of the degradation into which they were plunged by this unholy trade. May the wealth acquired by this worse than infamous traffic perish with those who accumulated it!

Aside from this nefarious traffic, the legitimate trade of the regular fur companies had grown to colossal proportions. The amazing number of Buffaloes slaughtered by the Indians of the plains is indicated in the following report of a partner in the American Fur Company (Mr. Sanford), made to Lieutenant Fremont, in 1843, and which is worthy of the most careful study:

[^5]or dressed as robes at any season. Probably not more than one-third of the skins are taken from the anlmals kiiled, even when they are In good season, the labor of preparing and dressing the robes being very great; and it is seldom that a lodge trades more than twenty skins in a year. It is during the summer months and in the eariy part of autumn that the greatest number of Buffaices are killed, and yet at this lime a skin is never taken for the purpose of trade.

What a record of slanghter is this!
Next in order came the invention and development of the modern breech-loading rifle, the highest type of which, in the estimation of the successful Buffalo-hunter, was, nnquestionably, the heavy-barreled, double-triggered Sharp. It is often remarked by western hunters that the Sharp riffe exterminated the Buffalo.

And finally came the last factor in the problem of the extinction of the Bison-the building of the Pacific railroads. This opened up the very heart of the Buffalo-range to the last of the scavengers-the indefatigable skin-hunter. It also checked the wanderings of the herds, and limited the area of their range.

An intelligent Sioux Indian, of the Santee tribe, with whom the writer became acquainted while $\uparrow$, ping furred animals in Dakota, twenty years ago, after describing to him the last Buffalo-chase he ever enjoyed, during which a wandering band of forty-seven Buffaloes were all slain, added:
"I told the other Indian boys, then, that the railroad was now built across the plains, which would stop the march of the Buffaloes, and that if we lived for a hundred years we would never see them here again."

Many able assistants in the final work of the skinhunters were found in the crowds of settlers along the frontier, who hinted for meat. Nothing but the hams of the Buffaloes were brought into the settlements by the fall hunting-parties, and at times the choicest meat went begging at five cents a pound.

The favorite method of the skin-hunter was to crawl within rifle-shot of a herd, and, while lying prone upon the earth, to open fire with his heavy rifle, with its heavy ball
of five hundred grains or more in weight; and the stupid Buffaloes, not seeing anything in the whole range of their vision save a very innocent-looking little smoke-cloud, and (the wind favoring the hunter) hearing but a slight report, would often stand until, one by one, to the last member of the band, they would be piled in unsparing slaughter on their native plains.

Following the line of the newly constructed Pacific railroad, as a continnally advancing base of operations, the skin-hunter "carried the war into Africa," and the shattered remnants of the once mighty herds, exposed to the converging fire of hungry Indians and greedy whites, melted like snow under a summer's sun.

The war was ended-the chase was done; whitening bones and bleaching skulls alone marked the path of the leaden cyclone of suffering and death, and the Bison of America, together with the Mastodon, and the Great Auk of the northern seas, lives only in listory.

The impulsive and pardonable wrath of the American sportsman, who, as he contemplates the extermination of the Buffalo, feels inclined to hold up to universal execration the Buffalo-skin-hunter, is little felt or shared by the philosophic naturalist. Much as the latter may be inclined to regret the disappearance of so interesting and valuable an animal, a careful consideration of the subject prompts him to graceful acceptance of the inevitable in the disappearance of the Buffalo, as he fully realizes that the presence of vast hordes of animals as gigantic, as stupid, and as intractable as the Bison, would inevitably lave been, if stringently protected by law, a menace and hindrance to advancing civilization. Only small bands of these animals could have been secured from the eager hands of unscrupulous, law-breaking hunters, both white and red, as in the case of the small band already mentioned in the Yellowstone National Park, or in the guarded seclusion of private ranches or parks.

The student of Indian history, also (who will not have failed to remember that permanent peace with the Indian
tribes of the great plains has ever been impossible of attainment so long as the warilke savage found an unfailing supply of meat wherever in his wanderings he raised his lodge-poles), in recollection of the blooly massacres of the past, and for the sake of the helpless women and children of his own race now scattered along the frontier in yet possible peril of the horrors of savage war, will incline toward an optimistic view of the question, and wisely conclude that the skin-hunter, with his big Sharp, instead of being the ogre of an untrained imagination, was not only a necessary evil, not only the necessary forerunner of civilization, but also that he was, after all, the true missionary! The imperative commands of Christian civilization were voiced in the roar of his big rifle; and with the extermination of their hitherto unfailing meat-supply, the red ferocity of the "Arabs of the New World" grew pale, as did the scattered bones which outlined the funeral march of the Buffalo!

The food-supply of a growing nation of people, already numbering more than sixty millions, imperatively demanded the use of the great plains for stocking the beef-markets of the crowded cities; and the lapse of less than a score of years has already demonstrated the wisdom of this demand, in the multitude of domestic cattle now roaming over all of the old Buffalo-range-a source of surply for the wants of man more necessary and reliable than that of all the wandering Buffaloes which ever lent the charm of their presence to the wild life of the plains.

In the year 1872 came the writer's personal experience with the Buffalo. It was even then evident that they were fast passing away; and we were obliged to go one hundred miles farther for meat that year than did the hunters of the year befo: The latter part of June was selected for the start; for, ithough we would be obliged to dry or jerk our meat on tide hunting-grounds, all reports from the gameregion agreed that the Buffaloes were steadily moving westward, and that should we wait until fall, the game would
be beyond our reach. The hunting-ground selected was the country lying between the Republican and Solomon Rivers, in Nebraska, to the westward of a line running south of old Fort Kearney.

Our party consisted of four men, with two teams of one span of horses each. M- and his son $\mathrm{E}-$-, a young man of some twenty years, were with one team, while Y- and I drove another. All were tenderfeet except $\mathbf{Y}$ - , who had been a night-herder with a wagon-train on the plains for years. Through lack of saddle-animals, all the hunting had to be done on foot. M-- and Ebrought small-bored, muzzle-loading rifles, in which they appeared to have great confidence. Y-carried a Spencer carbine, with forty rounds of ammunition, while I was armed with a Gallagher carbine, fifty-six caliber, using forty grains of powder. These were the best arms obtainable in our frontier settlement, and the choice of the most utterly worthless gun in America appeared to lie between the Spencer and the Gallagher.

The point-blank range of the Gallagher was one hundred yards, and while at fifty yards it would sling its bullet a foot above the center of the target, at one hundred and fifty yards the ball dropped a foot or more below. It was therefore necessary to get, if possible, within just one hundred yards of the game. The Spencer appeared to have a somewhat flatter trajectory, judging from the few instances, during the targeting of the carbines, when we found means of ascertaining which way the balls really went; but as its bullets did not seem to be at all partial to any particular direction, all were well satistied when at the close of the hunt its forty rounds of ammunition had actually killed two Buffaloes without crippling a single hunter.

Our road ran westward until, at a point on the Platte River a few miles west of Fort Kearney, it turned south toward the Republican River, distant some fifty miles, where we forded the strean and camped on its right bank. The hot weather compelled us to travel slowly, and the one
hundred and fifty miles of the journey consumed a week's tine.

After leaving the Platte River, the road entered the sandhills, and as the country looked favorable for hanting, E -_ and I started to hunt together, on a line parallel with the course of the slow-moving wagons, in the hope of finding an Antelope. After an hour's tramp over the sand, a fine buck Antelope was sighted feeding quietly in a little hollow surrounded by sand-hills, and we proceeded to stalk him as quietly as possible. A low sand-hill to the leeward of the unsuspecting quarry covered our advance until within one hundred yards. While still three hundred yards distant from our contemplated victim, the eager boy stopped, and in a hoarse whisper asked:
"How are we going te get that Antelope to the wagons after we have killed him?"
"We will not have any trouble in carrying him," I replied; for I had been there before.

We crept to the top of the sand-hill, cocked our guns, and slowly raised our heads above the grass to get a stand-ing-sbot at the sharp-eyed rascal. A red streak speeding over the opposite sand-hill rewarded our eager gaze, and having vainly' sent a couple of bullets in chase of the flying brute, we shouldered our guns and marched dejectedly back to the wagons.
'The Antelope in this part of the country had been much liunted, and had long ago been educated beyond the point of paying any attention to flags, lures, etc., further than to Hy like the wind in the opposite direction at the first sight of them, and had taught a crest-fallen hunter about my size that the sharpest-eyed brute that ever wore hair is the much-hunted Antelope of the plains. I have, on many occasions, caught first sight of them, but rarely have I been able to creep up and deliver my fire without being caught by that gaze which seems to sweep the horizon without an effort.

About half-way between the Platte and Republican Rivers, we saw our first Buffaloes. A band of half a dozen bulls,
chased by a mounted hunter, crossed our road half a mile in front of the wagons, and although we tried hard to head them off, we failed to secure one. A few miles farther on, we met a hunting-party leaving the range, and leading behind their wagon a horse which had evidently been used for running Buffaloes, and whose breast was ripped open in a most horrible manner, a long slit commencing between the fore legs and running up elear to the bottom of the neck. We inquires the cause of the herse's wound, and were told that it was caused by the collar of the harness, the unlucky hunter evidently being unwilling to confess his failure to stop the charge of an infuriated Buffalo bull with the breast of his untrained horse.

Nearing the Republican River, we met a man driving a nony-team, and inquired $0^{-}$him where the main herd of Buffaloes was. He replied: "Cross the river at the first ford you can find, go out on the hills to the south, and the whole world is black!"

Eagerly we pressed on, forded the shallow stream which ran swiftly over its wide bed of sand, and, gaining the south bank of the river, drove toward a grove of cotton-woods a mile or two above, to find fuel necessary for camp use.

As we turned the horses' heads up-stream, a large bull Buffalo appeared, walking rapidly from a ravine in the low hills to our left, across the bottom-land, toward the river. The day was fearfully hot, and the great brute was manifestly eager for water. Catching sight of the approuching wagons, he stopped to look, but apparently reassured by the slowness of our approach, he again walked swiftly on. He was now less than half a mile distant, and while $\mathbf{Y}$ who had seen such sights a thousand times, coolly continued the advance, driving the leading team, the other team was left to follow the wagon in front, while three excited tenderfeet, snatching their guns from the wagons, crept along close behind the leading wagon, watching with strangely beating hearts the advance of the mighty bull. He was very uneasy, and again stopped and gazed a few seconds at his advancing foes; then once again his
thirst overcame his fears, and with stately step the kingly brute came on. His course was diagonally across the kottom-land, down the stream, and we neared each other rapidly.

It seemed impossible for him now to escape us, and at a low signal we ran swiftly forward in front of the wagons, to get squarely across the path of his return to the hills. Quickly, as though on a pivot, he turned, and for the first time in our lives we saw the speed of a thoroughly frightened Buffilo, as he dashed across the level ground, still far in advance, and, in spite of our flying bullets, gained the hills unscathed.

The whole western, sky was now rapidly filling with angry-looking clouds, and as the sun sank to the horizon, the darkness came on quickly. Reaching the camp-ground, we had only time, after a hurried supper, to put things to rights, and fasten the wagon-covers more securely (for we had no tents), when it grew dark, and the storm burst upon us. Nearly all night it raged. Rain fell in sheets, while the almost incessant flashes of lightning illuminated the wild scene. The cowering horses, arching their backs to the falling rain, turned away from the coming blast, while the great cotton-woods, bowing their stately heads toward the plain, writhed and twisted as they wrestled with the gale; and the hunters drew the damp blankets closer around their ears, and wished for the day.

With the darkness of night the storm passed away, and the morning sun shone brightly on the water-soaked plain. All our plans for the hunt were now changed. Heretofore we had planned to lie in ambush for the thirsty Buffaloes as they came down from the hot plains to drink; but now, when every ravine ran full of water, and avery old Buffalowallow was a brimming cistern, it was evident that if we were to secure Buffalo-meat sufficient to load the wagons, we must climb the hills for it.

M—_ and E_accordingly ascended to the southeast, Y-_ remained to take care of camp, and 1 , shouldering the formidable Gallagher, wandered southward.

Following up a deep ravine, or valley, for a couple of miles, straggling Buffaloes began to appear on the hills, and a herd of several hundred came in sight on the divide to the right. A band equally large soon showed up on the divide to the left.

This began to look like business, and I stopped to plan an approach to the strange game, of whose habits I knew next to nothing, when I saw two large bulls leave the herd on the right and walk down the hill as though intending to cross the valley to the herd on my left.

Here was my opportunity. Thay would evidently cross the ravine half a mile in front of me, yet, as they were nearly a mile distant, I would have plenty of time to run forward, under cover of the bank, and secrete myself in front of them. Hurrying forward, I took position where I thought they would cross, and, not without considerable anxiety, awaited their approach. There was no chance of escaping the possible charge of a wounded bull should he sight me, nor could the oldest man in America tell where the Gallagher would carrom on the Buffalo should he be either more or less than one hundred yards distant.

After a long time, and when I began to hope that they had turned back, they suddenly appeared in the ravine two hundred yards above ine. One was the hardest-looking old "moss-back"--a term applied to the very old bulls, which were late in shedding their old coat of hair-I have ever seen; while the other was a splendid specimen-full grown, glossy black, fat and round-and I determined, as he stepped quickly across the bottom of the ravine and began climbing the opposite hill, to get him if possible.

It was useless to fire at that distance, so, observing that they were keeping on the crest of a log's back or ridge that rose between two small ravines tributary to the main one, I crept forward into the little ravine running parallel with their line of march, and, as they slowly climbed to the high platean above, vainly tried to get a shot at the big, black fellow without being seen byathem.

The black one walked in front, while the cld moss-back, whose wrinkled hide had apparently shed the snows of sixty winters, and whose races with the ponies of many a Pawnee and Ogalalla, long since dead, had stiffened his rheumatic old joints, crept wearily after him, as though in search of a good place to lie down and die.

Near the head of the ravine they stopped; and for an hour I waited for the old skeleton to walk on and give me a shot at the other, which stood just beyond him, and at which I could not shoot without exposing myself, which I dreaded to do with the wretched gun I carried. Finally I grew weary of waiting, and determined to start him. Rising up, I judged the distance at one hundred yards (it afterward proved to be about fifty), and fired.

Tom Hood, describing the sudden release of boys from the school-room, says:

> "There were some that ran and some that leapt, Like troutlets in a pool!"

Not a boy of all the class, however, could have skipped with this suddenly rejuvenated old Buffalo. The man who would "caper with him for a thousand mark" would be badly left, indeed. He seemed to rise up on his hind feet and pirouette with the agility of a Fanny Ellsler, while he looked hungrily around for the man who had trod on the tail of his coat; and had an observer been convenient, a solitary horseman might have been seen, on foot, with hair uprising and an old Gallagher in his hand, as he sped down the ravine, locking eagerly for a chance to crawl into a prairie-dog hole or climb up among the top limbs of a sagebush. The Buffalo had evidently been hit up in the hump, with the result of making him "fightin' mad."

When my heart had gone down in my body, and I was enabled to draw air into my lungs again, I found that they had both run on and joined the herd on the divide; and on trying to crawl within gunshot once more, some straggler caught sight of me and gave the alarm, when the whole herd run southward out of sight. The firing, and the panic
among them, had alarmed the others far on the west side of the valley, and they all ran off southward.

Slowly, and crest-fallen, I tramped back to camp. M -- and E -- coming in, reported having killed a Buffalo at the first fire, but this proved to be a wounded one, and unfit to eat. Wounded Buffaloes were to be found everywhere. The settlers along the frontier came with all known weapons in search of meat, and Buffaloes were shot with anything that would burn powder. Skir-hunters had been on the ground ahead of us, as the stripped carcasses proved, but we did not meet any. In fact, the land stunk with rotting Buffaloes, as the breeze many times testified when not a carcass was in sight.

Around the camp.fire that night the situation was discussed at length. Y - , who did not care to hunt, as it was old sport to him, and as he knew that his gon was worthless, kindly volunteered to haul the meat to camp and let us tenderfeet do the hunting. In fact, he killed only two Buffaloes on the trip. E-, the boy, was a gentlemanly fellow, and, although eager to hunt, expressed his willingness to do whatever the others wished.

M-, who, we had for some time observed, was not averse to letting us know that he thought $Y$ - - and myself very small potatoes as hunters, now volunteered the statement that E -_ and himself wonld have to do the killing. This was gall and wormwood to me, and, although nothing was said in reply, I inwardly vowed that the morning light would see the beginning of an effort to kill Buffalo, the best I was capable of making.

In the morning, $\mathrm{E}-$ expressed a wish to hunt with me, but, excusing myself, I sallied forth alone. M-and Ehunted together to the southwest, while Y-- kept the camp.

A mile or two out, I saw a very large Antelope feeding on the brink of a ravine half a mile in front, and as he, for a wonder, had not seen me, I ran down into the ravine and followed it up until opposite him, then crawled to the top of the bank, laid off my cap, and, peering carefully over the
crest of the hill, saw him lying down, one hundred yards distant, looking back over his right shoulder at me. I had never yet killed an Antelope, and, taking carefal aim, fired. The ball struck behind the shonlder, passed forward between the shoulder-blade and ribs into the neck, and, ranging parallel with the windpipe, clipped three of the ridge-like projections thereon, and stopped in the flesh of his neck.

Jumping to his feet, he ran some fifty yards, and I thought him unhurt, when, trying to draw his breath and the blood running into his lungs, he lowered his head, and the wheezing sound of his breathing gave notice of a hit. Still he ran on over the hill. Following, I jumped him again, shot him through the paunch as he ran; jumped him still again, and shot him through the heart, when he ran one hundred and fifty yards, and was not done struggling when I reached him -the hardest-lived animal I ever saw, for, be it remembered, the gun was fifty-six caliber.

This seemed a lucky beginning of the day's hunt, and, dressing him, I hurried on after Buffaloes. A herd soon appearing, I crawled up, and being careful of distance, succeeded in killing a noble bull, and repeated the operation twice more during the day. Feeling jubilant at my snccess, I returned to camp, and had just told Y- the story of my good iuck when the others returned.
"What luck?" asked M-.
"Ilhe boy has got three Buffaloes and an Antelope," replied Y-, before I could speak. "What luck did you have?" he continued.
" We have shot eight," replied M-.
My heart sunk, for I had hoped to equal his score, and had worked haid for it. Not until I felt thoroughiy humbled did we learn that they had shot at eight Buffaloes and succeeded in killing only one, which proved to be a wounded one, and E - afterward told me it smelled so badly they did not go within thirty yards of it.

Naturally enough, I felt better, and as M—_ soon afterward began telling, in a very modified tone of voice, of his
ability to dry meat properly, and of his willingness to let $E$ _- and myself kill the meat, while $\mathbf{Y}$ __ hauled it in, I began wondering what had lappened to him during the day, to frighten him into giving up the hunt without killing a single Buffalo. He never shot at another Buffalo from that day to this.

Peace again reigned in Warsaw, for I was perfectly willing to hunt with $\mathrm{E}-$, who was a very pleasant companion; and, although he hunted alone the following day, while I piloted Y —— to the dead animals, yet during the three succeeding days we were side by side, and he was only prevented from accompanying me on the last day by the fact that his feet were too badly blistered to go.

As the darkness fell around the lonely camp-fire, and the flitting shadows danced and waved along the edge of the surrounding gloom, the hunters drew near together in front of the cheerful blaze, and anecdote and reminiscence from the life-history of each served to pass the interval until bed-time; and, among the experiences that interested us, Y-_ told us of a thrilling sight, when he, together with others of the wagon-train with which he at that time belonged, watched a race where a human life seemed for the moment not worth a straw, and where all the deeply interested spectators were powerless to avert the impending doom.

A young German, absolutely without experience, had recently joined the wagon-train, and being possessed of an intense desire to kill a Buffalo, had borrowed a rifle from one of his companions, and, during the usual noon halt, one day, when Buffaloes appeared about a mile distant, sallied forth alone, in quest of game.

The prairie was nearly level, and while in plain view of the men of the train, he was observed to tire at a Buffalo cow, and, immediately and very imprudently showing limself to the cow, she dashed at him at full speed. The gun was a muzzle-loader; there was not time to reload, and the would-be hunter incontinently took to his heels. Seeing his imminent peril, $\mathbf{Y} —$, together with several
others, seized guns, and, mounting the nearest horses, sped on the almost hopeless errand of rescue. Away over the smooth prairie raced the thoroughly frightened German, at right angles with the approach of his mounted rescuers, who were horrified to see that, long before they were near enough to give aid, the furious brute was at his very heels. Just at the instant when all looked to see the poor fellow crushed to earth or tossed skyward, to the amazement of all, the cow stopped short, and gazed steadily at the fleeing fugitive. The horsemen dashed up to him, and, said Y-, "He was the palest man I ever saw."

He said that he had felt the breath of the Buffalo on his hands as he ran. The cow proved to be mortally wounded, and before the mounted hunters reached her, fell and died.

Next morning, Y-_ took the team, and with nothing in the wagon save a five-gallon keg of drinking-water, he and I set out for the dead Buffaloes. We drove up the hill and out on the great plateau stretching southward, and going slowly along over the smooth prairie, making lout little noise, had just reached the crest of a low ridge, when right in front, within three hundred yards, appeared a herd of one or two hundred Buffaloes-bulls, cows, and calves.

A way they went; and seeing that the ground was smooth in front, $Y$ - put whip to the horses, which seemed to enter instantly into the spirit of the chase and sprang forward at a full run, while the wagon bounded over the turf, causing us to cling tightly to the spring-seat, and the water-keg bounded and vaulted from side to side of the wagon-box, making a fearful racket, as we slowly gained on the flying lierd. Coming within seventy-five yards, Y- threw the horses on their haunches in his hurry to stop them, and, just as soon as I dared, overboard I went, Gallagher in hand.

A big bull was sighted in rear of the herd, but instead of falling at the report of the gun, he sped on more swiftly than before. Another cartridge was quickly inserted, the
gun elevated and fired at the herd, now huddled together in one solid mass. A fine young bull was seen to stagger a few steps and fadl, shot through the heart.

On rushed the herd, now worse frightened than ever; and as we harried on after them, we fairly shouted in triumph, for we saw that right in front of them ran a ravine which, we could see at a point beyond, was at least forty feet deep.

The ravines in this light subsoil, torn out by the deluging rains which occasionally fall in this region, were generally broken off at the edges just as steep as soil could hang, and as the Buffaloes were sweeping on like a tornado, with little time to look before they leaped, we felt sure that our hunt was ended, the meat supply ussured, and only regretted the unnecessary slanghter sure to follow as the fated herd plunged down the steep.

Over they went, now some three hundred yards ahead of us, and we slackened our pace to a walk and began planning how to get the meat of the slaughtered herd up the nealy perpendicular walls of the ravine. When within two hundred yards of the brink, to our amazement, a Buffalo appeared, clambering up the face of the other wall of the ravine, at a point that we afterward found taxel the climbing powers of a footman. Another and another came bobbing np, and we drew up the horses, utterly dumbfounded to see that every one, even to the calves, had made the plunge in safety.

This, to me, was one of the most noteworthy things that ever came under my observation. Many times afterward we saw Buffalo-tracks on the slight projections of the walls of these deep gullies, in places where we could only stop and stare. The shape of their limbs, too, seemed utterly to forbid their climbing such walls.

As the bulls at this season of the year were fatter than the cows, a fact which was apparent at a glance, we naturally chose them for beef, and as, like all tenderfeet, we were ambitious to kill the largest specimen to be found, it followed that nearly all we killed were large bulls. Yet,

when standing over the body of my first Buffalo, and noticing the extreme slenderness of the legs just ubove the hoof, I then and there began to measure each and every one we killed for meat, beside lurge ones found dead -when they did not smell too badly. I found only one the hind leg of which I fuiled to span with the middle finger and thumb of one hand, and this one was a dead and swollen animal, killed several days before. The fore leg was a trifle larger, having a circumference about three-fourths of an inch greater.

The size and weight of the Buffalo would seem to necessitate a leg as strong as steel for the down-hill plunges this animal can safely make.

The ahility of the Buffalo to climb up the most impracticable steeps is noted by Fremont; and that fascinating writer, George Bird Grinnell ("Yo"), who hunted Buffalo with the Pawnee Indians on this same hunting-ground, and during the same year, describing the position occupied by a Buffalo cow on a slight projection of a wall of one of these deep ravines, says: "I shall never understand how that animal reached the position it occupied."

A word of explanation may here be necessary, in order to show why we were enabled to outrun a flying herd of Buffaloes with a two-horse wagon.

The Buffalo is, or was, a strange animal, and in some respects closely resembles the pig. One of his peculiarities cropped out on this race. Had there been not more than a dozen animals, they would doubtless have uutrun us with ease; but the stupid brutes in the front and center of the herd seemed to lose fear with the consciousness that others were between them and their enemies, and galloped steadily forward without hury, while the thoroughly frightened ones in the rear, unable to force their way forward through the mass of their fellows, ran around the herd to the front, only to drop quickly into the pace of the leaders and gallop doggedly on, until they once more found themselves in the rear of the procession, ready to repeat the roundabout race again. Leaving the herd, that had fairly gained their free-
dom, we took the hams of the young bull and drove on. The number of hunters who have made a successful Buffalo chase with a two-horse wagon is probably very small.

A mile farther on, we saw, at some distance in front of us, four large bulls, two of which were lying down, and the others standing-all, as it afterward proved, fast asleep in the warm sunshine. Although we had no intention of running then, still, as they were directly in our course, naturally enough we were anxious for a shot.

As we slowly approached, driving at a gentle walk over the smonth ground carpeted with Buffalo-grass, we saw that they were asleep, and actually drove within twentyfive yards before the one standing nearest us, hearing a slight noise, opened his little, pig-like eyes, and from under his heavy curtain of black hair for an instant stared stupidly at the strange apparition. The glance of indifference quickly changing to one of wonderment, and his abject terror, were positively ludicrons. Away they went. Two balls failed to check the speed of the fattest, and they disappeared beyond a rise of ground half a mile away. Plenty of meat in camp that night caused general rejoicing, and from that time all were kept busy.

I found E-a delightful comrade, a true hunter, a good shot, and fuily able and willing to do his part. The night of July 3d, he and I bivouacked on the range, about five miles from camp, in order to be near Buffaloes early in the morning, and were awakened on the morning of the ever-memozable Fourth by the howling of Woives.

Seventeen head of Buffaloe:; were killed in the course of our ten days' hunt (not counting cripples), of which Y killed two, E- five, and ten fell to my Gallagher. The hot weather was the worst drawback to an otherwise pleasant trip; but a goodly quantity of dried meat was loaded in the wagons when we left the range.

When the loaded wagons were at last turned in the direction of civilization; when we had recrossed the sandy bed
of the rapid Republican, and had climbed the ridge to the northward, we paused upon its crest, and took a long look backward over the valley and the great plain stretching far to the southward, all wavy and shimmering in the rays of the summer sun; and, with a deen sigh of regret for the close of the exciting chase of America's noblest game animal, turned at leugth toward the oncoming wave of civilization which was destined to uproot and destroy all of the oldtime romance and poetry of the wilderness, entirely satisfied that we had done ou. full share in the probably necessary work of exterminating the American Bison.


## THE MUSK-OX.

> By Henry Biederbick, Of the Greely Arctic Expedition.

然HIS animal derives its specific name from the peculiar flavor by which the meat of some of these animals is tainted. He averages in size about twothirds that of the Bison, but, on account of his great coat of hair, looks much larger than he really is. The Musk-ox seems to form a connecting-link between the Ox and the Sheep families, having many of the characteristics of each. He looks somewhat like a huge ram, his broad, rolling horns adding much to this similarity. He is covered with thick, long hair of a dark-brown color, which, however, changes somewhat with the seasons. Animals killed hy our party in May proved to be much lighter in color than those killed later in the season.

Under this coat of hair, the Musk-ox is covered with a thick sheeting of soft wool of the finest texture and of a light-brown color.

The horns are large and jroad, are formed somewhat like snow-shovels, and are used in removing the snow in order to reach thei. scanty food during the winter months. The meat is coarse-grairen, but generally juicy and tender, especially that of the younger animals. The peculiar musky flavor can be obviated by dressing the animal as soon as killed.

The range of the Musk-ox is extensive. He abounds on the northern shores of Greenland east and west as far as explored, on both sides of Smith Sound, and in Arctic America, from latitude $60^{\circ}$ to $83^{\circ}$ north, longitude $67^{\circ} 30^{\circ}$ west, to near the Pacific Coast. Fossilized Musk-oxen have been found at Escholtz Bay, on the Northwest Coast, (303)
in Siberia, and in Northern Europe; but only one species of their living descendants is now found, and that is confined to the Arctic region of the Western Hemisphere.
-has heretofore been supposed that the Musk-ox was
gratory animal; but as some of them were seen by Sergeant Brainard and others of our party as early as March, when the snow is deepest and the temperature lowest, it must be taken for granted that he is a regular habitant of Grinnell Land and Northern Greenland all the year round.

The Musk-oxen travel in herds, and it is but an exception when one of them is found alone. This herding together gives them a better chance to defend themselves against their one enemy, the Arctic Wolf, and also gives them, through close contact, additional warmth and protection against cold and winds. Animals traveling singly were generally found to be old bulls, who had probably been driven from their herds by their younger and stronger adversaries.

The Musk-ox prefers the hill-country, but is often found in the low, level countries, either along the coast or farther inland. He is called by the Eskimo Oo-ming-mung. These simple Aretic people live principally on seai-fat and whaleblubber. They occasionally, however, hunt the Reindeer, more for the purpose of procuring skins for clothing and bedding than for the change of diet. Still more rarely, they plan a trip into the interior in quest of the Musk-ox, both for the purpose of varying their bill of fare and of procuring the great, soft robes for bedding or for barter. In hunting this animal the natives use dogs-the same ones that are used in drawing their sledges over the inhospitable wastes of snow and ice that cover the habitat of these people. Their method of hunting the Musk-ox is most novel and interesting, an: I cun not describe it better than in the language of Lieut. Frederick Schwatka. In an article contributed to the American Field, in 1889, that popular writer and explorer says:
"When the native hunter has reached the Musk-ox country, and has built his snow-house on the shores of some

Alpine lake in the hill-land, he prepares for his hunt. If there are three or four men and boys in the party, they will 'beat up' the country, so to speak, or give ita thorough search; that is, they will go out in as many different directions as they can organize parties, boys going in pairs, while the older hunters go each by himself. No sledges are taken when on these excursions, and if Reindeer are seen, they are killed and their carcasses cached, as if they had come for such animals instead of the Musk-oxen. The day's trip is as far as they can go and get back home by night, or often ten or twelve miles away in a straight line.
" If a Musk-ox trail is found by a hunter, its age determines his further action. If fresh, he will return and report it, and the next day will be given to the chase of the animals. 'Even if he sees the animals, he will do nothing to disturb them that day. If no signs have been seen by anyone, and their supplies warrant it, they will make another day's march farther into the Musk-ox country, build another village of snow, and beat up the country again. Sometimes this is continued by making a huge detour, or half-circle, through the district supposed to contain the game.
"If the signs are old, they will follow the trail with the sledges until it becomes fresh enough to warrant their stopping and building their snow-huts, and following next day as a hunting-party.
"Once a fresh trail is discovered, however, everything is animation and excitement in preparing for the chase, which usually follows the day after the finding. The night before, the party retires early, to get some sleep before a corresponclingly early start next morning; but the excitement genearally proves too much, and it is really much later than usual before slumber settles over all. On such ocicasions the Eskimos have a way of seeking a soothing draught in a big pipe of tobacco, if they happen to have it with them, for it is by no means so abundant among them as it is with us, or even with the savages of our latitude, as their only supply is from trade with the whalers at exorbitant rates of exchange.
"The evening before, the noisiest dogs have a muzzle of seal-skin thongs tied around their noses, to prevent their making a clatter that would frighten away the game, should they, in their wanderings, come near enough to the village to hear them.
"When the morning breaks, everything is activity and bustle. The dogs are rapidly harnéssed; those that are to be used for bunting, or bringing the Musk-oxen to bay, are fastened to the sledge by a separate 'slipping-strap,' so that they can De taken out more readily or slipped at once, should the game be unexpectedly encountered, as in a fog or heavy storm. The runners of the sledge are coated with ice, that the vehicle may pull easily over the siows; and when the long lash of the whip gives its first crack over the team of dogs, dawn is just emerging into daylight in the nast. As direct a line is made as possible to where the trail was seen the day before, and the usual loudly resounding commands to the dogs, and the sharp cracking of the whip, are subdued into much lower tones, for obvious reasons.
" In an Alpine country the sledge must wind considerably to keep on a fr: grade; for not only the incline is against making a 'bee-line' for a place, but to cut across the ridges is to expose the icy coating of the sledge-runners to the rocks that peep through the snow where the wind has blown most of it off, and this is fatal to the fragile shoe that is so necessary to make rapid and easy going.
"Once arrived on the trail, a 'confab' is hastily indulged in as to whether it is best to follow with the sledges or not. Within about a mile is as close as they desire to have these vehicles approach the game, unless everything is favorable to their hunting-as the wind in their teeth, the sun, if low, behind their backs, etc. When the trail shows that the Musk-oxen are not far ahead-and a white man will marvel at the acuteness displayed by these children of the North in reading the signs on a trail as truly as if it were a bookthe sledge or sledges are stopped, the hunting-dogs taken therefrom, and their harness-traces, from fifteen to twenty

feet in length, have their free ends, which were before attached to the sledge, tied to the waists of the hunters, to tow them along, as it were.
"The hunting-dogs are not fed for a day or two before the chase, if it is known abont when it will be likely to take place, as hunger makes them keener on the trail and more energetic in 1. olding the animals at bay when they have once been stopped. It should be said, however, that the Eskimo dog is only fed every other day, even when there is plenty, and often only every third day if there be but a small supply in the canine commissary.
" Each hunter takes from one to three dogs, according to the number to be had, and starts at once on the trail, the sledge being left with some boys; or, if they are fortunate in having guns, and thus enjoy the coveted right of going with their elders, a couple of women, who have come for the purpose, remain with the sledge, and just enough dogs to haul it conveniently when empty, and thus insure their not running away with it. The persons remaining behind have orders to follow on the trail slowly, until firing is heard, when they are to press forward with all haste.
"The hunters, with guns on their shoulders or held in their left hands, trot along, dragged by the dogs, and guiding them with the right hand holding the taut harnesstraces. The gait slowly increases until it becomes a run that the most enduring professional could not maintain ahundred yards through such snow, if alone, but which becomes easy with the eager, excited dogs tugging at the traces around one's waist. In fact, it becomes hard to avoid running, and running like a Deer, after one gets under headway, the only exertion necessary being to simply raise the feet, while the dogs furnish all the motive power that is needed, and oftentimes a great deal more than is wanted.
"If the uninitiated Nimrod should fall, and he is attached to two or three good dogs, the speed will not materially slacken on that account, although he may break a few ribs on the projecting stones. His only chance of escape is by unslipping the dogs, which he has been warned
a score of times against doing until the Musk-oxen are in sight. It is wonderful how far and how easily one can run in this way, and if the leg-muscles are in good condition it takes but a few minutes to place a number of miles to one's credit.
"When the advanced hunters sight the game, they wait only until they see it start in flight, when, with a dexterous twist, the slip-knot is thrown, and the dogs are let loose to bring the cattle to bay as soon as possible. These hunt-ing-dogs will not bark until they are thus lcosened (it is this distinction solely that makes a good or bad Musk-ox hunter, and whether he shall go on the trail or be left with the sledge), and then they send forth the loudest bayings that ever came from dogs' throats, especially when the Musk-oxen have formed a circle of defense, and the dogs have formed another circle around them.
"It is a singular sensation when one slips his dogs from their hold around hi, waist. From feeling as if he had wings and were Hying along the ground without effort, it now seems as if inis gun had suddenly changed to a fifteeninch columbiad, and his feet feel as if encased in leaden boots. Although he may be within a hundred yards of the bayed beasts, and may have run a mile to get there, that mile will have been easier than the short distance he has ahead of him. Yet, if he waits to slip the dogs until he is where he wants to stop, the knot may suddenly become unaccommodating, and if the dogs dragged him right up to the interior line of battle, his huge form would be sure to invite a charge from the nearest bull, that might end disastrously.
"In anotizer way the more pugnacious dogs are liable to be treated to a genuine surprise from some equally pugnacious Musk-bull that, charging him, gets the dog's long, Howing harness-trace under his feet and manages to keep it there for three or four steps, or until he is so close that the dog can not escape, when he is given an aerial ascent that may be repeated several times if he be not lucky in getting his feet under him when he alights, or
until some hunter shoots the juggling brute that is tossing the dog on its horns. There are some good Musk-ox hunting-dogs that seem to be always getting into this sort of trouble, and their owners then learn to tie their harness-traces in a bundle on their backs, just before they slip them.
"When the native hunters reach the herd they make sure of every shot, as the only danger is in wounding an animal, which, by its frantic efforts, might stampede the herd, and they are then exceedingly hard to bring to bay again; for not only are they more wary, but the dogs are hard to coax away from the bodies of the first victims to pursue the others. With Winchester rifles, such as my party had, a herd would go down like the typical grain before a reaper, and the tragedy would soon be over; but with muzzle-loaders, and one or two hunters to a large herd, it is slower and correspondingly more careful, but also more exciting work. Some of the bravest of them, in the days before fire-arms, would, knife in hand, pass through the circle of defense, fatally stabbing an animal at each passage until all were down. The battle over, the hides and horns are secured, and the party returns to its snowvillage."

And now to return to the experience of our own party in hunting this game:

When, in the afternoon of August 11, lool, the good steamship Proteus, having on board the members of the Lady Franklin Bay Expedition (of which I was a member), Lieutenant (now General) Greely commanding, neared Discovery Harbor, in Lady Franklin Bay, we caught the first sight of one of these renarkable and little-known animals, grazing on the steep sides of Cairn Hill. With his long, shaggy, matted hair and short legs, he looked, at this distance, somewhat like a huge caterpillar, as he slowly moved about, picking up his food-dryas octopetala, saxifraga oppositifolia, salix arctica, and here and there a tuft of grass. A party of us started at once to capture this, our
first Musk-ox. After a short but exciting chase, during which the ox retrented higher up the hill, he was brought down by a well-directed shot fired by Mr. White, the bontswain of the Proteus, who, being provided with an ice-gaff (a pole about ten feet long, with a sharp iron point and hook attached), was in better condition to climb the steep cliffs than the other members of the hunting-party. The prize proved to be a large old bull, and we estimated his gross weight at a little over six hundred pounds, though he probably did not dress more than four hundre' owing to the heavy head, skin, and other offal.

While we were carrying the meat on board essel, Lieutenant Lockwood, with two other members of the expeditionary force, chased ten more Musk-oxen to the summit of n large hill on the south side of Mount Carmel, where they came to bay and were dispatched in short order. This was a favorable beginning, assuring us a fresh-meat supply for some time to come, and augured well for the future.

The Musk-oxen, when scenting danger, always retreat to some elevation near by, and upon the approach of the enemy they form in a perfect line, their heads toward their foe; or, if attacked at more than one point, they form a circle, their glaring, blood-shot eyes restlessly watching the attack; and I think it would go hard with the man or beast who, under such circumstances, might come within reach of their broad horns or hard hoofs.

I had several opportunities of observing these manenvers during my trip with Lieutenant Greely into the interior of Grinnell Land, in the summer of 1882 . On this trip we saw hundreds of these animals quietly grazing in the valleys along Lake Hazen, and there is no doubt in my mind but that they remain there all through the year, as their food can be found there in abundance. We passed close to some herds, which, on these level grounds, on sighting us, would form in line with the promptness and precision of trained cavalry, and slowly wheel as we passed, their heads always fronting us, until we had passed to a safe distance.

They are easy to approach und kill, and when a party of skillful and well-armed hanters find a herd of these animals, it is seldom that one of the latter escapes alive, unless, for some reason, the hunters do not wish to kill them all. This result is largely due to their habit of standing at bay, as already described; and even if they do stampede (which rarely happens), they will, in the majority of instances, soon return to the place where one or nore of their comrades lave been killed. Sergeant Long once found a herd of thirteen Musk-oxen at the head of St. Patrick's Bay, and succeeded in killing nine of them and wounding another. The other three only escaped on accotnt of Long's ammunition having given out.

The most exciting chase ufter these animals in which I participated occurred on June 13, 1882, on which day Sergeant Connell killed two Musk-oxen within a mile of the station. While currying the meat of these animals to our quirters, we discovered a herd of them on the summit of the Sugin Loaf, about eighteen hundred feet above the sea. Lieutenant Kislingbury, Frederick, Cross, Linn, and myself started at once to cipture them. We deployed, and Cross came upon them first; but they showed such a bold front that he was afraid to attack them alone, and cantionsly retreated until Kislingbury and myself came up, when, together, we killed tive of them in short order. At this juncture, we discovered that there were four little calves, about four weeks old, which we decided to capture alive. Two cows were still left, and we shot them so as to cripple ther, thus preventing their escape. We then surounded the calves, Lieutenant Kislinghury keeping his eye on one of the wounded cows, while I covered the other, so that we might dispatch them in case they showed fight. Three of the calves were captured quite easily, but the fourth was wild, and an exciting chase was the result. We killed the two wounded cows, and then tried to encircle the remaining calf, which, however, always found some means of escape, until at last it jumped into the arms of Frederick, who commenced shouting joyfully over his success.

But the fun was not yet over, for the calf was strong, and threw Frederick to the ground. He, however, held pluckily on, and the two came rolling down the steep hill together, when I luckily stopped them before they got fairly under way, otherwise this would have been Frederick's last hunt on this side of the dark river. We carried the four calves to the station, where they were tenderly cared for, Sergeants Long and Frederick being the selfelected nurses. The calves-were fed on condensed milk, oatmeal, soaked crackers, etc., and seomed to thrive very well at first; but as no vessel came in 1882, when the cold winter months sat in they died, one after the other. The first one to die was Frederick's pet, which he had named "John Henry," although it was a female. One of our brute dogs had chased and bitten it, injuring its shoulder, which caused it to die shortly after. The other calves seemed to pine away after that, and on October 7th the last one died, and our hope of anriching the menagerie of the Smithsonian Institution with a live Musk-ox died with it.


## STILL-HUNTING THE ANTELOPE.

## By arther W. du Bray ("Gaucho ").

骨
HAVE been requested by our brother sportsman, "Coquina," to write a chapter for his book, and have been intrusted with the one on the Antelope. I therefore cheorfully sukmit the following, and throw myself on the tender merçies of my readers, knowing that several men who have written on this beautiful and interesting animal before me have left little that is new to be said. Still, I have had an extensive experience in lunting and studying the Antelope, and trust that I may be able to give some hints and suggestions that may be useful to beginners in this most delightful sport.

The Antelope is one of the wariest and fleetest animals on this continent, and the sportsman who would hunt it successfully must study, carefully and patiently, its nature, habits, and characteristics. A brief description of it may not be amiss heie, and this can not be given more tersely or accurately than in the words of that careful naturalist and graceful writer, the Hon. John Dean Caton, who, on pages 22 ard 23 of his charming book, "The Antelope and Deer of Ameriva," says:

Its size is less than that of the Virginin Deer. Its form is robnst; body short; neek short, flexible, nud ereet; head large and elevated; horas hollow and deeiduous, with a short, triangular, anterior process about midway their length, compressed faterally below the snag, and round above-horns situate on thil superior orbitul arches; tall short; legs rather short, slim, and straight; hoofs bifdd, amall, pointed, convex on top and concave on sid3s. Nocutaneous giand or tuft of hairs on outside of hind leg. No lachrymal sinus or gland below the eye. Mucous membmine very black. Lips covered with sliort, white hairs, with a biack, nakel diviling-line in front of upper lip, extending from the mouth to and surroundling both nostrils. Face brownishbiack, with sometimes reddish hudis upon it. Top of hend, nbove the eyes, (318)
white; cheeks and under side of head, white. Ears white, with dark line around the edges-most pronounced on front edges; a brown-black patch under each ear. Horns black, with yellowish-white tips. Top aad sides of neck, the back and upper haif of sides, russet-yellow; below this, white, except usually three bands of russe:- rellow beneath the neek; white extending up from the inguinal region, involving the posteriors, uniting with a white patch on the rump. Tail white, with a few tawny hairs no top. There is an interdigital gland on each foot, a cutaneous gland under each ear, another over each promi. nence of the ischium, another belind each hock, and one on the buek at the anterior edge of the white patch; in ull, eleven.

## As to the habitat of the Antelope, Judge Caton says:

We have no account or evidence that the Prong Buck was ever an inhabitant east of the Mississippi River, and it only reached that river in the higher latitudes. It is now (1881) found only west of the Missouri River. Westward, it originally inhabited all the region to the Pacifie Ocean, within the present limits of the United States, except the wooded districts and high mountain ranges. It was very abundant in California twenty-five years ago. My information is full that they were equally numerous throughout all the valleys and open country of tiat State. They were by no means uncommor in the open portious of Oregon: They are very scarce, if any exist, in that State now, and Californin is at this time almost deserted by them. Their native range extends from tire tropics to the fifty-fourth degree of north latitude. Within the deacribed limits they rio not invade the timbered country or the high, naked mountaius. Their favarite haunts are the naked piains or barren, rolling country. If they endure scuttering trees in a park-like region, or scanty shrubs, forests possess such terrors for them that these animals avoid them at any sacrifice.

There are many points in the natural history of this strange animal that I should like to dwell upon here, but space forbids. Many of its traits, habits, and peculiarities are, however, brought out in the following pages, in narrating my experience, and that of others, in hunting it; but for a further and closer study of the animal than it is possible to give in the space allotted me here, I must refer the reader to the work quoted above.

September, October, and November are the best and, in fact, the only proper months in which to hunt the Antelope in the Northwest; but in the far Southwest, the legitimate season may be extended to include December. Whether or not the season be regulated by law in each State or Territory, the true sportsman will not hunt game of any kind for sport during more than three or four months out of the
twelve. He will not disturb ii during its breeding-season, nor while rearing its young. Nor will he, as a.rule, take advantage of deep snows to pursue and kill it when it is unable to escape hini, or to have at least a fair show for its life.
$A \leqslant$ to the best arm for Antelope-hunting, there is great diversity of opinion among old prairie hunters, some preferring one weapon and some anctiner, each proclaiming ernphatically that his favorite is the best; and the question vill probably never be definitely settled to the satisfaction of all concerned.

I will say, for myself, that I am perfectly familiar with most of tiie popular makes of English rifles, shotguns, and pistols, and that for my own choice I prefer the American repeater and revolver to any of foreign make. The former are fully as safe, accurate, and convenient, and as good in every way, as game-killer or weapons of defense, as any made in the Old World, wile, in my humble opinion, the Winchester repeater and smith it Wenson revolver stand at the head of the list of fire-arms, fir general usefilness. The latter, aside from its intrinsic value and merit, is by far the handsomest pistol made.

It would be absurd to compare a Winchester rifle, in point of appearance, with a Purdy Express, the former costing from $\$ 16$ to $\$ 35$, while the latter pulls the pursestring to the tune of say $\$ 500$; but let both be tried as game-killers, and nine riflemen $\mathrm{ou}^{+}$of ten will do better execution when they have from five to ten shots at their fingers' ends than if only two. And in the event being corraled by Indians, an old-fashioned 44 Winchester, with its sixteen shots to draw on, is worth more than any number of double gans; for, after all, those pistol-charges are spiteful, and the bullets are ugly things to stop with one's hide at three or four hundred yards, as many a poor fellow has found out.

Furthermore, I regard the Lyman front and rear sights as indispensable to a ganie rifle-as much so as its hammer or mainspring; for although olie may kill lots of game with
open sights, yet let the Lyman once be tried, and its great advantages will become apparent.

With this, by way of preface, I will proceed with some reminiscences of hunting experiences on the great plains, and meantime will give some hints as to how best to hunt the game in question; for, notwithstanding the relentless war that has been waged against the wary little denizen of the plains, there are localities where he may still be found in sufficient numbers to afford good sport.
"Liver-Eating Johnson," guide, scout, hunter and trapper, prairie-man, Indian-fighter, thoroughly educated and equipped frontiersman at every point, graduate at the head of his class in prairie lore-withal, a long-headed, cool, end calculating man-once said to me while hunting: "What a live Ar. ,loupe don't see between dawn and dark isn't visible from his stand-point; and while you're a gawkin' at him thro' that 'ere glass to make out whether he's a rock or a Goat, he's a countin' your cartridges and fixin's, and ma'ain' up his mind which way he'll scoot when you disappear in the draw for to sneak on 'im-and don't you forget it." Dear reader, pardon me for adding, "And don't you forget it, either."

The ostrich, with his vaunted power of vision, is comparatively near-sighted when compared with the Antelope. The Giraffe may excel him, not from having superior eyes, but from their greater elevation, and therefore greater scope. The Deer is simply nowhere in this respect. Even when in the habit of roaning on the prairie, he has not the knack of detecting an intruder "on sight" as an Antelope has. I never had any trouble in getting within two buindred yards of an ostrich, in any decent place; yet, with years of experience on these, and a great deal of other prairie-shooting, I at first found it difficult to gét within six lundred yards of an Antelope, and then it was invariably a wide-awake one, fully able to take care of himselfgenerally on the trot or zigzagging about, craning his neck to find out, I suppose, according to Johnson's theory, whether my gun was really loaded with a ball or blank
curtridge. In certain localities remote from the haunts of man, they are comparatively tame, and may at first appear stupid and dull at "catehing on." But just try them where they have been hunted, and then report. My word for it, they will be found quite sharp enough to make it interesting.

During the summers and falls of 1878 and 1879 I did nothing but shoot, and Antelope received the greater part of my attention. Having killed over two hundred and forty by actual count, I think that, at any rate, I gained some valuable experience, some of which I will try to impart. The principal thing is to keep out of sight. Don't delude yourself with the idea that becanse a band is a couple of miles away, apparently feeding, and all with their heads down, none are on the lookout, and that yon nay ride up a little closer and then keep out of sight. 'That won't do; I know it to my sorrow. The chances are ten to one that they will see you long before you see them, and although they may not move at first, still they are on the qui vive, and if you get a close shot after having shown yourself, why, just score it, down as luck.

My advice is to always hunt over broken ground and undulating prairie, for although you don't see as many Antelope there as on level ground, still the chances are about twenty to one in your favor, as against the level country, when you do come across a band. Again, remember that when you reach the summit of the hill your horse's head is in plain sight before you can look in the hollow beyond; so, if you are too lazy to disnount, always skirt along the ridge for a few yards, stand well up in your stirrups, and take a good look. But this is the lazy and unprofitable style, and generally before you can check your horse the Antelope have seen you; and that settles it. So the best way is to dismount; lead your horse, with a good long lariat, so he will be some yards behind you; take off your hat (which, by the way, is also visible before you can see, your eyes being lower than the crown), and go slowly up until you can just see well into the ravines and on the hill-sides beyond.

Don't be in a hurry. Take a cautious survey, as during the day it often happens that an old buck is lying down sunning himself on some gentle slope, when he may easily be mistaken for a stone; or perhaps a whole band may be feeding or wandering through these ravines, right under yon, or deep down where the grass is freshest. This is more likely to be the case in the. fall months, when the prairie grass on the level and high ground has become sun-dried and cured, in which case Antelope, and in fact all herbivorous animals, prefer the short grass, which is more tender in low, damp ground.

If by good fortune you shculd chance to see one or more, walk back to your horse. Don't pull him up to where you are. Take off your picket-pin, drive it in firmly with your heel, and be sure it is straight, as then it will hold better. Fasten your horse securely, and commence your stalking. After the horse is well off your hands, then you are all right; but be sure before you leave him that he can't get away, or when you come back you may find your horse has disappeared, and then, as frequently happens, you may be fifteen miles from camp, which is quite a long walk, besides losing your saddle and acconterments; for although the horse may turn up, you will generally hear from the party who has found him that he was stripped. Whether he was or not, that is generally the story, so it pays to have the horse both tied and hobbled.

Now go steadily; keep the wind well in your face, and, if necessary, do the very best creeping you can. Get as close as possible, and don't shoot if you can't get within three hundred yards. Never mind what you have done at a target, or what you see in print about long shots, and all that. I have seen dozens of as fine rifle-shots as ever put a rifle to shoulder, and I never saw a man yet who could count on an Antelope at more than three hundred yards. Remember, it is fully equal to a five-point in an eight-inch ring. Besides, if yon miss this shot, you may at the same time scare away more game than yon have seen in a week; so be steady. After crawling about and dragging yourself
snake-fashion, it is well to take a good rest before firing, for, although you may think yourself steady, cool, and in good wind, it may only be over-anxiety; so just hold on a few minutes; scan the ground deliberately; calculate your distance; make all due allowances; push your gun forward, and, if a single-shot, place another cartridge in your mouth, bullet-end in; take good, steady aim, andpull.

Reload your gun instantly, whether the game is down or not. Another animal may jump up that you had not seen. Better to be always ready, and accustom yourself to do all the waiting, for an Antelope has not much patience; and if only hit through the paunch, leg, haunch, or in fact anywhere but in a vital spot, he can still outrun any ordinary horse-even on three legs. In fact, I have seen some make it quite interesting for a cavalry-horse on two sound legs and a stump. Again, if only wounded, although fatally, he will be sure to go as far as he can, and then all your work may only result in providing a square meal for a Coyote, and no saddles to show for it. So, I repeat, get as close as possible, and make as near a "dead-center" as you know how; and with all these precautions, many a one will get away without a scratch.

Just behind the shoulder, and a little low, is the best place to hold for. When on the run, shoot well ahead and low, as a bullet that passes over an animal is lost, whereas one that goes low, even if too low, stands a chance of breaking a leg; besides, the failing is, and always has been, to overshoot, especially when taking quick shots.

Although trained, since a mere boy of fourteen, to shoot at running and flying game with the rifle, I still find myself, even though trying at all times to guard against it, shooting entirely too high. It is just as natural for a man to take in half of his front sight above the hind one as it is to get behind on very fast-moving objects. Indeed, it is extremely difficult, unless when shooting through a Lyman rear sight, to know just how much or how little of the sights are taken in; for it all has to be done quickly, and
the mind is so intent on the lead that the elevation is apt to be overlooked-no pun intended.

The vitality of the Antelope, considering its size and weight, is truly wonderful. There is absolutely no give-up in them; and many a man has worn out a good horse in trying to run down one minus a leg, or one that had been shot clear through by several large bullets, any one of which would have killed a Deer on the spot. I have killed many an Antelope with one solid bullet; but, again, I have put two or three of these through many another that went off like the wind, as though he had only been frightened. That these poor creatures died from the effects of their wounds is very certain, but it is equally true that $I$, at least, never got a pound of the meat; so, as I was hunting for food as well as recreation, I gave up solid bullets altogether, and confined myself to hollow-pointed ones exclusively. A fairer test of ammunition could not have been made, as I used the same ritle and powder-charge-everything exactly the same, but simply substituting a hollowpointed for a solid bullet; yet the difference in the execation was so striking that the most casual observer must have noticed it. I have no reason to believe that I shot closer to vital spots than before; nor did I get closer shots, nor more of them. The dead Antelope, though, were there all the same, proving conclusively that, even if not driven by the heavy powder-charge, nor fired through the slowtwist grooves, the hollow bullet, as a killer, is so far superior to the solid hall that there is no comparison whatever between them.

Now, a borly-hit meant a knock-down, sure enough, while a raking shot-even at a slight angle-fore and aft was always a paralyzing one, and generally left the quarry so nearly dead at the instant of impact that a few convulsive kieks and spasms were all the signs of life remaining; while many and many a one was instantly doubled up like a rabbit-struck lifeless between bounds-and died a truly painless death. Indeed, years ago, when shooting on the pampas of South America, I discovered that a Double

Express Westley Richards ritle, forty caliber, shooting 100 to 110 grains of Curtiss \& Harvey powder, served me just the same way. . With this rifle I shot hundreds of small Deer and ostriches, but never, until I used the hollow-pointed bullet, was I sure of my game unless I hit it just in the right place. With the Express ball, all places seemed more or less alike, so far as stopping further locomotion was concerned. The shock is so terrific that no small animal can stand up under it, more especially, as I said before, if the bullet's course is quartering, for then the animal's body catches the full force of the blow, aside from the tearing and smashing of a ragged-pointed ball, carrying all before it.

For Antelope-shooting, then, or, in fact, for any kind of big game shooting, I prefer the Winchester, my choice being the repeater of large bore, say fifty caliber, with its 110 -grain powder-charge and hollow-pointed, 300 -grain bullet. Those preferring the single-shot need not swerve to any other make, as this company makes the best single-shot rifles, of all calibers from twenty-two to fifty; and were I using a single-shot rifle for Deer, Elk, Bears, or Antelope, my choice would be the forty-five caliber, shooting one hundred and twenty-five grains of powder and three hundred grains of lead-hollow-pointed ball. I must frankly admit, however, that I never conld see where any single or double barreled rifle could, in any way, compare witi a repeater-every advantage clearly going to the many-shot rifle.

I an partial to the Winchester rifles, for these reasons: They are safe, accurate, and durable; they are made in all calibers; they are sold at prices within the reach of all; as repeaters, they are more reliable than any other kind with which I am familiar; as single-shots, they are quicker to load, less liable to get out of order, and, in my judgment, just a little better than any other single-loader made. The Winchester Company has proved itself imbued with a progressive spirit, and has catered to the ever-changing and manifold wants of men of many minds and divers experiences. It is, furthermore, an essentially American
concern, and I believe that Americans shonld patronize American manufncturers. And, to cap the climax, the Winchester is about the only sporting-rifle that has come up to the hypercritical and fastidious scrutiny of the English sportsmen, than whom none are better judges, owing to their early education und vast experience. These men shoot wild and dangerous game all over the globe, and know a good riffe when they see it. Moreover, as none but the wealthy among them can indulge in such sport, the price paid for their weapons is a matter of no concern whatever, its absolute reliability and accuracy being the sine qua non of the arm. When, therefore, the plain but thoroughly sound and serviceable Winchester, costing say £4, supplants the elaborate double rifle of twenty times its valne, something inherent to the Yankee rifle must be there to back it up.

Aside from all this, memory carries me back to many a cabin, dotting a boundless plain, where upright in the corner stands the king of all rifles-ever-ready death-dealer -the Winchester; or, perhaps, carciessly swung to the antlers of some monarch of the forest, or resting on those of the now extinct Bison, together with the buckskin belt studded with cartridges, in which also hangs the best, handsomest, most accurate revolver the world has ever seenthe Smith \& Wesson. These are quasi the whole, or, at any rate, the most valuable furniture that adorns the cheerless cabin; but, of their kind, they stand to-day paramount. On their merits the hermit occupant has been wont, mayhap, to trust his life against savage and beastnot a life the loss of which, perhaps, would be much mourned, or over whose grave eloquent orators, weeping women, or frantic parents might, with untold grief, lovingly and fondly linger, but his life, his all. His scalp, his herd, and, if more fortunate than the great majority of these dauntless pioneers, his wife, his little ones, his dogs-all have been taught, by oft-repeated lessons and never-failing deeds, that his selection of weapons has been wise, for they never have failed him at the critical moment. With these
weapons he may have stood against human odds, or may have lowered the ferocious Grizaly, not with one or two shots, perhaps, but by pouring in such a deadly streak of lead that nothing could stand before it.

Swong to the wagon-bows of the erratic prairie-schooner, exposed to rain, dust, and snow, the old Winchester has dangled, magazine full to the hopper-taken' down when needed, now to clip off the head of duck, brant, or grouse, now to riddle Coyote or Fox, now to fan the tail of cunning Jack or fleeing "Swift;" now replaced in its slings withont further ado. Seldom cleaned, and never thoroughly so, yet, perhaps, to-morrow the lives of the whole party may depend on one or two of these deadly weapons, whose sharp and oft-repeated reports shall ring through the air, in contrast and defiant answer to the wild warwhoop of circling, seldom-visible savages. These are some of the reasons why I like the Winchester.

If I have dwelt at greater length on the subject of rifles than seems proper, I trust I may be pardoned. My reason for so doing is, that we frequently see, in our sportsmen's journals, the question asked, "Why is the Winchester such a general favorite?" I have simply endeavored to show why it is such; and "them's my sentiments." Verily, I could not look on any Winchester and say otherwise; nor could I-handle my old chum and companion, the forty-fourcaliber Smith \& Wesson, that has been so close to me since early in the '70s, and that has never failed me once.

A target-rifle may be better for its purpose if narrow in the bore than if of large caliber. To merely perforate a piece of linen or paper, a thirty-two-caliber may be better, up to two hundred yards, than a forty-five or fifty caliber; I believe it is. There is less recoil, noise, and Fourth of July about it; but when it comes to up-ending a Deer, Elk, or Bear, I greatly prefer a forty-five or fifty caliber, as then one pill is generally a full dose.

My experience in killing large game is identical, in many particulars, with that of perhaps the ablest writer on such topics that we have in this country-I mean Mr. T. S.

Van Dyke. I agree with him that the larger the bullet the harder it hits, and so long as the trajectory remains as flat as may be, up to two hundred yards, I an willing to sucrifice a trifle in accuracy if I can thereby add somewhat to the striking-force. I used a double rifle, of sixteen-gange, for some time ou Deer, and I can't remember ever losing an animal fairly hit with it.

It is absurd to tuant a man with using a rifle of large caliber, and for such critic to consider himself more of a sportsman in thit lie uses a pea-shooter, for the greatest. desideratum of any i:umane man ought to be to kill his game as quickly as possible, and not inflict hours, and perhaps days, of unnecessary suffering on a poor, inoffensive beast. A small bullet certainly will kill a Deer or Antelope if i: hits him in a vital spot and with sufficient force; but as such shots are the exception rather than the rule, when taking all chances that present themselves, the use of anything smaller than a forty caliber is, to my mind, unsportsmanlike.

So long as nothing larger than a Deer is to be met with, the forty caliber may do very well. It is never as good, however, as the forty-five or fifty. If an occasional Elk or Bear is to be encountered, then the $50-110-300$ repeater is the proper arm. A large bullet, striking an animal spot for spot (in other than vital places), is always much more effective, for the simple reasons that it strikes a greater surface, is going with much greater force, crushes bones more effectively, bleeds the animal more rapidly, and hence lets the vitality out of it sooner.

I have not taken into consideration the far greater degree of danger attending the use of the small-bore rifle; for if a. man chooses to attack a Grizaly with a $32-100$ caliber, that is his own affair, and he alone is taking the chances; but I claim that it is wanton cruelty to habitually shoot at large game with a small-bore rifle, since none but center-shots kill on the spot, while all, or nearly all, wounded animals wander off to die a lingering death, especially where they can not be tracked or run down with dogs.

The claim put forth by many small-hore advocates, that a large bullet teurs and mutilates the game, is so absurd and fur-fetched that it ought not to come into consideration, for the loss of one wounded animal, shot with a smallbore rifle, will incur a greater loss of meat than will the killing of a dozen animals with a large bore. The man who cun plant his bullet within a couple of inches of the desired spot, over unknown ranges extending through wools, over prairies or mountains, up hill and down, say up to two hundred and fifty yards, at either stationary or moving animals, may shoot a thirty-two-caliber rifle a whole season and not lose much game. The question is, Does such a man exist? He often claims that he does, but I doubt it.

For Antelope-shooting, as a specialty, a forty-five or fifty caliber rifle, fitted with the Lyman sights, is, in my judg. ment, the very best. It need not perforce be a repeater-though that is always a decided advantage. One may get into a band, and by being cool, a good marksman, and a good judge of distance, he may, with a repeater, bowl over several before they get out of range, though I must confess that to hit an Antelope, running, at anything over one hundred and fifty yards, is either proof positive of superb shooting, or, much more generally, proof of a lucky scratch.

I once saw an Indian scout, young War Eagle, creep up to within fifty yards of a band of five Antelope, and kill them all in seven shots. As this performance was witnessed by the whole column of the Seventh Cavalry, I don't hesitate to relate it; while had I, unobserved, performed a similar feat a dozen times, I doubt if I could muster up the audacity to assert it. As a matter of fact, I have several times worked my way, on hands and knees, to within a short distance of bands of Antelope, but never have I succeeded in killing more than three at one time, though I always had a much better rifle than the one War Eagle used, to say nothing of vastly superior ammunition. The fact is, I could not inake my bullets connect with the game so often, for an Antelope will scamper over a long stretch of country in a short time, and, as they are not generally
found on dead-level ground-at least, one can seldom get ciose to them in such a place-one has to make nice calculations, after the first shot, as to where the sprightly fellow will be when the ball reaches him. Allowance must be made for the time it will take, and then, aga.a, other angles, from the uneven lay of the land, etc.

I once got into a hot coriser, while Antelope-shooting, that I am not at all likely to forget. I was out with the Seventh Cavalry (Custer's regiment), on our way up the Missouri River. I don't remember how many troops of cavairy tinere were, but following them came a long wagontrain, strung out-including the troops-say three-quarters of a mile. Presently, the trail we were following took us a short cut across one of the big bends of the Missouri, the neck of which was not over one mile wide. The scouts and Indians were skirting the river a couple of miles to our right, when suddenly we heard several shots fired from that direction. We were not long in inspense as to what had bronght forth their fire, for sweepisg over the rairie, coming straight at us, weie several hundred Antelope-perhaps seven or eight hundred in all, though there may have been a thousand. It so happened that our entire outfit was spanning the narrow neck from side to side; so that the Antelope found themselves in is cul de suc from which there was no escape.

When the firing eommenced, I was about midway between the columnand the scouts, so I had full view of this magniticent band of tleet-footed animmls charging in full career two or three hundred yards past me. Seeing some stragglers. I dismonnted, picketed my horse, and lay in wat for them. Taking broadside shots as they vanished across my line of fire, $l$ killed two or three in I don't know liow many shots-probably ten-and was just commencing to enjoy this battue-shooting, when a volley of bullets came whizzing by, so uncomfortably close that $I$ instantly dropped to the gromind.

I soon discovered, to my dismay, that I was directly between two fires, and us the scouts from the river-side were
approaching me, bullet after bullet came singing merrily along until I became painfully aware that $I$ was in a very undesirable place. Up to this time, however, I had not apprehended much danger; but when the soldiers clossd in from their side, and began pelting away, and I found myself hemmed in on all sides, I was decidedly uncomfortable.

What made it worse, the bullets, before reaching ine, nearly all struck the ground, so that they came tumbling and ricocheting over my liead, broadside or butt-end on, screeching and screaming in their dangerous flight; buzzing, at times, so allired close that, had I been equipped with an intrenching tool, I would soon have buried myself.

During the lulls in the firing, which were of short duration, I signaled several times to the soldiers not to kill me, but kept on shooting, and succeeded in tumbling over, in all, eight Antelope. I could have killed four or five times that number had I accepted the eas., close shots that presented themselves; but I was shooting for practice as well as for meat, and took only running-shots, at from one hundred and fifty to two hundred yards. I must have fired at least forty shots to make this killing.

Several terrified Antelope stood panting, all the way from fifty yards up, and a couple stood staring at me, in wild amazement, at not over thirty yards. So near were they that I could distinctly see their flanks undulating, from sheer exhaustion, ufter their mad racing back and forth, running the ganntlet of hundreds of bullets. One poor fellow, I well remember, stood with staring eyes and open month, catohing his wind, quite close to me, so paralyard with fear und fatigue that he seemed not to care whether he lived or died. I was admiring thr gicieful. beanty of his form, moralizing on the wanton desturtiof that had overtaken these lo: ely animals, and speculating on what would be the end of this jaunty fellow himself, when suddenly, with a stiff-legget bound, he rose up and fell in the agonies of death. At the sume instant I heard the whik of a ricochet bullet, and on walking up to the poor
fellow, found that he had been shot through the neek by one of the many balls that were continually flying in my vicinity. The jagged key-hole showed plainly that this ball had not come end-on, but had been oapsized in its flight, retaining. however, sufficient speed nnd force to cut through the well-rounded throat of my erstwhile timid but lovely companion.

Strange to say, my horse escapel mocathed, and put in his time grazing peacefully, proving again that where ignorance is bliss, 'twere folly to be wise.

On riding over the ground, we found some forty or fifty deal Antelope enough to provide the entire command with meat for many days. Many others were, of course, wounded and lost, which fact we sadly regretted, bnt in the excitement of the moment it could not be avoided. Some of these, however, were afterward killed by the sconts, and brought in with the wagon-train.

I don't think I failed to kill over a single one that I hit. Many came scampering by me with blood-stains showing plainly on their sides. These were the ones I shot at, principally, and when fortunate enongh to hit them with my hollow-pointed bullets, their doom was instantly sealed.

In the matter of clothing best adapted for prairie use, corduroy or mole-skin tronsers are about the most suitable; while a good Hannel shirt, of some neutral color, is the best. For the coat, I am inclined to think that a dog-skin jacket is the best. It is wind and water proof, extremely light, durable, is not cumbersome or warm when worn open, and is a grand protection against cold when buttoned up to the neck. A buck-skin shirt, although good in certain places, is not so good as a flannel one for prairie use. as in wet weather it is a nuisance. In the brush, however, they are grand, as they are noiseless, of good color, and are soft and comfortable.

Nothing that I have ever seen can compare, as foot-gear. to the old Thompson \& Son's moccasins, with moderately light soles, say single soles, with hobnails on the heels, and $n$ few under the ball of the foot; in fact, a couple of spikes
in each shoe are a bonanza, when the grass is slippery and dry. Let the soles project half an inch all the way round; then when you strike a cactus-bed, you can go ahead without prodding your feet at every other step. The sole should project under the instep as well as across the toes, for thorns are just as painful there as anywhere else. Corduroy leggins are comfortable, cool, light, and afford ample protection, though in hot weather they are superfluous.

A soft, felt hat, of a grayish color, is best; one that has a moderately wide brim will be found comfortable in hot weather, or in rain. A few ventilators will be beneficial; so will a strap to fasten under the chin in windy weather.

Beware of leather belts for carrying cartridges. Nothing equals one of webbing; next is canvas. Leather belts are a frand; the shells become covered with verdigris and dirt, and soon foul the breech of the rifle. Always carry a shellextractor in your belt, and then you will have it where it does you the most good; one left behind in camp is like the Dutchman's anchor-only an aggravation. By shellextractor, I mean one that will pull ont a headless shell; nothing but a first-class extractor will budge it.

Every rifle for prairie use should be provided with a pointed wiping-stick, one that fits in the stock like that of a Winchester. A hide thong, with a piece of rag, is good enough to clean a rifle with, but if the bore gets choked with mud or snow, it is convenient to have a rod with which to poke it out.

I always carry a hunting-knife and steel, both fitting in one sheath. This saves trouble; and however good a knife may be, it soon gets dull when carving large game. The blade of the knife should be all one piece with the handle, with buck-horn grip. No other kind of knife will stand chopping, and that is sometimes unavoidable. A small;' light steel is all that is required.

I prefer the California saddle to any other, but a good McClellan is, perhaps, the best for both man and horse. Always carry saddle-bags; they are convenient for your lunch, some extra ammunition, matches, and a flask of cold
tea, which is the best and most refreshing drink I know of. It is as well to carry in them an oiled rag, and if it comes on to rain, just rub your gun with it, and when you get to campyou will see how easily it is cleaned.

My favorite lariat is made of plaited cord-not twisted, for this, when wet, unravels-about the same as good, strong window-cord, forty-five feet long. I fasten one end to the bit, and hold it up as I would a halter-strap, and allow the other end to trail after me. When I see game close, I jump off my horse, stand or sit on the rope, and thus secure my horse at a moment's notice. When I have time I use a picket-pin. This should be made of steel, and formed like the old-fashioned bayonet, not round, as in hard ground it is difficult to drive the latter, whereas a three-cornered one cuts its way, and is soon home. Have a swivel attachment on top; that prevents the lariat from becoming twisted or snarled. Keep the pin fastened by a steel snap, on the mounting-side; this is the most convenient and secure mode of carrying it, and the quickest to get it off.

A good, powerful field-glass is useful; the single-barreled one will answer all purposes, is much more easily carriedthe best way being in a leather pocket made to fit it-than the lorgnette, and not nearly as liable to be broken or rendered unserviceable. This can be fastened to the belt, and should not be over two inches in diameter and six in length when closed.

A compass is a grand, good thing if you understand it, and know where you want to go; but unless you do, it doesn't amount to much, for it is always a greater aggravation to be lost with a compass than without one. I always carry one-one that opens like a double hunting-case watch is the best-and sometimes have been lost, compass and all. There is nothing more easily leading to this than to follow a wounded animal; you forget everything lout the game you pursue, and when it is getting late, and thoughts of camp steal gently o'er you, then you find you have lost everything but your appetite. For this emergency I always carry salt and matches in my saddle-bags, and if I have
some meat I can at least have some supper and a smoke, which goes a long way toward reconciling a man with himself and the world generally.

I have never had much success in flagging Antelope; in fact, I don't think I ever killed one that way. Although I have tried this ruse, never could I lure them within reach. The scheme doubtless worked all right in early days, before the game of the prairies became educated to the seductive wiles and sly ways of the white man; in fact, old frontiersmen have told me some most amusing stories of how they have lured the little Gazelles to their ruin. The time was when the white canvas of a prairie-schooner would set a band of Antelope all agog, and they would approach so near to it that they could be easily shot down by the teamsters and guards. In those days, a white or red rag attached to a stick and allowed to flutter in the breeze would bring an Antelope, or a herd of them, from any distance where they could see the strange apparition.

An old cruiser told me that on one occasion he was riding down the Yellowstone, and saw a small band on the level river-bottom, about two miles away. He wanted meat, and there was no cover from which he could approach the herd. He had no flag; but an old-timer is equal to any emergency, and, dismounting, he took off his red flannel undershirt, tied it to his wiping-stick, stuck the latter in the ground, and unfurled his banner to the summer breeze. The curious little creatures soon sighted the novel oriflamme, and started for it. The hunter had but to lie low and await their coming. They came within a hundred yards before the belching smoke, the echoing report, and the hissing lead revealed the cheat; then, those that were not hit, hustled for the foot-liills.

To lunt Antelope successfully, one must be well mounted; indeed, I have never seen anyone try it on foot, as the circuits necessary to be taken to circumvent a band are sometimes of such a radius that it would take hours to go round on foot.

The pith of all teaching on this subject is contained in these injunctions: Don't be in a hurry; keep out of sight as much as possible; don't depend on long shots. They are magnificent when successfully made, but this is of such rave occurrence that a little more plodding and care are much more conducive to filling the larder. It is exceedingly easy to shoot close to an object at five or six lundred yards, but it is quite another thing to hit it. Besides, what appears to be a close shot, judging from the dust raised by the bullet at these long ranges, may be several feet or yards off the mark; so that, unless it be impracticable to get within three hundred yards, shots at beyond that distance are unwarranted. The better the hunter, the closer he gets to his game. It is only the beginner who tries halfmile chances in the hope of doing execution. Any man can, by using judgment and taking time, become an average stalker, but not one in a thousand can plant his bullet just where he wants it, at an unknown range and distance, if it exceeds three hundred yards.


COURSING THE ANTELOPE WITH GREYHOUNDS.

By M. E. Allison.

78HE Antelope is the fleetest animal that lives, as well as the wariest and most cunning; and one of the grandest sports that this continent affords is that of coursing him with Greyhounds. For a merry party of sportsmen to mount their spirited horses, on a clear, cold, frosty, winter morning; to bring out the eager hounds; to speed away over the prairies for ten or twenty miles; to sight a band of Antelope, slip the dogs, and follow them through such a grand race as must ensue; to watch the startled game in its efforts to escape, and the efforts of the hounds to come up with it; to head it off at every turn; to follow and encourage the dogs, and at last to come to their aid, after they have pulled down the largest and fleetest buck in the bunch-all these afford grander and more exhilarating sport than any I have ever indulged in.

As may readily be imagined, noue but the best-bred Greyhounds, and the lightest-footed, toughest, and beststaying horse, can cope with the Prong-horn; and happy is the man who owns, or may even follow, a pack of these noble dogs that can pull him down.

I have spent many years in breeding and training Greyhounds, and flatter myself that I now own one of the finest packs in the West. I have had many grand runs with them, at the mere recollection of which the blood leaps to my brain; and I can almost see the little brown-and-white streaks of venison drawing away across the prairie, with the long, lithe forms of the great Greyhounds stretched out and vaulting through the air so swiftly, so lightly, so eagerly, that their feet scarce tonch the earth. I can feel the hot breath of the wiry little cow-pony on my thighs as (358)
he comes down to the work, and can feel his sides swell beneath the saddle as he reaches for the game, and asserts, by his intense action, his determination to be in at the death.

There are many experiences of this nature that I might enumerate, and I scarce know which would interest me most in the telling, and you in reading; but as representative runs, I will narrate a few made in January, 1886. Myself and a frienc took four of my best hounds-Mike, Jim, Terry, and Jeff-and boarded the west-bound train for the home of the Antelope. The first point at which we stopped was Garden City, a flourishing town in Finney County, Kansas. My friend Jones, who lives there, and who is one of the famous Antelope-hunters of the West, met us at the train, by previous appointment, and had everything in readiness to take us out the next morning, bright and early, to where he had located a herd of about twenty-five.

Morning came, and we packed our luggage and hounds in wagons, and started. After driving some fourteen miles north, Jones' eagle eye spied the herd feeding in the flats, abont a mile away. We drove our wagons inte a low piece of ground, to keep them out of sight of the game, then saddled our horses, got the hounds ont, and started to surround the Antelope as nearly as possible, keeping in the lowest ground, and at the same time on the windward side of them, for they are quick to catch the scent of any approaching danger. After going some distance, we managed to get within five or six hundred yards of them, and they had not yet discovered us. But here was a rise in the ground which we had to cross, and as this would bring us in sight of the game, we decided that now was the time to make a dash for them and send the hounds off. We accordingly put whip and spurs to our horses, and away we went.

Just as we came in plain view of the Antelope and told the hounds to go, a jack-rabbit jumped up and started in the opposite direction from the Antelope. Of course, every hound saw it, and having been taught to run and kill
jacks, started for it, and never saw the Antelope at all. As soon as we discovered our predicument we stopped, but not in time, for the Antelope had seen us, and ran off a mile or two before they stopped. We were so angry with the hounds, rabbit, and our luck, that we never looked back to see whether the hounds caught the rabbit or not, but followed on slowly after the Antelope, so as to give them another turn when the hounds should come up. After awhile the hounds caught up with us, and we again sighted the Antelope standing a mile or more away, on a ridge, watching for us. We had to maneuver a good deal before we could get any closer to them, for the country was nearly level, and there was not even a bunch of grass that we could use for cover. After considerable delay and anxiety, for fear another jack would get up, we made up our minds we could get no closer; and as the Antelope had seen us, and were getting ready to start, we had to do something at once. We spoke to the hounds, and away we went, the Antelope at least a half-mile away. They made a swing to the right, and the hounds saw them for the first time. Then the chase commenced in earnest. But there were big chances in favor of the game, and as my hounds had never seen an Antelope (they being young), I was not sure they would take hold of one, even if they could come up with them.

The Antelope continued to swing to the right, and here one of the hounds-Mike-exhibited the best judgment I ever saw in a young dog. Instead of following the chase, he shot off at an angle of ninety degrees, and as they saw him coming they undertook to head him off; buthe was too smart for them, and kept them on the outside until he fell in behind them, not more than fifty or sixty yards astern. By this little piece of strategy he was away ahead of the other hounds, and of the hunters who were bringing up the rear, yelling like Indians on the war-path. We could see-:he was gaining on the herd, and for the first time I realized that he was going to catch one if he had proper staying qualities. We did not have to wait long to determine that point, for in less than a quarter of a mile he dashed into
the herd, cut one out-a large, fine buck-and in less time than it takes to write it he threw it heels over head, and the other hounds, which had meantime drawn up, covered it before it conld get up.

Everybody yelled like wild men, and we put our horses to the best pace in them till we were all in the struggling mass, when Jones drew his knife, and, dismounting, caught the buck by the horn and severed its jugular.

This run scattered the Antelope and made them very wild, so we concluded to go to town, and try them the next day.

Bright and early the next morning, we were back where we left the game. After driving over a large extent of territory, we found the same bunch again, and turned the hounds loose, when Mike duplicated his previous day's record. For four days we returned to the flats, and each day Mike sustained his reputation, and caught his Antelope every time he was turned loose on the herd.

We had now cuught five out of this bunch, and felt proud of our success; but the survivors had become so wild that it was almost impossible to get the dogs within sight of them, and we concluded to take the first train to Hartland, about thirty miles west, where Antelope were reported plentiful, and in large bands.

When 'we arrived at Hartland, the sportsmen there laughed at us for bringing hounds to cutch Antelope with. They did not believe us when we told them we had caught five at Garden City. They had some hounds that they said could run some, and they had run them on Antelope fifty times, but never succeeded in catching one unless it had first been wounded, and they knew it couldn't be done. We offered to put up something on our dogs, but the local lads didn't care to back their Antelope with their wealth; so, to satisfy them, we invited them to gather up their hounds and go with us the next day.

We hunted north of town for twenty-five or thirty miles, and at last sighted a herd of six, about half a mile away. The crowd became much excited, and talked loudly, which
finally attracted the attention of the Antelope, and they began to move away before we had decided what was best to do. We had no tlme to parley thet, and I told all hands to turn the hounds loose as quickly as possible.

Away we all went, my dogs in the lead, the local pack next, and the cavalry bringing up the rear. Gee whiz! how the cayuses did tear up the earth! and how those natives did cuss and kick when they saw my dogs throw. ing alkali dust in their dogs' eyes !

But it was no use; the natives and the native dogs were left. The latter could run, sure enough, but they couldn't stay with the thorough-breds. The only thing they could see, in a minute or two, was the dust raised by my dogs; and once in awhile they would get a glimpse of the Pronghorns as they circled. On went the herd, cleaving the sod, throwing gravel behind them, and shivering the sage-brish in their course. We were wild with delight, and our friends were blind with jealousy.

Finally, the Antelope swung off to the right, and, as usual, the stalwart Mike got in his fine work. He drew down on a short cut, and it would have done yonr heart good to have seen him run. Why, a streak of greased lightning couldn't have kept in his dust. For awhile it looked as though he did not see the game at all; but he presently proved himself smarter than anybody, for when the Antelope made nnother turn to the left, he dropped in behind them, not four rods distant, and in about ten seconds canght a fine buck-two hundred yards ahead of the other hounds! This satisfied the doubting party that there were some hounds that could catch an Antelope.

We followed the remaining, five three or four miles before we came in sight of them, but they were so wild that. we could do nothing with them; so we then gave up the chase for that day, and returned to town.

We remained there and hanted out south from town five days, catching eight fins Antelope, making in all thirteen. But the Hartland fellows wouldn't go with ns any more; they were disconsolate. The idea of a pack of tenderfeet

Greyhounds coming in there and doing up their native stock in such disastrous shape was too much for them, and they refused to be comforted.

I will describe one more day's chase, and I think it constituted the finest day's sport I ever enjoyed. We had found a herd of sixteen which lind, apparently, never been chased by hounds. We took. Ent two hounds out that day, Terry and Mike, the others mot being in good form. We came upon the herd stunding looking it us, about half a mile away. The hounds had learned to look for them when we stopped, and all we had to do was to point in the direction of the game, and say "Antelope!" The dogs wonld invariably catch sight from the wagon, in whicil we always carried thein.

Here Mike did the fipest work I ever saw, and I never expect to see it equaled. The dogs both jumped from the wagon, und started off; but in crossing a low place in the ground the Antelope were out of sight, when Terry concluded he was mistaken, nid stopped. Mike, however, kiew his basiness, and kept on, getting within fifty yards of ine Antelope before they saw lim. In the next quarter of a mile he downed a large doe, while the balance of the herd stopped half a mile away, on a ridge, and watched us. We loaded the dead Antelope and hounds in the wagon, and drove quartering toward the herd, keeping the hounds on the lookout in the opposite direction, that they might be rested for the next chase.

The Antelope all this tims were watching us, and we presently began to pull in more oward them, watching every move, so as to turn the hounds in their direction the moment they started. Pretty soon they cantered off, and when we pointed them out to the hounds, it was only an instant until Mikg and Terry both saw them, jumped out of the wagon together, and ran off side ly side. The Antelope disappenred over the ridge, ani presently the hounds did the same, apparently rumning side ly side as they started. As we had no saddle-horses that day, we put the whip to the horses, and went off at a mattling pace for the ridge, whence
we could see the chase. We took no notice of Buffalowallows or dog-towis as we flew over them; and the way we pounded the seais of that wagon was a cantion to tenderfeet. When we arrived at the top of the ridge over which the hounds had disappeared, we saw the grandest sight I ever beheld in all my experience on the plains. Each one of the hounds had cut out a fine, large buck, and, as they dodged back and forth in their frantic efforts to keep out of the jaws of the long-nosed hounds, which were now at their very heels, they would pass and repass each other. They kept this up, it seemed to us, for five minutes; but, of course, in our excitement and efforts to get up to help the dogs, the time seemed mnch longer than it really was. To add to our anxiety, Terry had never caught one alone, and we did not know what he would do with it after he got it. But, no doubt feeling disgusted at himself for getting left so badly in the last chase, he concluded to play a lone hand here, and to redeem himself by catching the largest one in the herd unassisted.

On we went, at better than a two-minute gate, our eyes meanwhile on the chase. Finally, Mike caught his, and they both fell in a pile. At the same instant, Terry made a fearful lunge, nailed his by the lind leg, and hung like a vise. He could not get it down, and it was jerking him about as a kite yanks its tail. Mike had succeeded in getting his by the throat. First he was on top, then the buck; but he never lost his grip. Our every effort was put to test to get to 'Terry and help him out, as he had discovered before this that he had an elephant on his hands which he could neither hold nor let go. In its efforts to get away, the buck would drag him around in a circle, of perhaps fifty yards in diameter, and would pass within a few feet of where Mike was wrestliug with his; but neither one paid any attention to the other.

On our arrival, I jumped out, the team being on a run, just in time to meet Terry and his buck on their circuit. I tried to grah) the buck by the horns, but missed him, and Terry discovered my presence for the first time. He seemed
to think he had done something wrong, and let go to look at me. The buck was not many hours in getting on his feet and striking out for Mexico. I yelled to Terry to catch him, and the way in which he responded proved that he needed only the word. Hé made a dash, and canght the buck again by the fore leg, turning it a complete somersault; and before it could get up I fell on it with my hunt-ing-knife and cut its throat. I then turned to look for Mike and his buck. My partner had reached them, but as he had nothing with which to cut the buck's throat. it was a rough-and-tumble fight between him and it; first one was on top, and then the other. I arrivel a moment later, and cut the Antelope's throat, when all hands, men and dogs, laid down on the ground, completely exhausted.

After resting a half-hour, we loaded our game in the wagon, and started on in pursuit of the herd. We found them again a mile farther on, showed them to the hounds, and away they went. Terry soon lost sight of them, but Mike persevered, and finally ran into the herd, when he cut one out, and caught and killed it before we could get to him. This made three he had caught alone that day; and out of the thirteen caught on the trip, he had eleven to his record.

This ended the hunt; and I think it safe to say that no party of men ever enjoyed a week's sport more intensely than we enjoyed that week with our noble Greyhounds.



## THE DEATH OF VENUS.*

By Williay Pittyan Lett.


LAS ! poor Venus-noblest hound That ever aprang with eager bound The instant that the scent was foundThy final hunt is o'er!
Never again thy bugle-note Shall on the breeze of morning float; The matchless music of thy throat Shall greet our ears no more.

This finger, holding now the pen, Was on the rifle-trigger-when, With lightning swiftness, down the glen The buck in terror came.
Fierce in his wake thy strides came fast, And loud thy voice swelled on the blast.
Aini little thought I 'twas thy last
Run with the noble game!
Thou wert of stanch, unrivaled breed;
Swift as the Antelope in speed,
Thy voice was ever in the lead,
Thou queen of all the pack!
Not one could wind the game like thees,
Or bound away so lithe and free, Or follow with such certainty

A cold and scentless track!
True as the best Damascus blade,
By process of refinement made;
Perfect, without a single shado
To urar thy matchless fame!
When thou wert slipped to scour the wood, The watcher of the runway stood
With confldence that smoke and blood


Woulil snon be in the game.

- Venur was killed by boifun carelesaly met out for Foxes. Bhe was a nowle hound, trua, sutith and tirelems, and had been in at the denth of many a Deser.
(\$1) ,

Oft have I listened to the sound Thy tongue rang echolng around, While on before, with startled bound,

The antlered momareh fled;
DI by St. Hubert! 'twas a yell, Once heard, would be remembered well; Its loud and glorious trumpet-swell Would almost wake the deadl

Fierce as a Tiger on the run, Yet gentle when the chase was done; And sure as bolt from ritted gun.

Alas! that thou art gone!
Falthful beyond e'en luman falth,
Sad was the aceldental scath
Which hurried thee to timeless death-
Of hounds the peerless one!
Brave Venus! who will say 'tls wrong
For thee to sing a funeral song,
Or censure sorrow, keen and strong,
For noble benat like thee?
I would that every earthly friend
May prove as constant to the end;
For even a dog a charm can lend
To proul liumanity!


# THE ROCKY MOUNTAIN GOAT. 

## By Joun Fannin.

50HIS animal may be briefly described as follows: Average weight about one hundrel pounds; legs short and stont; hoofs broad and stnbby; ears pointed; horns on both sexes, curved buckward, from six to twelve inches long, ringed or rough for abont half their length, then smooth to their sharp) tips, jetblack, and susceptible of a high polish; Heece white, consisting of a fine wool next the skin and a long, straight hair, pendent on sides of body and legs, erect along line of back, longer over shoulders and rump, giving the animal the appearance of having a donble hump.

The Rocky Mountain Goat has been reported as far south as $36^{\circ}$ north latitude, und as far north as $62^{\circ}$; but I am not nware that any definite information exists resprecting the limit of its northern rauge. My opinion is that this animal will be found as far north as there are mountains. This Goat is extremely abundant in British Cohmbia, ranging from its southem boundary to the watershen of the Arctic, and from the coast-line to the Rockies, though probably most abundant along the rugged peaks of the Coast Range. Here, muid Nature's wildest scenes, amid storm-swept canons and beetling crags, amid steelblue glaciers and snowy peaks, where the silence is seldom broken save by the rush of momtain terrent, the howling of the storm, or the crashing of the treacherons avalanches; here, far removed from the trail of the ordinary hunter: the Mountain Goat, solitary in its habits and contented with its shaotic and gloomy surroundings, increases and multiplies while sportsmen, and even naturalists, are predicting its early extermination. Indeed, there are few (84) )
animals on the North American Continent of whici, having regard to its distribution and relative abundance, so little is known as of the Rocky Mountain Goat.

This animal is known also by the different names of White Goat, Antelope Goat, and, to the Indians of the Northwest Coast, as Sheep. The fleece is clipped from the dry skins by these Indians, and the wool and long hair connected together, and twisted into a coarse yarn by rolling between the hand and bare leg of the operator-this work being done by the women. The yarn is then woven into blankets, on the most primitive sort of lom, consisting of two upright posts, connected by two cross-bars, over which the warp is stretched, when the weft is passed over and under with the hand alone.

The manufacture of these blankets is still practiced by the Indians of the Northwest Coast, but not nearly to such an extent as in former days, being only indulged in by the few who still adhere to primitive customs and those far removed from the settlements; though a few years ago i saw nearly one thousand of these blankets given away at a "potlatch" held by an Indian chief at Burtard Inlet.

Although, strictly spenking, an animal of the mountainpeaks, I have known Goats to be shot within a few hundred yards of the sea-level, and to be captured while in the act of swimming rivers or wide stretches of salt water. These occurrences, however, are rave, and their wanderings much kelow the timber-line are, jerhaps, more from necessity than choice. Occasionuliy, the deep suow forces them to quit their lofty hauts in seareh of more faroruble brows-ing-gronnd in the timber behw; mad in the enrly spiting, when the snow lins melter "inity frim the "slide-putches" on the mominain-sides inil aling the borders of monntain streams, the Goats wimler down to nibhite the yomigg grass and weeds which spinfig ifj almist limindlutely with the disuppearance of the smow: Agnin, they fieguently mingute, at any time of year, from one momintalin fomionlief, of bren from que range to another; crossling, of course, lit thalf tmoels, whatever villeys or lowhats lintervene. At sum
times a pot-shot may be had without much climbing. When taken young, they are easily domesticated, and will follow the person who feeds them with the fidelity of a dog. They are, however, somewhat mischievous, and will chew up anything they happen to come across, from a poekethandkerchief to an old boot; and one that I kept in confinement was extremely pugnacious in the presence of dogs and cows.

Except during the rutting-season (November) and in mid-winter, they are not, to any extent, gregarious. They are not an animal of speed, as the short, clumsy limbs will at once show; nor are they ever in a hurry. Time is of little importance to them; and even when sturtled by the approach of the hunter, their mode of escape is usually in skulking behind some projecting rock, railer than in speedy flight.

Wonderful storles have been told concerning the cunning and alertness of this strange animal of the mountainpeaks, and the great caution required by the hunter in staiking it; and Indians-even at the present time-will warn you of certnin rules which must be strictly followed if you hope to become n successful Goat-hunter. You must not emoke; you must not build a fire within three or four miles of where Goats are supposed to be found; you must wear moccasins-boots make too much noise; you must not fire a random shot, for if you miss your Goat, gone is your chance for that day-all of which, so far as my experience goes, is the veriest rot. The Mountain Goat is, perhaps, the most stupid animal in the mountains, and little or no skill is required in hunting it. The great ditficulty is in reaching the alnost inaccessible places which they usually inhahit.

The best time for a pleasurable hunt is during the months of September and October, or before the "wet sensin" sets in, aithough the skins are not in prime condition till later on. Any of the modern makes of American lirge-hore pifles will he found effective in the parsuit of this animal. In every case, when liming, I have used a

44 Winchester, and have had no trouble in bringing down the game; though rarely have I had to shoot over one hundred yards.

There is one precaution which it will be well to observe; that is, keep the wind in your face when possible, as the Goats, when they scent you, may take a notion to skulk off among the rocks and keep out of sight, adding to your trouble in finding them.

A couple of good Indians will be necessary, to pack your grub and camp outfit, and to pick out the least difficult way in making the trip up the mountain; for, during the months above mentioned, Goats are rarely found below the summit. When the summit is reached, if the game is not in sight, the usual signs are sought for-a fresh track, or tuft of wool hanging from bush or projecting rock. In places where this game is abundant, trails will be found worn deep in the soft ground.

Of course, there is always a certain amount of interest and excitement attached to the hunting down of a wild animal; but after his first Goat-hunt, the average sportsman will probably conclude that the sport obtained in the capture of the Goat hardly pays him for the leg-wearying toil experienced in climbing the rocky heights to reach its. habitat.

During the winter months, say January and February, if one take a canoe and a couple of Indians, and paddle along the shore of any of the inlets which indent the coastline of British Colnmbia, he may get a shot at a Goat without proceeding far from the water's edge. I have, on one occasion, bagged three and got back to my canoe within one hour from the time of leaving it. The only drawback to $a$ hunt during these months is the disagreenble, wet weather which one is almost certain to encounter in winter on this Northwest Coast.

I have found more pleasure in sitting down on the sunny side of a rock, and, with the aid of my field-glass, watching an hour or two the queer actions of these sleepylooking denizens of the mountains, than I ever got out of a
day's shooting them. Still, the skin or head of a Mountuin Goat can not be classed among the lesser trophies of the sportsman's battle-field; and even in British Columbia, the reputed home of this animal, the white men who have killed one can be easily counted. And then, again, there is a fascination about mountain-climbing peculiarly its own. The ever-shifting scenes of rugged penks and gloomy cañons, of stretches of snow, of miniature lakes, of shady groves of cypress and pine, the banks of blooming heather, together with the expectation of starting, at every turn of the tortuous trail, not only Goats, but Black and Cinnamon Bears and Deer, all of which animals are found on the summit, ought to repay him for the hard work and the many hair-breadth escapes he has had in making the ascent.

To tho student of natural history, who has a desire to study the habits of this animal, and who may be somewhat anxious concerning its extermination in the early future, I can say that, so for as British Columbia is concerned, they are on the increase instend of being diminished, for the following reasons: The Indinn, except in very remote districts, has almost entirely abnndoned the pursuit of the Goat, for the reason that he finds more lucrative employment in working for the whites, and his blankets can now be had with less trouble than in scaling the rocky heights to procure them from the fleece of the White Goat. Then, again, of the white population which may fill up the country, not one in a thousand will ever develop into a Goathunter. Mountain-climbing is no fool's-play, and is nssociated with many a discomfort which will not only vanquish the tenderfoot long before the summit is reached, but will often tax the patience and endurance of the old hunter of the plains. The country may fill up with bustling enter:prises and noisy industries, yet these will have little or no effect on the shaggy inhnbitants of the mountain-peaks - the conditions of food and cover for them will remain unchanged.

Civilization may advance, but its attending intluences will play a small part indeed in disturbing the solitude

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which surrounds the home of the Mountain Goat. Among these rugged peaks, there is little for the avarice of man to covet or his hand to develop; and, taking all these facts into consideration, it may be safe to predict that the White. Goat of British Columbia will exist when all the larger animals of the forest shall be exterminated or driven beyond its boundaries.

One word respecting large Goats. From time to time, stories have been told me about monster Goats that have been met with in the mountains, and the opinion of not a few is that a larger variety of this animal exists. During a trip, last winter, of about a hundred miles up the coast of British Columbia, out of about sixty skins which I examined at an Indian ranch, I picked out four large ones, three of wLich measured five feet in length, while the fourth " measured seven feet, with a breadth of four feet ten inches. This, even allowing for stretching after being taken off, was an enormous skin, and must have belonged to a monster Goat. That two varieties of this animal exist I do not believe; nor do I think that overgrown individuals are more frequent with Mountain Goats than with other species of wild animals.

As experience is the best teacher, it may be well to give here narratives of two excursions after this animal, at two different seasons of the year-one in May, the other in September. These will give a fair idea as to the kind of sport to be had and the nature of the difficulties to be encountered. My experience extends over a period of many years, and over the greater porticn of this wonderful country of forest, stream, and mountain-the coast region of British Columbia; and I am only sorry that out of it all I can not recall more excitement, more genuine sport, in Mountain Goat hunting than is related in the following. Both of these hunts took place on the north arm of Burrard Inlet, about fifteen miles from the now flourishing city of Vancouver, the western terminus of the Canadian Pacific Railway.

On the morning of the 26th of May, I gathered together my camping-ontfit, which is always of the most modest description, consisting of blankets, grub, cooking-utensils, and a 44 Winchester, and procuring a couple of Indians and a canoe, started for the head of the north arm. A fair breeze was blowing; we hoisted sail, and our beautifully modeled chinook canoe skimmed over the water like a bird. After a four-hours' run we reached our destination, and pitched our camp on the banks of a beautiful stream at the head of the inlet.

It was early in the season, and we expected to find the game without much climbing. The plan proposed by the Indian was to simply paddle up and down the stream, keeping a shary lookout on the sides of the mountains which hem in the cañon. Sure enough, we had not proceeded far from camp when the old Indian pointed up the mountain with his paddle, and said, "Sheep."

I had with me a.good field•glass, which I at once brought to bear on the spot pointed out by the Indian. It was an open, grassy place on the side of the mountain, down the center of which a brook coursed its way, emptying into the creek nearly opposite where we were standing. Among the disjointed rocks, well up on the side of the cañon-wall, were three shaggy, white-coated animals. A council of war was held, and an attack immediately decided upon. The ascent of the mountain was comparatively easy, being along the course of the stream until we neared the grassy opening, when we had to make a long circuit to the left, in order to keep under cover of the timber. The traveling then became difficult, on account of the great number of fallen trees and the immense growth of a species of umbrella-plant, locally known as "devil's walking-stick;" and woe to the hand which clutches one of these sticks for a friendly support!

We at last reached the level on which the grassy spot was situated, toward which, still picking our footsteps, and guarding against the sligicuest snap of a twig, we kept on. Fortune seemed to favor us, for right in front, and shutting
out the opening from view, was a rocky, moss-covered ridge, up the side of which we crept, and cautiously peered over the top. There, within one hundred yards, were three Goats quietly feeding, apparently unconscious of our approach; while farther on, and about four hundred feet farther up, perched on the pinnacle of a rock, stood a large buck Goat, whose attention was apparently attracted by the prospect of fresh feeding-grounds on the mountains across the valley. Or he might have been a sentinel watching over the safety of his three companions in the little opening below him. If so, he was a careless one, for his position commanded a clear view of the rock on which we lay, and no warning of our approach had been given.

Choosing our victims, we fired, and the three dropped almost in their tracks. Hastily throwing a fresh cartridge into my rifte, I turned to look for the sentinel, but he had disappeared. In an instant, Clarley was off, dropping powder and ball into his old muzale-loader as he ran; and while I was engaged in taking measurements of the three we had killed, the loud report of his musket sounded far up the mountain-side, and presently he appeared on the point of rock on which we had first discovered the sentinel, and, shouting down the warning "Klosh nanitch!" (look out), before I could utter a word to prevent him, he tumbled the carcass of the unfortunate Goat over the cliff. Down it came, s limp, shaggy, white mass, bounding from crag to crag, till it reached the flat on which we stood, shattered and torn beyond use. Its horns were split into shreds, its jaws broken, and great patches of hair cut clean from the skin-in fact, it was useless as a specimen.

I felt annoyed, and only awaited the approach of Charley to give him a severe reprimand. But the old hunter, chafing under Charley's success, and indignant at his presumption in acting without orders, at once opaned out upon him with a burst of eloquence that, to anyone conversant with the guttural oratory of the Indian, must have been scathing in the extreme. He concluded by informing Charley that we were collecting the skins of animals and birds solely in
the interests of science, and ware not killing as do the Indians, who hunt merely to satisfy their hungry stomachs. But Charley took it all good-naturedly; and when the old fellow's back was turned, he held up two of his fingers, to show that he had killed two Goats, while the mighty hunter had bagged only one.

Our descent of the mountains, to where we had left the canoe, was not at all difficult, as the hard snow along the border of the creek allowed us to drag our specimens without injury to the skins.

The next day's sport, though of a somewhat exciting character, did not redound much to my fame as a Goathunter. The ascent of the mountain had been difficult, and in many places dangerous, and more than once the assistance of my trusty guides had to make up for my lack of iron nerve. Creeping along the face of a cliff, with a thousand feet between you and the first halting-place should you happen to miss your footing, is a feat whici few amateurs in mountain travel may accomplish with ease. Muscle and endurance are valuable adjuncts to the composition of a sportsman, but in hunting the Mountain Goat, muscle and endurance will avail him nothing if he be lacking in that most necessary of all qualifications, a steady head; and the enthusiastic hunter, urged on loy the excitement of the chase, with the game keeping just beyond the reach of his rifle, may find himself at a point where to go on is impossible, and to return requires the nerve and coolness of a Blondin.

We at length reached a shelf, from which, to gain the top, the old hunter had to mount on the shoulders of his brother; after which he lowered the butt of his musket for Charley to cling to, and, with my assistance, he also ascended. The old fellow then formed a loop on one end of his belt, and fastening the other to the butt of his musket, passed it down for my assistance. I, however, began to look at the thing from a purely scientific point of view. I had much to learn concerning the habits of the Mountain Goat; in fact, I had orly just commenced the task. Now,
the belt, which was an old one, might possibly break, and a fall back to the narrow shelf on which I was standing might carry me over its edge, and that would be the end of me. So I told the Indians to go over the ridge, and if they found any Goats, to come back, and I would then make the attempt.

They had scarcely been gone ten minutes when they commenced firing, the sound of their muskets echoing and reëchoing along the mountain-side. Shot after shot was fired, till the whole place appeared to resound with one continuous roar of musketry. I became excited, and ran along the shelf in hope of finding some more accessible place by which to reach the top; but the search was fruitless, so I came back, sat down, and, lighting my pipe to soothe my excitement, awaited the return of the Indians.

In the meantime the firing had ceased, and presently the old hunter; with a frown on his swarthy brow, appeared on. the crest of the ridge, and sliding down on the shelf, seated himself ceside me.

He was in a decidedly wrathy mood, refused to have anything more to do with the hunt so long as Charley remained, and urged me strongly to send him home. It appeared that shortly after leaving me they came upon a band of seven Goats, and as they had approached them from above, there was a good opportunity for rare sport had they returned to notify me, as I had instructed and as the old hunter wished. But the uncontrollable Charley at once opened fire, and the old hunter, fearful lest he should again be behind, followed suit. Whether from excitement or the inaccuracy of their flint-lock muskets, it is hard to sayout of all their shooting but one Goat fell, and that at Charley's first fire.

As the old man was in bad humor, I decided to return to camp; but on reaching the canoe, an exclamation from Charley drew our attention to a mountain on the opposite side of the creek, where, in a small opening, we discovered a sheGoat with a young kid, the latter appearing like a mere speck of snow skipping about among the rocks.


WANTED-A FRIENDLY HAND.

Before starting out, I had offered a fair reward for the capture of a kid, and this was the old man's opportunity. As he was stripping for the chase, he turned to Charley and commanded him to remain below and occupy his time in catching trout, with which the stream abounded. He then disappeared in the dense growth of timber whichi intervened between the creek and the foot of the mountains; while I took up a favorable position, with my glass, to watch


Goato-Fomele and Young.
the success of the chase. The ascent must have been difficult, for two hours passed before the crouching form of the Indian appeared in the opening. A sliort time before this, the old Goat must have snuffed the danger, for she started up the monntain, and at the moment the Indian came in sight had reached a shelf to which the kid was unable to foliow. All this time a large, white-headed eagle soared in majestic circles directly over the scene. After several 23
unsuccessful attempts to reach Its dam, the kid started back toward the point from which the Indian was advancing; but before proceeding very far, sprung down upon a narrow shelf, and stood concealed beneath an overlanging bush.

The Indian, in the meantime working his way upward, stopped within a few feet of the place; but from his actions I was satisfied he was ignorant of the kid's position, and fearing the prize would escape, in my excitement I shouted at the top of my voice. The sound must have died away before reaching him, for he took no notice. Presently, he raised his musket and leveled it at the old one, which still remained in the same position on the shelf above; but lowering it again, he commenced a search amoug the rocks for the lost kid.

His stupidity annoyed me, foi', had he kept his position, he commanded, so far as I could see, the only way by which the kid could escape. Below was a perpendicular cliff of at thousand feet, against the side of which no possible foothold for anything without wings could be seen. But in this I was mistaken, for a rock, loosened by the Iudian's foot, rolling over the cliff started the little animal from its hiding-place, and, with a bound, it sprung outward and down. The thought of its fate sent a cold shudder through me. A thousand feet sheer down, to be ground to atoms on the rocks below!

But no-down it went, fifteen or twenty feet, and alighted on a rocky cone which stood ont at a slight angle from the main cliff, on the top of which there was scarcely room for its feet huddled together. Had it started from that point and soared away over the tops of the trees which studded the valley, I would not have been more surprised, and I waited breathlessly for the next move.

For a moment it rested like a speck of snow upon the dark-gray granite cone, then, with a downward spring of perhaps tenfeet, it reached a narrow shelf which had before escaped my notice, and which ran along the face of the cliff to the wooded mountains on the right. But a sadder fate awaited the unfortunate animal than if it had fallen into
the hands of the Indian. The terrible lird which, in narrowing circles, had kept above the scene, and whose piercing eye had taken in the vantage of the position-the kid separated from the protection of its dam-stopped suddenly in its course, then swooped downward swift as the lightning's flash, and seizing the poor kid, just when life and liberty seemed so near, bore it from the cliff, Hinttered a moment in mid-air, then drifted downward along the mountain-side, disappearing below the tops of the swaying firs.

The chase was over, and, with a sigh of disappointment, I shut up my glass and awaited the return of the Indian. It was nearly dark when we reached camp. After partaking of some of the delicions trout which Charley had hooked from the creek, I lit my pipe, and being tired with my exertions, rolled myself in my blankets. With a beautiful, clear sky for a roof, and the "babble, babble" of the creek for a lullaby, I lay dozing, cogitating over the events of the day.

Finally, the forms of the two Indians, dimly outlined through the smoke of the camp-fire, faded entirely away; I glided into dreamland, and all through the night reẻnacted the scenes of the chase-the kid's terrible leap, my frantic exertions to reach the top of a cliff where Goats were being killed by the two Indians, till at last a large, white-headed bird lifted me from the rocks, dropped me over a preci-pice-then, with a start, I awoke and found it was daylight. My dusky companions were already astir; and after the morning's meal I announced my intention of starting for home, as I had procured what specimens I required for the present.

The next hunt was made in September, with the same two Indians and an old companion, Dick Griffin, whose experience in Mountain Goat hunting equals, if not surpasses, mine. We reached the foot of the mountain which we had decided to ascend about noon, and dividing our blankets and grub into two packs for the Indians to carry,
commenced the ascent at half-past twelve. After five and a half hours of hard climbing, we pitched our camp within the timber, a few hundred yards below the bare summit. The Indians advised this, lest by camping in the open our camp-fire might warn the gama of our presence.

By daylight the next moriing we had eaten our breakfast of bacon, crackers, and coffee, and leaving the timber behind, passed up a beautiful, grassy lane to the summit.

We had scarcely reached this when a dense fog encircled us in evely direction. It was so thick that objects two aundred yarls distant were totally obscured. This was aggravating, the more so as appearances indicated a continuance of this state of things all day. The air was chilly, and, as we had left our coats at the foot of the monntain, we were obliged to unpack our blankets and wrap them around us.

At half-past eleven a slight breeze sprung up, a few faint shafts of light penetrated the darkness, and then, as if by magic, the great bank of fog rolled away; the sun burst forth in all his splendor of noon, and daylight was with us. We were now enabled to determine our position, and found we were on the summit of the divide between the north arm of Burrard Inlet and Seamour Creek-a broken and uneven backbone, made up of sharp ridges, deep ravines, and level stretches, as smooth as if graded by human hands. Everywhere, except on the tops of the rocky ridges, was heather-beautiful, sweet-scented heather-over which we moved as if treading on carpet.

We now picked out a place for a permanent camp, and leaving our grub and blankets there, started out on our hunt. At every step we came upon fresh signs of the game, but for awhile the Indians appeared puzzled as to which way to steer; for although the country was open, and the eye could reach for miles in any direction, yet the broken state of the ground was such that Goats might be within a few hundred yards of us and still be out of sight.

At length the old Indian left us, and started down the side of the ridge. He had hardly gone two hundred yards
when he turned and signaled us to approach. Supposing the game to be at least three or four hundred yards away, we hastily scrambled down after him; but what was my surprise, upon reaching him and peering over the rimmp of cypress behind which he was standing, to see four Gailstwo females and two kids-within thirty yards.

There was a clear, open field for a running-shot should they attempt to escape, and feeling confident that I was good for two of them before they could get out of range, I stood out in open view to watch their actions. Thare was none of that startled look about them which we notice in Deer and other wild animals at the approach of danger. There was no throwing up the head for a moment, and then bounding away as if a whirlwind had undertaken to pack them out of sight. On the coni ary, these silly brutes appeared to look at us stupidly from under their eyebrows, and then, with their heads scarcely raised a foot from the ground, trotted off about a dozen yards to the right, wheeled, and retraced their steps. I felt almost ashamed to shoot; but hearing the lever of Dick's Bullard falling back to its place, I opened fire, and with four shots we dropped the four, within fifty feet of where we first discovered them.

It was past one o'clock when we got the pelts off, and feeling somewhat hungry, we decided to make our noonday meal of Mountain Goat, or rather of kid, for my experience with this animal is that the adults are not of the most savory character.

The meal finished, I gave my rifle to the old Indian (who had come without a gun), and taiing my shotgun, started toward the top of one of the ridges, on the lookout for ptarmigan, while Dick and the two Indians moved along the foot, to a gap which cut through the ridge about a quarter of a mile from the point at which I was ascending.

Before reaching the top, I turned to take a liok at the country behind me; and just here I picked up a little experience coucerning at least one Mountain Goat, which, taking into consideration the wonderful stories told by the Indians as to their acute senses of hearing and scent, surprised me.

On the top of a ridge which ran at right-angles with the one I was on-the two being separated by the gap before men-tioned-I discovered a large buck Goat poking along on the very edge. The side of this ridge appeared to me to be almost vertical, and its height about seven or eight hundred feet. About half-way between it and the one I was on, the smoke of our camp-fire curled up and drifted off in the direction of Seamour Creek.

This Goat appeared to care nothing for camp-fires. He was going to come down the side of that ridge if he broke his neck in the attempt; and so I sat down to watch him. His distance from me was not over five hundred yards, and with my glass I could watch every move he made. About thirty yards below him, growing out of the side of the cliff, was a bunch of broad-leaf plants, which the Indians had told me were a favorite food of the Goat. This spot appeared to be his objective point; and carefully he worked his way down till he reached it, when he commenced feeding.

Just then I was startled by a $k a k, k a k-k a k$ just above me, and looking up, discovered a flock of ptarmigan not twenty yards away. There were eight of them, and I shot them all, firing seven shots; yet the Goat stood there as unconcerned as if he were a thousand miles away. 'And still he must have heard the shooting, because Dick, who was twice as far away, and nearly in the same direction, heard every shot. I felt somewhat disappointed, on picking up my birds, to find that they were the black-tail instead of Lagopus leucurus. They were also in the last stage of summer plumage, and scarcely fit specimens to mount.

Hanging my game on the limb of a cypress, I reached the top oi the ridge, and found I commanded a view of the opening into which my companions had gone through the gap, and I at once began to look for them. Presently, I discovered two dark objects heneath the shadow of a spreading pine, which, with the aid of my glass, I made out to be Dick and the younger Siwash; while farther on, near the foot of the opposite ridge, was Seammux, creeping along as
if on the lookont for some animal ahead. The younger Indian got up and started back toward the gap, and just then I heard a shot in the direction of Seammux; but before I could bring my glass to bear on the spot, a dense fog rolled up the opening, and enveloped the whole scene in darkness. Then came another shot, and another, until I counted nine shots in quick succession.

I became alarmed, thinking probably that my companions had stumbled onto a Cinnamon Bear; and I was on the point of starting down the ridge and through the gap to join them, when the voice of Dick came up through the thick fog, "Catch 'im alive!" and then a hearty "ha! ha! ha!" from the same individual satisfied me that nothing was wrong. So I resumed my seat, and waited for the fog to lift. It rolled away almost as suddenly as it came, and I then discovered Dick and Seammux bending over some animal, which, with the aid of my glass, I made out to be a Goat.

I turned to look for my friend on the cliff. He was still in the same place feeding away, but another actor had come upon the stage. A dark object was creeping toward the white one. It was the young Siwash. Stealthily he picked his way along the side of the ridge until he got within what appeared to me fifty yards of his prey. Then he halted; a puff of smoke sliot out in front of him, the Goat sprung backward-in fact, turned completely over-and fell, a distance of fully five hundred feet, to the bottom of the cliff.

In a short time the young Indian joined me, bringing with him the mutilated skin of the unfortunate Goat. Ever since the start, there had been a jealous feeling between the two Indians-more noticeable on the part of Seammux-because I had engaged the young Indian as guide; and all points as to routes and the chances for game were referred to him. I did this ont of spite, simply to punish the old fellow for the way he acted or a former trip. He, however, missed no opportunity to sneer at any proposition the young fellow made; and now it was 'fillicum's tuirn, and, as he seated himself beside me, he asked if I had
heard the shooting in the valley below us. I replied that I had, and asked what it was all about. With a sort of comical grin on his greasy face, he answered, "Klonass sogers" (perhaps it was soldiers).

It turned ont that Seammux had fired the nine shots at one Goat, and the young Indian had stood by and laughed at him. In the meantime, Dick had brought down another Goat, which made seven-more than we could manage; so I gave the order to shoot no more, to pick up our skins, and head for camp.

It was five o'clock when we reached a spot about three hundred feet above our camp, and looking down and seeing that everything was just as we left it, we sat down to rest before going down the slope. We had scarcely seated ourselves, when Seammux, pointing across the valley in the direction of Seamour Creek, exclaimed, "Niñ"a tum-tum spaz" (I think that's a Bear). All eyes were turned in the direction indicated, and, sure enough, a dark object was discovered, which, with my glass, I made out to be a large Black Bear, and with it three good-sized cubs. They were in the bottom of a ravine, the mouth of which entered the valley directly opposite where we were sitting, and was about three-quarters of a mile away. The hills on each side were at least fifty feet high; that to the left timbered, that on the right, with the exception of one solitary tree, bare. But that tree proved to bs in a favorable position, for the wind coming from the left, the approach had to be made up the slope on which it stood.

After all, there is a good deal of murder in the shooting down of a wild animal; at least so it has seemed to me in many cases of my own experience-this one I am about to relate, in particular. Here is an animal enjoying the freedom of a wilderness almost unknown to man. There is no cautiousness-no thought of danger-because there is no animal of her surroundings that she dreads. She strolls leisurely along, stopping now and then to pick up some choice root or caress a favorite cub. The sun is sinking lower and lower behind the hills. The shadows of approach-
ing night are creeping higher and higher up the opposite slope. She stretches her great length on the heathercovered ground, and placing her head between her paws, quietly watches the playful frolics of her three cubs. Hark! What is that? Only a whistle; but it comes from the lips of a human being, and, as if seized with the dread of some terrible danger, she raises her head, turns it in the direction of the sound, when the object for which that whistle was given is attained, and the next instant a bullet from a Winchester rifle crashes through her skull. She spring3 to her feet, and uttering the most piteous wail I ever heard from the lips of human or beast, drops dead among her cubs, which a moment after share the fate of their mother.


## THE ROCKY MOUNTAIN SHEEP.

By G. O. Shields ("Coquina").

然HE Rocky Mountain Sheep is one of the wildest, wariest, and most difficult to hunt, successfully, of all North American game quadrupeds. His habitat being the highest, raggedest, and most forbidding mountain ranges, it is only by the most arduous toil, the most wearisome and, in many cases, dangerous climbing, that the hunter can reach the feeding-grounds of the wild Sheep at all; and once there, his skill will be taxed to its utmost to get within rifle-range of the game. He will be fortunate indeed if, after he has crawled a quarter of a mile, and has almost reached the point from which he hoped to make a successful shot, one of the capricious currents of wind that are so often fatal to the hopes of the mountain hunter does not sweep up a cañon or around a crag, in a diractimon immediately opposite to that from which it has been blowing, and carry his scent to the delicate nostrils of Odis, int the sense of smell in this animal is equally as keen as that of sight. He will also be fortunate if, after hours of careful and tedious, time-killing and back-breaking stalking, he does not displace a loose rock and start it rolling. down the mountain, or if he does not break a dry junipertwig, the sound of either of which would send the game leaping and dancing away among the crags.

The Big Horn is gregarious in its tastes, and a few years ago bands of several $\mathrm{h}:$ :ndred were frequently seen together. Now it is rare indeed that so many as fifty are found in one place. The sportsman is extremely fortunate who can find a band of ten or fifteen after riding and climbing a week to reach their range.


- Es BC. !!

When bands of Sheep are feeding, they nsually post a sentinel on some prominent point, to watch for possible danger; and when about to lie down, they seek the highest ground in the neignborhood, in order that each member of the flock may act as his own guardian.

The muscular development of this animal is simply marvelous; and while possihly not as graceful and elastic in his movements as the Deer or the Antelope, yet he will leap from crag to crag, will bound up over ragged ledges, over ice-glazed slopes, or down perpendicular precipices, alighting on broken and disordered masses of rock, with a courage and a sure-footedness that must challenge the admiration of everyone who has an oppertunity to study him in his mountain home.

It may be well to state once more, however, that all the old stories of hunters and mountaineers, to the effect that the Sheep jump over precipices and alight on their heads, are purely mythical. A full-grown ram weighs three hundred pounds or more; and while his horns would probably stand the shock of such a fall, his bones woald not. His neck, and probably every other bone in his body, would, if he jumped from a precipice and fell fifty or a hundred feet, be crushed to splinters. Besides, if the rams could stand it, and come out of it safely, what would become of the ewes and lambs, which have not the big horns, and which follow wherever the rams lead! A Sheep never jumps down a sheer precipice of more than ten or fifteen feet; and whenever or wherever he does jump, he always lands on his feet.

General Gordon, one of the Special Indian Commissioners, who was traveling in Northern Washington when I was there, bought from a hunter the head of a ram that had the tips of the horns broken. The General showed them to several persons of my acquaintance, and said he had never before believed the stories of the Sheep jumping down mountains and alightiug on their heads, but that now he was compelled to believe them, for here was an undeniable proot of the truth of them. This noble animal had, he said, undoubtedly broken his horns in this way. But I can in private collections throughout the country, have been broken in the same way.

Generally speaking, the range of the Rocky Mountain Sheep may be said to extend from Old Mexico to Alaska, and from the eastern base of the Rocky Mountains to the Pacific Coast, though there are some ranges of mountains within these limits in which it has nover been found. On the other hand, it ranges down the Missouri and Yellowstone Rivers to a line some four hundred miles east of the Rocky Mountains. Here it finds refuge in the Bad Lands and rocky cliffs that border these streams.

This animal has few characteristics in common with the domestic Sheep. The horns of the wild ram resemble somewhat those of the domestic species, although much more massive; but the wild ewe has horns six to eight inches long, that curve backward, while the domestic ewe has none. The wild Sheep has a heavy coat of stiff, coarse hair, much like that of the Elk. Some writers have stated that nuderneath this there is a heavy coat of wool. This is an exaggeration. There is but a scant allotment of the wool-not enough to hide the skin when the hair is plucked out.

In color, also, Ovis Montana closely resembles the Elk, buing of a light-brown, or almost red, in summer, and turning to a gray in winter. It has the same ashy-white patch on the rump as is seen on the Elk, while the muzzle is lighter colored, and the belly and flanks are white. The tail is only about two inches long, and seems to we entirely useless.

The rams grow to a height of three feet and six inches at the shoulder, and attain a weight of three hundred and fifty pounds, while the ewes average about one-third smaller.

The horns of the male grow to a great size. I have in my collection the head of a ram, killed in the Little Missouri Bad Lands, the horns of which measure sixteen inches in circumference at the base, and thirty-six and one-fourih
inches in length. They are badly battered at the tips, from fighting-probably two or three inches of each horn having been broken off. The peculiar shape of the horns of the eje has frequently cansed her to be mistaken for an Ibex, or a species of " Red Goat," by inexperienced hnnters.

The appearance of the Big Horn in the Missouri and Yellowstone Valleys seems to have been due to some accident or caprice, though the bands that are there seem contented,


Mother and Son.
and make no effort to migrate to the mountains. The favorite haunt of the species in general is, as already stated, the higher ranges of mountains, in the neighborhood of perpetual snow and ice. They are occasionally found at an altitnde of twelve thonsand feet in summer, though in the early spring they frequently descend into the valleys, in search of the first green vegetation, or of alkali.

The ability of the wild Sheep to scale forbidding beds of rock and ice is owing to their being shod with a pad of a soft, black substance closely resembling crude rubber,
which clings with grat tenacity to any object with which it comes in contact.

The young of this species (usually one, but sometimes two in number) are dropped in May or the early part of June; and when a few days old, will follow their mothers, if alarmed, over rocky walls where it would seem that a Wildcat could scarcely find a foot-hold.

The flesh of the Rocky Mountain Sheep is adjudged by most hunters the most delicious venison in the mountains, and the roasted ribs of a fat young ram, with a couple of hard-tacks, have often, after a hard day's climb, furnished me a repast that I have relished more, beside my camp-fire, than any spread I ever sat down to within the confines of civilization.

Notwithstanding all the natural instincts of the Big Horn, he may be overcome by the experienced and skillful hunter. The natural alertness, the wariness, the keen eye, the quick ear, and the acute scent of the one, are no match for the trained eye, the cat-like tread of moccasined foot, the superior reasoning faculties, and the breech-loading rifle of the other; for, after all, the white man is the smartest animal on the earth. And so the doom of the Mountain Sheep is written in his own blood, as is that of all the large game animals on this continent. How long it will be before the bones of the last specimen of this noble race are left to whiten on his native rocks, it is impossible to say; but it is only a question of time.

Within the memory of men now living, there were thousands of wild Sheep on various mountain ranges in Colorado where not a track of one has been seen for five years past; and some of the best-informed hunters and guides assert that there are not now a hundred Big Horns left in that whole State. In all the far western States and Territories, the Sheep have been rapidly reduced in numbers, year by year, until now they can only be found in small bands, and in the most remote fastnesses on the continent.

Perhaps the best hunting of this class is now to be found in British Columbia; and as few readers of this volume will
ever have the opportunities that I have been fortunate enongh to enjoy for hunting and studying this game, I will narrate some of the incidents of a trip I made into this northern range in the autumn of 1887.

We had traveled on horseback-carrying our camp supplies on pack-animals-a distance of one hundred and eighty-five miles from Spokane Falls, and on arriving at Loomis' ranch, the last one we were to pass before starting up the mountain, we deposited there all our provisions except enough to last us five days, and on the following morning started on the trail that leads through the foot-hills to and up Mount Chopaca.

We reached timber-line, on the first peak, late in the afternoon, and hunted there that evening, but saw no signs of Sheep, though we found plenty of Deer, and killed one fawn for present use.

Before dark I prospected the range, and seeing another peak about three miles northwest that looked better, we started for it at daylight next morning, with our rifles and saddle-horses, leaving everything else behind. We reached the base of it, and rode our horses up as far as they could go. Then we picketed them on a grassy bench, and proceeded to climb to the top on foot.

We separated soon after leaving our horses. When I reached the summit, I took out my field-glass, adjusted it, and commenced to sweep the surrounding country for game. I had just got fairly settled down to looking, when I saw a large band of animals quietly feeding along the side of a spur of the mountain nearly a mile away, and several hundred feet below me. At first, it was difficult to determine whether they were Mountain Sheep or Deer, but a minute's scrutiny revealed the fact that they were Oois Montana. I had now no interest in whatever else might be seen from the peak, and returning the field-glass to its case, I made a hurried descent from the summit, to get to the diverging ridge on which the Sheep were.

And here let me digress to say that a good field-glass is an almost indispensable item in hunting-outfit for the
mountains. It often saves one long walks and weary climbs. By its aid yon may often turn a black log into a Bear, a few gray rocks into a bunch of Sheep or Deer, or vice versa. By its aid you may often find game on what appears to be open, unoccupied ground, and where you would not think of going to look for game if you did not first see it there. Then you have a great advantage in stalking the game if you know exactly where it is while so far away. You would often frighten it by a noisy misstep, or by approaching it from the windward, if you did not know its exact whereabouts. I should never have seen this band of Sheep at all had I not had the glass, for they were on ground that I should not have considered favorable, and should never have gone there to look for them. Furthermore, the glass is useful in picking out routes through an unknown country. You may often see, by the aid of the glass, and from a promontory, a trail, miles away, winding up or down the side of a mountain, or along a stream, or over a prairie, that you would never have found with the naked eye. Yoi may, with it, find broad fields of impassable sliderock, or great swamps, in time to avoid them, where to the naked eye all looked fair. A good field-glass costs but a few dollars, weighs only a pound or two, and, to a hunter in the mountains, is often worth its weight in gold.

When I got down onto the lawer ridge, where I was out of sight of the Sheep, my next precaution was to make a wide detour, to get to the leeward of them. Then, being within a few handred yards of them, I started with cantious, cat-like tread to move toward them. The hill was covered with "chip rocks"-that is, small flakes of shale, over which it was almost impossible to walk without making some noise; but my feet being shod with moccasins, I was able, by exercising the utmost care, to move quietly. However, when I reached the top of the ridge opprsite where I thought the Sheep should be, and peered cantionsly over, there stood the old ram, evidently the sultan who ruled this large harem, looking at me.

The heel-plate of the rifle was already pressing my shoulder, and my first view of him was over the gleaming barrel. Instantly, the little gold front sight gleamed like a spark of tire on his great, broad, muscular chest, and ere he had determined what the strange apparition was that had risen so stealthily on the horizon, a cloud of smoke hid him momentarily from me, a deafening detonation went rolling and echoing across the canon, and the sultan fell struggling in his tracks. He was nearer to me than I had thought, and having taken a little coarser aim than necessary, the bullet had gone three or four inches higher than I intended, and had broken his neck.

Nearly all writers who have written of this animal have told us of its wonderful vitality, and that if shot, almost anywhere, even through the heart, it will invariably run from two hundred yards to a mile before falling; and not knowing that my bullet had gone above the point aimed at, I was surprised to see this ram drop in his tracks.

We have furthermore been told, by these same writers, that the wild Sheep of the mountains always run uphill when alarmed. This is also an error. All my experience with them has been directly in contradiction of this statement; and this herd (like all the others I have ever frightened) lit out down the hill at the best speed they could make. I fired two shots at them as they went, but none of them stopped. They went. to the bottom of a deep cannon, crossed it, and climbed the other side, disappearing around the point of a mountain half a mile away. I counted them as they went up, and there were twenty-three of them, nearly all ewes and lambs.

Then I turned my attention to the ram. He had stood on the brink of the hill, and in his dying struggles was gradually working over it. If he should once get started down it, he would go to the bottom of the cannon, which was at least six hundred feet deep, and I had to catch him by a hind foot and hold him till he was dead.

Immediately after I finished my fusillade, I heard my companion fire four shots in rapid succession, away across
the canon. When he came to me, he sald he had located four Sheep, and was sneaking on them when I flred. My shots alarmed them, and they ran. He shot at them at long range, and one ram fell, but immediately got up and tried to run. He kept falling and staggering tlll he reached the brink of a great precipice, when he fell over and went to the bottom of it, no doubt crushed to it shapeless


The Sultan of Chopaca.
mass. Miller thinks the Sheep was nearly dead when he started down, and is sure he was nothing more than a mass of sausage when he reached the foot. He said he was not hunting that kind of $m=t$, and would not have gone down that heathenish hill-side : fter him if there had been three barrels of him.

We took the head, skin, and saddle of the big ram I had killed (and whose portrait is shown herewith), carried
them down to our horses, lashed them on our saddles, and returned to camp.

The next morning I went back over the same ground, to see if there were any more Sheep in sight, and as I neared the top of the same ridge on which I had killed the big ram, I heard strange noises issuing from beyond it; and advancing cautiously to the top, saw a Wildcat and a Coyote engaged in a fight over a shoulder-blade of this same Sheep, which was already pretty well polished.

I was careful not to disturb them, and. taking a reserved seat in the front row, watched the circus till the end of the last act. The varmints seemed well matched in size, strength, and courage, but their tactics varied widely. The Cat, of course, depended mainly on its claws as weapons, while the Coyote's best hold was with his teeth. The Cat was quicker and more elastic in his movements, while the little Wolf was the more deliberate, and the better stayer. The Cat seemed the more sanguine of the two, the more anxions for the possession of the property in dispute, and in greater haste than his antagonist to push the battle to a speedy conclusion. He seemed determined to have the bone, even though he should have to wade through blood and hair a foot deep to get it; and the Canis latrans seemed determined to stay by it as long as he had a piece of skin on him as big as a postage-stamp.

When I first sighted the contestants, they were in the midst of a sanguinary round, but finished it in a few seconds, and separating, as if by mutual consent, both backed off a few paces and sat down. The Wolf growled, snarled, showed his ivories, and licked his wounds in turn; while the Cat hissed, spit, and caterwauled, much as a domestic cat does when engaged in a family row.

Finally, the Coyote started for the Cat, and no sooner had he taken a step than the Cat shot into the air, clearing at least ten feet in a single leap, and lit on top of the Coyote. Then there was snapping, clawing, snarling, yawling, howling, and shrieking. Teeth and toe-nails contended valorously for the victory; the air was filled with hair; and
rent with cries of rage and shrieks of pain. To paraphrase John Hay, or whoever it was that vrote it:

> He tried for to chaw the neck of the Cat, But the Cat he wouldn't be chawed; So he lit on the back of that there Woif, And bit, and clawed, and clawed.
> Oh, the hair it flew, and the Wolf he howled, As the claws went into hils hide, And chunks of fiesh were peeted from his buck, And he flumixed, and kicked, and kiyied.

Blood flowed until the snow looked as if a dozen chickens had been beheaded at once and thrown out there to flutter their lives away. The pent-up fury of Goths and Vandals seemed concentrated in these fiery little creatures. They writhed, struggled, clawed, and gnawed each other in a way that was truly frightful. They rolled over and over, and seemed like a single monster in the throes of death. Sometimes they were almost burisd in the cloud of snow thrown up in their struggles. Hostile arrows from the bows of enraged savages never flew with greater swiftness than did these creatures move in their efforts to devour each other; nor did the arrows ever smite their victims with more terrible emphasis than the claws and fangs of these animals sought each other's vitals.

When both seemed exhausted, they again drew off. Again they sat, nursing their wrath and recovering their wind, for perhaps two or three minutes. Still, both seemed anxious for the finish, and without avaiting the call of "time," both sailed in. Another cloud of hair and snow filled the air and enveloped the contestants. More screams and yells made the day hideous, and this round was fought through much as the others had been. Round after round was savagely contested, and though both of the little gladiators were becoming visibly weakened by suffering and lossof blood, neither seemed disposed to yield. After the fifth round that I had seen, the rest was much longer than at the end of either of the others. Neither combatant seemed disposed to renew the trouble, though neither seemed the least inclined to yield the belt, or the bone. I decided to
assume the rôle of referee, and mentally declaring the fight a draw, took a shot at the Cat. This broke up the affair suddenly.

The Gat stood with his head to my right when I fired. I held for his choulder, but realized that, as I pulled the trigger, I pulled the muzzle off to the right. "There," I said to myself, "I have missed him." But when the smoke cleared away, I was surprised to see him floundering where he had stood. I then turned my attention to the. Coyote, who, notwithstanding the hard work he had lately done and the large quantity of gore he had wasted, was getting out of the country at a rate that would have left the fastest horse on the turf out of sight in five minutes. I shot at him three times, but he did not stop-at least not while I could see him. He was headed straight frr Mexico, and, for aught I know, is there now.

Then I went to pick up my Cat; but he was gone, too. I went to where he had stood when I shot, and found some small pieces of meat and bones, some blood and some hair, but the rest of him was gone. There was a deep gulch close by, and I tracked him where he had rolled and tumbled to the brink of this, apparently making his dying kicks as he went. He hid tumbled down into it, and I followed. I saw several places where he had struck rocks or bushes, leaving blood and hair on them, and fully expected to find him dead at the foot of the hill, if not lodged somewhere this side. I slid and scrambled down about three hundred feet, when I found where the pesky varmint had gotten his feet again and gone off on a series of long jumps that would have done honor to a healthy jack-rabbit. I followed him a considerable distance, and though he was leaving some blood on his trail, he seemed to be getting nicely rested, and to have startel for Hudson's Bay. So, with a sad heart and a pair of tired legs, I climbed back up the almost perpendicular wall of the gulch to the scene of the battle. It seemed that I had not pulled off quite so far as I supposed, and had shot away either his nose or his lower jaw-most likely the latter.

The band of Sheep we had frightened the day before seemed to have left this region, and not finding any others, we returned to the ranch, and outfitting anew for ten days, started for a Sheep country of which we had heard a great deal, and which lay forty miles to the northwest. This was near the head of Ash\&nola Creek, a stream which rises among the snow-clad, storm-swept crags of the Cascade Mountains, in Northern Washington, flows north, and empties into the Similkimeen River in British Columbia. The country drained by this stream is undoubtedly one of the greatest Mountain Sheep ranges remaining on this continent. Nearly all the mountains and foot-hills in this portion of the range have large, open plateaus and parks on their tops or sides, which are covered with a luxuriant growth of bunch-grass, affording good food for the wild Sheep; and it seems that they have congregated here from all other portions of the Cascade Range. They have made this their home, their trysting-place, their breeding-ground, and their pasture. In winter or summer, bands of them, numbering anywhere from a dozen to fifty, may be seen feeding or reposing in these parks, or on the rocky hilisides near them.

On the 3d of November, we started for this great Sheep-range. The first day out, we rode to an Indian ranch on Ashanola Creek, four miles above its mouth, and went into camp at three o'clock. We had just taken the saddles and packs off the horses, when a wild-looking squaw rode up to us and demanded two dollars for the privilege of camping on her land. We objected to paying such a price, lut she was obdurate. We discussed the propriety of saddling up and moving on, but the horses were tired, and we didn't know how far we might have to go to find another place where they could grazt; so we finally compromised with the "Kloochman" at a dollar for the privilege of sleeping on her land over night.

We pulled out early in the morning, and after riding an hour, arrived at the foot of a high, steep mountain, up which a trail went zigzagging and winding over rocks and
crags as far as we could see. From the directions given us, we supposed this to be the trail we were to follow. We climbed the mountain to its summit, a hard piece of work, which took till afternoon. When we got there, we found an open, grassy country, such as we were looking for; but bands of horses and cattle were grazing all over it, and not a Sheep or Sheep-track was to be found.

My guide, a half-breed Indian, had, in the face of my earnest protest, allowed his dog to follow us. He was a young mongrel, and I felt sure he would be a nuisance; but Charley insisted that he was a good dog, and would be useful to us in various ways. He had already had several runs after Deer along the trail, and now that we had got into a country where they were abundant, his squeaky yelp was heard in the land all the time. He ran by sight, and as soon as one Deer had gone away and left him, he would jump another. Before we had had time to ascertain whether there were any Sheep on this mountain or not, I was mad enough at the pup to shoot-him all to pieces. I knew that if there was any game in the country, he would drive it all out long before we could get sight of it. I told Charley if he didn't round up the infernal cur and picket him, I would brand him with an Express bullet. He said he would, just as soon as he could catch him, but that was a very indefinite quantity.

We went into camp, and the dog had Deer running all around us before we got the tent pitched. Some of them almost ran over us. A band of eight or ten came bounding down the side of the mountain, and stopped within thirty yards of us. Charley picked up his rifle and killed a fat young buck, which we needed in our business. Then some Indians who were camped near us, hunting Deer and dryiny meat, came to us and asked if we wanted that dog any more. Charley said we did, and they said then we had better tie him up; they wanted what few Deer there were around there, and he was driving them all away. We asked them about the Sheep, and they said we had climbed the :nountain too soon; that we must go back to the creek,
follow it up about two miles, and then climb another mountain like the one we were on.

It rained that night, and early the next morning we started to retrace our steps. We slid down the mountain, followed the creek up till we found a trail leading up another rocky wall, and followed it. This proved to be a much higher mountain than the other, and my back was almost broken when we reached the top of $i t$. We sa:v plenty of fresh Sheep-tracks as we went up, however, and the knowledge that at last we had found the home of the Big Horns sweetened the toil.

Near the top of the mountain, we met a gentleman from Victoria, British Columbia. He told us that if we had come to hunt Sheep we need go no farther, for we were then in a land where they were abundant. He had been there, he said, tell days, and had killed nine-all old rams. He could have killed many more in the time, but had shot only such as he wanted-such as had fine, large horns. The proof of what he said lay all around his camp. Sturdylooking old heads, with massive, rolling horns, wer. on every $\log$; plump, fat hams hung from the trees, and skins were spread upon the ground. Mr. Pike said he had finished his hunt, and should start for home the next day, when we would have the field all to ourselves.

We made camp on the bank of a little spring brook, and tied the dog to the largest tree in the grove with the largest rope we had. Then we started out, in opposite directions, to prospect for game. I had gone but a slort distance, when the dog showed up, smiling, and ready for a run. He had chewed the rope in two. With a club, I hit him a blow across the hinder parts that sent him toward the camp howling like a Coyote. From the top of a ridge, I saw a band of seven Sheep quietly feeding on an open plateau half a mile away.

I made lively time over the intervening ground, and crawling cautiously to the top of a ridge near them, peered over. They had lain down, and were quietly chewing their cuds and basking in the afternoon sun. I was not yet near
enough to make sure of my aim; and as the light wind was favorable, I got behind a large fir-tree that stood farther out on the prairie toward them, and crawled cautiously to it. Theri I moved carefully to one side and took a look at them. Beautiful creatures! Their glossy, gray coats glistened in the autumn sun, and their large, lustrous, dark eyes were now plainly visible. There were three ewes, three lambs, and a ram. The father of the herd had but a small pair of horns, however, and to this fact he owes his life, if he be still alive and well, as I hope he is.

I selected the largest ewe, as I wanted the heads of a family, for my collection, and training the Winchester an that the little gold front sight gleamed on her side, jusu back of the shoulder, pressed the trigger. The band sprung to their feet, huddled close together for a moment, looking in every direction for the source of the deafening roar. I remained hidden, and being unable to sight or scent me, all but the ewe I had aimed at went bounding away down an almost perpendicular mountain-side, over rocks and among trees, and in a moment were out of sight. The one that had been my target started with the others, but after going perhaps twenty or thirty feet, she stopped, with her head down, paused a moment, turned two or three times around, sank down, and died without a struggle. The Express bullet had done its work effectually. Two ribs were broken where it went in, three where it came out, and her lungs were torn to shreds.

Returning to camp, I found the half-breed there, with the head of a large ram that he had killed. He reported having seen two large herds. The evening was devoted to skinning and preparing the heads of the two specimens, to cooking, eating, cleaning rifles, etc. We gathered dry logs, and branches of fir, pine, and cedar, and made a roaring fire that might lave been seen from mountains ten miles away. We were in a hunter's paradise. Game was abundant all about us, awaiting the test of our skill in hunting and shooting, on the morrow; our stomachs were full of good, nutritious food; a cold, clear mountain brook war-
bled its sweet music in our willing ears; our tent was pitched, and in it soft beds of fir-boughs awaited us; our fire burned brightly, and we had been successful in our afternoon's hunt. What remained to complete our happiness?

Speaking for the half-breed, nothing. He lay on his stomach and gazed complacently into the fire, saying nothing save when spoken to, and then usually answering in monosyllables and grunts. He was good-natured and willing, but inherited the moroseness of his maternal ancestors, and on this night, as was his custom, went to bed soon after supper.

But, speaking for myself, I lacked a companion, or half a dozen of them, for that matter. If I had had a good, genial friend there-one who could keep his end of the whippletree up, or even one who would have listened gracefully-I could have poured forth a string of yarns, reminiscences, and the like, that would have reached far into the night. I was in a mood to talk, but had no one worth a continental to talk to; or, I could have listened most eloquently had there been someone to talk to me. I wanted somebody to commune with; but this communing is not Charley's forte. I could even have been happy alone. I have spent many days and nights in the mountains entirely alone, and never felt lonely, for then I could commune with Nature and my own thoughts; but in poor company I am always lonely.

Besides, I am of a generous nature, and if I have a good thing, and there is more of it than I can use, I like to pass it around. Here I had a large stock of camp comfort, of enthusiasm; of vitality, of wood, food, water, and game, and wo one to unload them on. I simply had to bottle up my sociability and save it for some future occasion. I hope to corral a dozen or so of my friends in just such a place as. this, some night, surrounded by just such pleasant conditions as we were surrounded with there, and then ask them if they are not glad they enlisted.

As the first rays of the golden morning light shot across the grassy plateaus, the evergreen groves, the snow-capped peaks of Mount Ki-icht-hutl, I took up the field-glass and scanned that portion of the country visible from our camp, for game. I soon located two magnificent old rams standing on a ridge a few hundred yards away, gazing down in a stupid, curious way at our camp-fire. Their great, muscular bodies, clad in their heavy winter coats of dark, coarse hair, with the peculiar white patch about the rump; their strong but shapely limbs and massive, rolling horns, outlined against the bright gray of the morning sky, afforded a fine study, and I watched them for some minutes with the most intense interest before attempting to secure one of them.

There was no cover that wonld enable us to approach nearer to them, and our only chance for a shot was to take it from where we were. We picked up our rifles, assumed what is known on the rifle-ranges as the kneeling position, took careful aim at the larger animal, and fired. They were too far away, however, for effective shooting, and we both failed to score. At the double report they bounded away a short distance, stopped, took another brief look at us, and then disappeared behind the hill. Charley followed them, while I breakfasted. He failed to get another shot at these, but returned in half an hour with a large ewe that he had killed a short distance beyond where they had stood.

I went to the top of a high hill near camp, and from there saw four separate bands of Sheep. The smallest numbered twelve; the next larger, nineteen; the next, thirtytwo; and the largest, something uver fifty. They were on a broad, open table-land, about a mile away, in such a position that it was well-nigh impossible to get within shootingdistance of them. I made a long detour to the left in the hope of approaching them-moving cantiously through small groves of timber, crawling on the ground behind slight elevations or ridges, skulking from tree to tree and from rock to rock.

In this way I traveled perhaps two miles. At frequent intervals, a Mule Deer, and sometimes several of them,
would get up, stare at me for a few minutes, and then run, usually toward the creek. One band of ten danced along ahead of me for nearly a mile. They would run fifty or a hundred yards, then stop and look at me; nibble the grass or shrubs until I came near them, and then bound away again. Finally, they seemed to tire of my society, and sailed away right through the Sheep-pasture. All this
? hegira of the Deer alarmed the Sheep; they became restive, and moved nervously about. I frequently peered over a ridge or through a thick clump of trees and watched their movements, but was careful that they should not get a glimpse of me. I was also careful to keep to the leeward, or at least across the wind from the game, so that they might not scent me.

One by one the smaller bands finally took the alarm from the fleeing Deer, stampeded, and ran away; but the larger band, seeming to feel more confidence in its videttes, stood its ground. Nearly all the herd went into a deep draw to escape the cold, raw wind that was now blowing, and laid down. I felt sure of getting within easy range of them. I passed on through a strip of down timber, then over several wide beds of broken and disordered porphyry. Having got opposite the pocket in which I had last seen the Big Horns, I now started to crawl directly toward it. I hoped to get on the brink of the hill above them, and to pick out and kill the best ram in the flock, before they became aware of my presence; but I still kept jumping Deer, every one of which ran by the Sheep, and some of them right through the herd.

When at last I reached the brow of the hill, removed my hat, and cautiously peered through the grass on its apex into the draw, there was not a Sheep in sight. Examining the ground, I found a great many tracks, all indicating that the animals that made them had hurriedly fled to the north. Silently following them up to the head of the ravine, over a barren, rocky ridge, and through a narrow strip of stnnted timber, I saw them in the middle of another small park. They had again apparently relapsed
into a feeling of security, and I crawled to within about fifty yards of them. The majority of them had gone to feeding. Several of the lambs-gay, sprightly little creat-ures-were skipping and gamboling merrily about, just as you have seen domestic lambs play in a pasture-field.

Some of the older animals were engaged in the more serious occupation of love-making. Two lusty old rams became involved in a quarrel over a demure-looking ewe, whom both seemed anxious to captivate. As one of them moved toward her, the other, which was a few feet in the rear, made a vicious rush at him, and striking him on the port quarter, sent him spinning and reeling a distance of twenty feet or more. This was the signal for open hostilities. The jealous rivals squared away, faced each other, and prepared for war. For a moment they stood sullenly eying each other, their manes erect and their eyes flashing fire. Then, as if at a given signal, they lowered their heads and charged each other with all the force and fury of mailed knights in the lists. Their massive horns came together with a shock that seemed sufficient to grind them to splinters, and to dislocate the necks of the angry beasts; but they simply reeled, staggered, shook their lieads, and then slowly backed off, until thirty or forty feet apart, for another encounter. Both now seemed more savage and desperate than before. They snorted, groaned, and pawed the ground in their rage. By this time most of the herd had gathered about to watch the battle. They formed almost a perfect ring around the contestants, and seemed as deeply interested in the fight as are the toughs who gather to watch a human slugging-match.

Again the burly foes went at each other with the speed of race-horses, and met with the same terrific shock as before. The sound of their clashing hooms could have been heard a mile. The animals were evenly matched in size, and the contest was bitterly waged. Each round consisted of a single assault, and as the belligerents became heated and blown, the waits between the acts were prolonged, each requiring time to recuperate for the next onset. Both were
now bleeding profusely at nose and ears, and apparently suffering great pain. Yet the terrible blows were given and received with as great spirit and as unwavering courage as at first. Finally, after a dozen or more rounds had been fought, both rams began to stagger and totter on their feet. Still, there was no indication as to which would be the victor.

At this stage of the game, a restless partisan of one of the contestants made a rush at the other, and striking him squarely on the shoulder, knocked him down. No sooner had he dealt the blow, than he in turn received a countercharge, from a champion of his victim, that sent him to grass. These two then squared for each other, and the fight at once became four-cornered. Shock after shocli resounded over the hills, and the sound of the blows was like that made by powerful men breaking rocks with great sledge-hammers.

Finally, the original pair drew off, neither having strength nor inclination to pursue the other; each staggering and reeling as if each step must be his last. The fresh combatants hammered away at each other until they in turn began to falter. But these were not so well paired as the others, the one that first entered the lists for his friend not being the equal of his antagonist in strength or staying qualities. At every onset he was driven back, and more than once was forced to his knees by the superior weight and strength of his adversary. At last he was thrown backward with such force that he fell prostrate on his side. His antagonist followed up the advantage thus gained, and when the unfortunate creature attempted to rise, struck lim a fearful blow that laid him out, to all appearances stone-dead. The victor then walked away with his head up, and thus the battle was ended. The vanquished ram soon recovered, partially, and slowly regaining his feet, staggered away and left the herd.

Talk about your ancient battering-rams, your modern Columbiads, and your Zalinski dynamite-guns! Give me half a dozen of these wild battering-rams, lariated and
trained to the work, and I'll take a contract to knock down the walls of Jericho in seven minutes, by the watch.

I had followed up this band with the intention of killing one or more of them; but these old rams, by their great cournge, fortitude, and consequent suffering, had won immunity from my rifle, and I allowed them to go their way in peace. There were no others in the herd that I cared for, so I went in quest of another band.

In the afternoon, I went to a large park that lay abont a mile to the southeast. Crawling to the top of a ridge, whence I could command a good view of the entire prairie, and peering over, I saw a bunch of six Sheep lying down, very near where I had killed the ewe the day before. There were two rams in the lot-one two-year-old, and one large one with a tine pair of horns. I decided to shoot at the two-year-old first, and take the chances on the old ram afterward.

I supposed that after the first shot they would jump up and stand for a moment, as they usually do, trying to determine whence the report came, before running. In order to get within easy range. I had crawled to the same big fir-tree from which I had shot the day before, and drawing a coarse bead on the shoulder of the young ram, fired. They all sprung to their feei, and started at once for the precipice beyond, which seamed to be their place of refuge at all times when alarmed.

The two-year-old fell dead after making two or three bounds, but the remaining five were going like the wind. I took a running-shot at the old patriarch just as they reached the jumping-off place, and as he disappeared I saw a hind leg swinging from side to side, like the pendulum of a clock, but rather faster. I followed them down the steep mountain-side a short distance, and looking carefully ahead of me through the brush and rocks, I saw the big, dark eyes of the wounded ram glaring at me over a ledge of rocks, not more than a hundred feet below. He had apparently stopped and turned to see what it was that had
struck him. His great, heavy, rolling horns loomed up over the ledge as if they had been carved there from the native granite.

But I had no time to admire the picture. Quick as a flash, the heei-plate of the ritle was at my shoulder; I saw a momentary glimmer of a speck of goid between his eyes, and instinctively my finger pressed the trigger. But as I did so, I saw his head suddenly swing to the right, and I knew I had missich him. He had seen enough of me, and had sprung away in flight. But, quick as a flash of light. ning, the lever has swung down and back to place! Click-ock-click! The bright speck again gleamed on a fleeting patch of gray hair-and bang! The mountain breeze quickly drove the smoke aside, but this did not enable me to see the game. It was gone-hidden in the labyrinth of junipers, jack-pines, firs, and rocks. I sprang out on an overhanging ledge, and strained my eyes, peering into the jungle. I could not yet see him, but could hear him. Now he is down, and seems to be in the death-throes. Hear the small rocks rattle away down the mountain-side-a perfect shower of them! He has dislodged them in his struggles. But hark! he is up again, and is making off. His progress is slow and difficult, and I can hear him fall every minute or two. But he is getting away, diagonally down and along the mountain-side. Look! there is an open space, away ahead, in the direction he is going. If he passes through it, I may get another shot. Sure enough, there he is in the edge of it, and nearly five hundred feet below me! He has stopped; he reels, staggers, and seems ready to lie down; but I will not risk it. I will give him another shot. Flash! bang! Now , will you stop? Yes; he is down. But see! there he goes again! He is dead this time, though, and is rolling, tumbling, heels over head, end over end, down the: almost perpendicular mountain-side. Where on earth will he stop? Now he is out of sight again in the thicket. Crash ! thump! rattle-te-bang! he still goes. Now at last the noise has ceased; but has he stopped, or is he so far away that I can't hear it? Shall I go down and see? And
if I do, can I ever get back up herel Well, I'll chance that.

It required no effort to go down, but it did require all my strength to keep from going so fast as to break my neck and all the rest of my bones. I had to hang on to every bush, tree, and projecting rock that I could get hold of , and let myself down with one until I could reach another. Finally, atter descending about six hundred feet, I found the object of my pursuit hanging to a small fir-tree. One of his horus had fortunately caught the tree, completely encircled it uear the ground, and held him securely. It required all my strength to release him and get him in position for dressing. If he had not caught on this or some other friendly tree, he would doubtless have gone into Ashanola Creek, fully two thousand feet below, before stopping. The ball I fired at him when looking at me had cut the tip of one horn as he swung his head; the next had passed through his flanks, and the third through both shoulders.

And now arose another serious question-Could I get the game, or any portion of it, to camp? It would seem to require all the skill and all the power of the most expert Alpine-climber to scale that mountain-side without any incambrance. But I said to myself that I would take the head of the Sheep to camp or stay with it till the Indian should come to hunt me. So I cut it off, skinning the neck back to the shoulders, and started with it. Thein I bethought me that there was too much meat there to be wasted; so I turned back and diossed the carcass, that we might come after it next day, if I succeedel in getting to camp with the head. I now tied a piece of quarter-inch rope to the horns, forming a large loop of it, and putting it over my shoulders, so as to swing the head well up on my back, began the terrible ascent. I used my heavy rifle as an Alpine-stock, and with the other hand caught every bush, tree, and rock that could afford me any help, pulling myself up foot by foot and inch by inch. Once I caught hold of a currant-bush that grew in shallow soil on


CAMPWARD BOUND
top of a bed of rock, and was raising myself by it, when its roots let go their slight hold, and I fell backward. I should have gone, no one knows how far, down the fearful declivity, even as my victim had lately gone, had I not fortunately canght a strong j:niper-shrub that stood near. This friendly shrub was the means of my living to tell this story.

I was compelled to stop every few minutes to rest. I would throw myself prostrate on any shelving rock or friendly bit of level earth that was large enough to hold me, and lie there like a dead man until I could recover sufficient breath and strength to resume my way. I frequently had to jump from point to point of projecting rocks, across open chasms which I could cross in rn other way, and which there was no means of going around.

Finally, after an almost superhuman struggle of more than two hours, I reached the rop of the mountain, and fell on the soft grass in the park, more dead than alive. My clothing was wet with perspiration, though the temperature was far below the freezing-point. I lay there until I began to feel the pangs of cold and hunger; then I went and got the good, faithful old horse, Blue, who was picketed in the w:uds a few hundred yards away, lashed the Sheep-head on in: :iding-saddle, and led him to the camp. It was dark Vh: I reached there, and Charley had a good, hot dinner of mountain mutton-chops, boiled potatoes baked beans, and hot bread awaiting me. Thi? I eat? W ell, you would not kelieve it if I told you how muoh I ate, and if you want to know, the best thing you can do is to go out there and try it for yourself.

I could find no better hunting-ground than the same park, and went back to it early the next morning. Sure enongh, there was another small band of Sheep. I picked ort a large, fat ewe this time, and killed her. Then for a running-shot I selected a lamb. I broke his hind leg, also, and he started down the hill, just as the ram had done the day before. I followed, and found him lying down just below the edge of the prairie. Another ball through the
heart finished him, and it was but a few minutes' work to carry him back to the level ground. Then I took a seamless grain-bag that I had brought for the purpose, went down and brought it $u_{i} \quad$ e task was equally as severe as that of bringing up tie .ead; but I never waste meat when it is possible to save it.

I brought old Blue to the front again, and with great difficulty succeeded in loading the ewe onto him and cinching it down. Then I put the bag of meat and the lamb on; and just as I had finished packing and cinching the load, I heard a snort, and looking in the direction whence it came, I saw a large ram standing looking at me, not more than fifty yards away. I had not expected to need my rifle on my way to camp, and had packed it in with the load. I seized it by the stock, and after tugging frantically at it for a minute or two, brought it out; but my visitor had concluded that he had seen all he cared to see of the outfit, and had taken a header down the mountain-side. We had now all the meat, heads, and skins our horses could carry, and returning to camp, made preparations to start home the next morning.

Anyone who may wish to visit the Ashanola country will find the ronte I took perhaps the easiest, shortest, and most pleasant-i.e., by way of the Northern Pacific Railroad to Spokane Falls, Washington; thence by team to Loomis' ranch, and from there by saddle and pack animals. It is about two hundred and twenty-five miles from Spokane to the hunting-grounds; but the trail leads through an interesting and beautiful country all the way, and, when once reached, the mountains along Ashanola Creek are, as I have already said, unquestionably the finest Sheep-range remaining on the continent. Deer are also there in countless numbers. We never saw less than twenty-five or thirty in a day, and one day we counted seventy-two. We were not hunting them. If we had been, we could, of course, have found a great many more. But I hope that no man will ever be so unmanly as to go there and slaughter
game for the mere sake of sport, and then allow it to be wasted. Never kill more than you can take care of.

The Sheep are not nearly so plentiful there now as they were five years ago, and probably five years hence it will be difficult to find half a dozen in a week's hunting. "Passing away" is written over the gate-way to this hunter's paradise, as it is over that leading to all hunting-grounds on this continent; and let no man hasten the time of the extinction of the Rocky Mountain Sheep more than is commensurate with his needs in the way of reasonable sport and of trophies for preservation.


## THE PECCARY.

By A. G. Requa.

我会HE Peccary, or South American Musk-hog, is found in large herds in Old Mexico, and sometimes as far north as Arizona and Southern 'Texas. The largest herds, however, are to be found in the interior of Old Mexico.

In appearance, this animal resembles the common hog, bnt differs from it in many ways. The flesh of the Peccary is good to eat; but it is necessary to renove the dorsal pipe, or gland, immediately after killing, otherwise the meat will taste of the secretion which is found on its back, near the loin. The gland is about the size of a small orange, and contains an odorous matter smelling like musk; hence the name, Musk-hog. When they become angry, the odor emitted is very strong.

There are two species of Peccary found in North America. The common, or Collared Peccary, is about the size of a small hog; the bristles on the neck are longer, forming a mane, while a narrow, white collar surrounds the neck. The White-lipped Peccary is considerably larger, and of a darker color, with conspicuousl $y$ white lips. The ears, which are short, and stand erect, are almost covered with the mane. The tail is not readily visible, but may be found on close inspection. It is flat, and only about two inches long. The male and female resemble each other closely. Once a year the female brings forth one or two young, of a uniform reddish tint.

The White-lipped Peccary is found in large herds, usually led by a male. When one of the herd is alarmed, he makes a signal by stamping with his feet, which is at once repeated by all the rest. They are then on their guard. If
one of their number is wounded so that it squeals, the whole herd becomes ferocious, will charge their enemy on sight, and speedily destroy him, unless he escapes by climbing a tree or by flight. It has been stated by old hunters that if the leader of the band is killed, the rest will take to flight, while they will not do so though many of the common herd be killed. This is contrary to all the experience I have ever had with them. They feed almost indiscriminately on animal or vegetable substances, but it may be considered that roots and grains form their principal nutriment.

Both varieties are gregarions, herds of from two to three hundred being sometimes found in the far Southwest. Where only a few are found together, the Mexican ranchmen sometimes hunt them with dogs, but never when a large herd is known to be in the country; for no ordinary pack of dogs conld live long in a contest with one of these armies of savage, fearless brutes. The Wild Boar, the European congener of the Peccary, furnishes exciting sport when pursued by hounds; but a single one of these animals will often kill several valuable dogs before himself yielding to the combined attacks of the pack; and thongh the Peccary is not nearly so large or so powerful, and though not armed with the great tusks of the Boar, yet he is equally ferocious, and when congregated in such great numbers, they wage a most bitter and bloody war on any foe by whom they may be attacked.

Hunting the Peccary in Old Mexico is certainly exciting enough for the average hunter. In the fall of 1880 , I left Hermosilla, the capital of the State of Sonora, with a Mexican guide, to prospect in the Sierra Madre Mountains. We had two pack-animals, two saddle-horses, and enough provisions to last forty days, except meat. Cur route lay directly across the mountains. We were well armed, my guide carrying a Long Tom, or Needle-gun, and a pair of Colt's revolvers, while I had a pair of 44 Colt's and a $32-40$ Marlin repeater (which rifle, by the way, is my favorite for small game).


AT BAY.

The first night out I was lucky enough to kill a large Mule Deer, but it proved to be poor. The next day we only traveled about twenty-seven miles, and camped at a small spring, well up in the mountains. We saw numbers of doves, and after we got our horses staked out I shot the heads off several of them, and we had a Spanish stew, which was very fine. Near the spring, we noticed wellbeaten trails made by the Peccaries coming there for water. My gulde insisted on going up the mountain to capture one of them, but I would not listen to it, knowing the danger there is in attacking a drove of them on their way to water.

Early the next morning, we packed, and started just as the sun was showing over the mountains. We had traveled about five miles, when my guide pointeri to the opposite side of the cañon we were traveling in, and about three hundred yards distant I saw a large herd of Peccaries feeding. We stopped, and my guide being anxious to have a shot, took the Long Tom, and after raising the sights to the proper distance, took deliberate aim, resting his gun on a rock, and fired directly into the center of the bunch. At the report of the gun they threw up their heads, anci seemed to wonder where the noise came from. The ball struck too high. The next shot was better, striking sear the center of the herd; but they only gathered closer together and snuffed the air. The third shot struck a rock, and the ball whizing through the air seemed to frighten them, for they started down the cañon and were soon ont of sight. We then remounted and resumed our journey.

There was water where we stopped at noon, so we stayed late; and after filling our canteens and giving our animals another drink, we traveled until ten o'clock at night, and then made a dry camp. Next morning we were off before daylight, so we could reach water before our animals got too thirsty. We reached the Yaqui River, which flows south and empties into the Gulf of California. Here we camped near a settlement of the Yaqui Indians where we got some fresh goat's milk and some fine cactus-fruit, of which there are several kinds growing on this river.

The Yaqui Indians speak the Spanish language poorly, and are but half-civilized. They cultivate small fields, nnd plow with a forked stick. Sometimes the women pull the stick intended for a plow, and sometimes a burro or small jack furnishes the motive power. We lenrned from the natives that there vas.a small insurrection going on, down the river, between some of the Mexicans and Yaqui Indians. I afterward leaned that such things occurred every time they had a good crop of beans. So, deciding not to go into the mountains until things got more settled, we moved up the river ten miles, near an Indian settlement, and prepared to stay a week or two. The first two days were spent fishing and picking fruit, which grows in great abundance on the many kinds of cactus which are to be found in the vicinity of this river.

The mammoth cactus grows here in great abundance, and the novel way hunters have of picking this fruit would surprise many of our Eastern friends. This cactus grows from fifty to one hundred feet high, being ubout three to four feet in diameter, and having one or two limbs, which are the same sizo of the body. The top is as large as any part of the body, and right on the top is where the fruit grows. In some instances, fifty or more blossoms come ont. When the fruit is ripe it looks and tastes much like a black mulberry. Each berry is protected by n kind of husk which stands up around it. The fruit is about three inches long and one inch in diameter. The only way to get this fruit is with the ritle, unless you cut the whole tree down; but with the rifle it can be had easily. The top of the tree, under the fruit, is soft and spongy. The trees usually grow on the side of the mountain, which is quite steep. By climbing up the mountain, opposite the top of the tree, you can get within fifty feet of the fruit, and disertly opposite it; then, by firing eight or ten shots from your rifle, you may cut the whole top off, and down comes the most delicious fruit that man ever ate. We called it picking fruit with the Marlin.

The second day we were at this camp, a native came to us and tried hard to buy my rifle. He told us the Peccaries
hud destroyed all his crop, and he wanted to join the insurrection; he said that was the only way he could get anything to eat, since his crop had been destroyed. I induced him, by offering him a small sum of money and all the Peccaries he could use, to show us where to find them. Next morning he was at our camp, mounted on a burro, and we were soon off. Going up the river three miles, then turning toward the mountains and following up a cañon, we came to his casa and a sinall field which he had irrigated from a spring farthel up the cañon. He said he was always bothered with the Peccaries, but had mauaged to raise a crop until this time, when they became so bold as to come to the field in broad daylight.

We followed up this cañon, finding lots of trails, showing that there were large bodies of the Peccaries together. We traveled directly up the main cañon about four miles, then followed a well-beaten trail which turned up a smull side cañon. After following this trail two miles, it seemed as if they had scattered, and everything indicated that we had reached their feeding-grounds. The ground was rooted up in every direction. We had been steadily climbing since we left the river, and must now have been three thousand feet above its bed. The country was more level, and was covered with underbrush, cactus, and a few trees. We were on the second bench of the table-lands, which is usually the home of the Peccary.

As we rode out from the cañon on this almost level land, we could see for miles away, but were unable to see any of our game, the brush being about five feet high on an average. The Yaqui had said but little since we started up the last cañon, and as we got on top of this bench he stopped and refused to go any farther, saying the Peccaries were there-meaning in the brush-and that he would go back in the cañon, get in a tree, and wait for us to come back. I knew what the matter was; he was getting scared. He then told us there had been two Yaquis eaten by the Peccaries, near there, a year ago, and that the way to get them was to wait until they came down for water, and then
kill them from the sides of the cañon. I began to think that way myself, but my guido was wild to get a shot at them, so we left our Indian and pressed on through the brush; but our progreso was slow, as the brush became thicker. I was in the lead, when all at once my horse stopped and began to snort; then for the first time I realized the dangerous ground we were on, for the best time we could make through the brush was a walk. My horse kept snoiting, and at last I saw, not more than ten feet from me, a dead Peccary, partially eaten. We rode up a littie closer, and discovered that it had just been killed. Getting off my horse, I observed tracks made by the Siiver Lion, or Cougar.

I then knew we were on dangerous ground, as the Lion could not be far off. I got on my horse, and took my rifle in my hand, just as I heard a fierce growl come from the brush directly in front of us. My horse was behaving badly, and I could not get sight of the Lion. I told my guide to ride up by my side and take his revolver in his Hand, putting his Long Tom in the case. I did the same; then we both rode straight toward where the noise came from. We got a glimpse of the Lion as he ran chrough the brush, and both fired at him. We could hear him traveling through the brush, and pretty soon saw him spring up on a rock about two hundred yards away, and face around to get a good look at us. This was my chance, and taking my Marlin out of the case, I raised the sights, slid off my horse, and fired. My guide said I had not toached him, but I was certain I had; ar ' getting on my horse, we rode up to the rock, and there lay our Lion, shot through the sinall of the back. It proved to be a small female. We took the skin, and concluded to take the Indian's advice; so we went back and lound him in a scrub-pine, and the jack feeding near him. He had heard the shooting and got scared, thinling the Peccaries would be after us. He soemed to be very much afraid, so we started down the canon to find water, where we stopped and ate some lunch.

After letting our horses graze for an hour, wo had just started, when our Indian pointed to the mountain and then
started down the cañon. Taking my field-glass, I could see something coming down the trail. I told my guide to get on his horse, but he would not. Pretty soon we could hear the noise of their hoofs as they came down the mountain. I saw there was only a small bunch of them, so I tied my horse and got down behind a large rock near the trail. Just then my guide fired and killed one. Then he fired again, and down went another. Then I fired, but only wounded one, and it began to squeal, when the rest of them canght sight of my guide and went after him. Just then the Iong Tom spoke again, and another one rolled over. Now there were but three left, and they were not more than twenty feet from me: I got two of them with my Marlin. My guide had thrown down the Long Tom and drawn his Colt's revolver, when the only one left charged right at him, and he-killed it not mure than two feet from the muzale of his revclver; making seven we had killed in that many seconds.

We cut the musk or gland from two of the smallest, tied them behind our saddles, and started down the cañon, well pleased with our day's hunt. We found our Indian at home, and when we told him what we had done he seemed surprised, as he expected us both to be eaten. We gave him both the Peccaries, except the hams of one, and told hin to go and get the rest that night. We had fried Peccary, fried fish, and fried quail for supper.

All that evening my guide begged me to go again next day. When I told lim there was lots of danger, he only laughed, and said he would go alone if I would not go with him. Next morning, I again tried to persuade him out of the notion; but nothing would satisfy him, and at sunrise he was off. It was the last I ever saw of poor Frank Yanso.

I put in the day fishing, and that night I watched and waited all night for him, but no Frank came; so, early the next morning $I$ was in the saddle, riding up the river on a swinging lope. It did not take me long to get to the house of the Indian who had showed us the huntingground two days before, and speaking in Stanish, I asked
him if iny guide had been there. He said he had, at about the same time the morning before, and tried hard to get him to go with him, which he did as far as the mouth of the cañon where we had killod the seven Peccaries. He had got two on his burro, and came back, but Frank had gone on up the same cañon, saying he was going to kill a Lion himself.

The Yaqui said he told him not to go, but it did no good. Then I knew something had happened him; so I followed up the cañon until I came to where the small cañon turned off. I followed that, and came out where we had been two days before. I rode directly to the rock I had shot the Mountain Lion from, hitched my horse, and climbed up on the rock. After looking in every direction, I saw a higher point nearly a mile away. I went to that, making my way through the underbrush as best I could, and had got near the point when my horse suddenly raised his head and shinnied. Looking straight ahead, and beyond the rocks, I saw Frank's horse tied to a small scrub-cedar. Riding to him, I looked in every direction for Frank; then I called, but no answer. I went to the rceks, and going on the highest one, commenced looking with my field-glass. At last $I$ took the glass down, and was getting down from the rocks when I saw the Long Tom lying near, on the ground. I crawled down, and saw that the ground was all torn up around there, with blood-marks and hundreds of tracks made by the Peccaries; and looking further, I found small pieces of clothing, and one of Frank's revolvers. I also noticed tracks of the Lion. Then I went back on the rocks, examined closely, and found tracks of Peccaries on the rocks. By this time my hair was standing nearly straight. I got down, picked up the revolver and rifle, got on my horse, unti dd the other one, and started back. It seemed lonesome up there, and I got back to the Indian's ranch as soon as possible. When I told him what I had seen, he seemed to think the Peccaries had done the work; but I shall always believe it was the Lion. My opinion is that he had hitched his horse and gone on the rocks to look for
game; that he had shot at and probably wounded the Lion, and it had killed him; that then the Peccaries came along and ate the body. I think that if the Peccaries had lilled him, they would have tackled the horse, too, for they get very savage when they are excited.

Next day I learned that the natives expected the troops to make a raid down the river; so I hired a native, packed up, and left.

The next sping I was again in Hermosilla, and telling my friends of my troubles, they suggested we make up a party and try to get ever with the festive pigs. They said they knew where to tind a large herd, within one day's travel; so it was decided to leave early the next morning. There were four in the party, all armed with Marlin repeat-ing-rifles and Colt's revolvers. Each had a saddle-horse, and we had two pack-animals. We got off at eight o'clock, and at ten that night we camped about $f$ miles from Hermosilla, well up in the mountains, on th bank of a small stream fed by a spring near by.

Next morning we could see signs of our game, where they had come for water. After getting something to eat, we all started, leaving our horses. We kept together, following one of the many trails which led up the side of the mountain. We had agreed to keep together, and not go in the open country, but to keep near the trees, as that is the only safe way where there are large herds. We had gone about a mile when we came to fresh signs, which we followed. The wind was favorable, so we had no fear that they would scent us, and we soon came in sight of a large herd. They were feeding near the top of a small divide, and we watched them until the last one had passed over; then, hurrying to the top, we could see them not more than eighty yards distant.

I counted three, and we all fired. They gathered closer together, near one that had been killed, when wa gave them anoiler round, this time with better effect, as we saw two drop; then the firing became faster, and the Peccaries
seemed dazed. They stood around and snuffed the air, while we emptied our rifles. While reloading, they seemed co get sight of us for the first time, gave a snort, and down the mountain they went. We fired at them until out of sight, and on counting up, found we had killed eleven where they stood and three while they were running.

We cut the hind quarters from four of the fattest, hang them in some trees, and followed the herd, which it was easy to do. The ground being soft, they made a good trail, and after following them about a mile we saw them again, feeding. We made a circuit around a small hill and got close to them, but they broke at the first fire. However, we had good shots, as they ran close together, over comparatively open ground, and dispatched seven before they got away. This was $\mathrm{s}_{\mathrm{i}}$ : ti enough for one day, so we started for camp.

That night we discussed the best plans for killing the Peccaries, and concluded that we would try to get close to them and near some trees; then one man could shoot and cripple one of them; then let them smell us, and they would come for us. We would then climb the trees, and while they would try to guaw the trees down we could kill the whole herd, as it is a well-known fact that if they wind you after one of them is crippled, they will charge you. Then, the only show is to go up a tree or outrun them, which I found, the following day, to be hard to do. We had determined to kill the whole herd if possible, though I now see how foolish it was, as we had no use for them.

Eurly next morning we were off up the mountain, with a hundred shells each, determined to kill all there were in the herd, provided we could get them to charge us. As before, we agreed to keep together and near the trees, there being plenty of scrub-cedars growing on the sides of the mountain. We went in the same direction we had gone the first day, and going to "here we killed the first ones, we found one had been eaten and another carried off. We saw by the tracks that this had been done by a Grizzly, and some of the boys wanted to follow him; so we took a
vote on it. Two were in favor of the proposition and two opposed. At last they left it to me. Peccaries were large enough game for me; so on we went, looking for fresh signs, by which the Peccaries are easily found. Taking my fieldglass, I was able to see the opposite side of the cañon, a mile away, and could see something moving. There were a number of animate objects, but we could not decide what they were, as they were soon out of sight. It was decided that I should go down the cañon a mile, cross, and go up the other side, and if I found them to be Peccaries, I was to fire my revolver three times, so the others could join me; if they were not Peccaries, we were to go up the cañon until we found the game we were after, when the same signal should be given by the party finding them.

I was not long in reaching the ground where I had seen the objects, and soon found that what I saw was a large drove of turkeys, instead of Peccaries. The turkeys in Mexico are smaller than our common wild turkey of the North, and almost coal-black. I was anxious to get one; so I followed the trail up the monntain, when all at once up flew the whole flock. They had heard or seen me following them, and hid until I got right among them. One of them lit in a tree near by, and I was not long in getting him down. The rest of the flock flew down the mountain; so I took the one I had killed and started down after them. Frequently I would get a glimpse of one running, down below me, and at last got another shot, but missed. Then they all flew clear across the cañon. I watched them aliglit, then sat down on a rock to rest, taking my coat off, for by this time I was quite warm.

I had not sat there more than five minutes before I heard the sharp noise of the Peccaries. They came in sight not more than twenty yards below me. There were not more than a dozen that I could see, and there were plenty of small pines near by; so I thought I would just kill the whole herd, provided they showed fight. As they came into the open ground, they seemed to wind me, as they began to snuff and paw. I fired at one, and, just as I
intended, only crippled him. He set up a great squealing, and, sure enough, here they came! I was just a little excited, and started for a tree, forgetting my coat and turkey. I had scarcely time to get up when they were around the tree, and instead of twelve, they kept soming until there were at least two hundred.

I commenced shooting, and killed five with my rifle, that being the number of shells in my gun. It then occurred to me that my ritle-shells were in my coat; so, having no further use for my rifle, and realizing that it would become a burden to me if compelled to stay in the tree several hours, as seemed likely, I threw it down. Fortunately, I had both revolvers, and a belt full of cartridges for them; so I went at them. They were chewing the tree, and climbing over each other trying to get at me. Each shot laid one ont, and each shot seemed to make them more and more furious, as they would rush at the tree, and gnaw the bark and wood, while the white flakes of froth fell from their mouths. All at once I remembered that my cartridges would soon run out, so I quit shooting and watched them. When one would rear up and act as if he wanted to climb the tree, I would give him a load; then they would rush at the tree again, and bite and gnaw. I tried to count them, and found that there were over two hundred left, and I had killed twenty-three. The position I had was not a comfortable one, but I had to stand it. Then for the first time I thought of the boys. Had they heard my shooting? If so, would they come? Then I remembered I had not fired the signal agreed on, and that I had followed the turkeys up the mountain and down again, and by this time the boys must be four miles up the cañon, and on the opposite side.

The Peccaries showed no signs of leaving. It was now noon, and very warm. They would root around, then come back to the tree, and grint, and paw, and bite the tree; then they would cool down a little, wonld go a short distance away, root around awhile, then come back again. I was getting tired of being treed, but it was just what we had planned the night before, only we were not all together.


ONLY WATTING.

If the boys could only hear my firing, and come over, how quick we would wipe them out.

Such thoughts ran through my head; but still the pigs stayed. One o'clock came, then two; still they stayed. Then I thought I would fire a signal with my revolver-may be the boys were hunting for me; so I made a noise, and back to the tree they came. I killed three of them in about a second; then I waited. Three o'clock came, then four, and no signs of the boys. Some of the pigs would feed while others stood guard; then they would change off. I was so tired I could scarcely stay in the tree; so I took my belt off and buckled myself fast to the trunk, so that I would not fall out.

Seven o'clock! I could see no change; they still camped near me, showing no signs of weakening. Then the sun went behind the mountain; darkness came on, and I was thirsty, hungry, and tired; but, worse than all, I was a prisoner. Twelve o'clock! The moon shone brightly, and I could see my sentinels scattered around. Two o' clock! Then came a signal from some of the outside ones; the rest snuffed the air, then away they all went. I could hear them far below, going down the mountain.

I then commenced to wonder what had started them all at once. Was it a Grizzly or a Silver Lion? If either, I was still in danger. I listened a few minutes, but could hear nothing, see nothing; so I unloosed the belt and got down, more dead than alive-so stiff and cramped that I could scarcely walk. I went first to where I left my turkey and coat. The turkey had been eaten, and my coat had been thoroughly chewed. I found a few cartridges scattered around; and putting them in my rifle, I started for camp, where I arrived just at day-break. Two of the boys were out on horseback, hunting for me. I was so tired I could not stand, and after eating a little and having two cups of strong coffee, I went to sleep. When I awoke, at twelve o'clock, the boys had come in. They said after I left them they had gone back and trailed the Grizzly six miles into a deep cañon, but failed to get sight of him. I
told them I had all the Peccaries I wanted, and was ready to go back; so next day wè packed, and rode into Hermosilla well satisfiel. Hereafter, anyone who wants to hunt Peccaries can hunt them and be blanked; but l prefer some kind of game that is not so fond of human flesh as they are.
 HIS animal has the distinction of being called a number of names. Like the African Lion, he is a ferocious brute, almost similar to that animal in color, and has the same trait of instantly killing his prey. He was originally, and still is in some localities, called the American Lion. Among the people in the Western States it was formerly called the Panther, and by common custom this name degenerated into "Painter." In New England it was sometimes called the Catamount. The French in the early settlement of Louisiana called it Cougar, and some of their naturalists, eager to make a little notoriety, gave it the name of Carcajon, which really belongs to the Glutton. Others called it by the outlandish, unpronounceable name of Gouazoura, and if they could have found a worse name they would doubtless have applied it to this much-named creature. By the title of Puma, given to it by the South Americans, and by the names of California Lion and Mountain Lion, it is generally known in . the United States.

This animal is similar in shape to the Mustela, its body being long and slender, the legs short and stout. The head is small when compared with the body, and is always carried high. . He is a rather proud chap, is our Cougar.

His color is silvery fawn, sometimes approaching to red on the upper part of the body, the tawny hairs of the upper parts being whitish at the tips. The belly and inside of the legs are almost white, the head black and gray irregularly mixed. The female is colored like the male. The Cougar varies in length from eight and one-half to eleven feet, from point of nose to tip of tail.

The Cougar is the Tiger of the Occident, being the largest of the cat kind found in the northern purt of the Western Hemisphere. His range extends from the Arctic Circle to Patagonia, but east of the Rocky Mountains he is altogether extirpated or extremely yare, except in the Southern States. It is yet abundant in Northern California, Oregon, Washington, British Columbia, and Alaska. It is especially abundant in Northern Washington, along the Skagit and Nooksack Rivers, the abunäance of Deer, grouse, rabbits, and fish in the streams, furniching it with a never-failing supply of food; and here it obtalis its greatest development in size.


Cougar and Young.
It is a subject of discussion among hunters as to the number of young that the Cougar produces at a birth. The naturalists state that the litters nsually vary from three to five, but from my own personal experience, and from extensive inquiries among other hunters and trappers, I can not corroborate this statement. I have never found more than two kittens in a litter; and very pretty little
creatures they are, spotted, and sometimes striped like the turathoise-shell cat. The den they are born in is usually a cave in the rock on the mountain-side, or a hollow tree in some dense thicket. The Cougar is a very affectionate mother, and will fight to the death in defense of her young.

The Cougar is stated by naturalists to be a nocturnal animal, but in this they are also mistaken. He may be nocturnal in a measure, but he is also diurnal, and seeks his prey by day as well as night, as many a poor rancher can testify, through losses of colts, sheep, calves, and cattle, day-victims to this greedy marauder. Neither is it the cowardly animal that the above-named gentlemen term it, but it will fight boldly in defense of its young or its prey. In another place I will relate several instances where it has attacked people in daylight, and, on the other hand, I have never known it to attack a person at night.

The food of the Congar consists-of Deer, Elk, sheep, hogs, birds, snails, fish, rabbits, rats, and mice. He is very destructive, often killing, apparently, for the mere delight of destroying. While I write this, my feet rest on the skin of a Cougar that killed nineteen sheep the morning that his skin became mine. The Bear delights to feast from the quivering flesh of its living prey, while the Cougar will not begin its meal until its victim is dead, and that death is usually instantaneous. A flash of lightning could not be more sudden in its work than is the leap of Felis concolor. A swoop of that great, muscular paw, and if the victim's neck is not broken, the white, glistening, ivory fangs cut through the neck and sever the spinal cord. But there are exceptions to this method, as in the case of fawns and children. These the Cougar seizes and carries away as a cat does a mouse. But the favorite food of the Congar appears to be horse-flesh, and the younger the colt, the more to his taste. If the mare fight in defense of her colt, she will also become a victim, for the Congar is a determined brute, and only interference on the part of some powerful enemy will divert him from his prey. I have known a Cougar to kill a good-sized Indian pony and its colt, and
drag them across a meadow and over a high fence into the adjoining wootis. This seems almost incredible; but many iustances are on record, attested by indisputable evidence, showing equally great feats of their strength.

I was a witness of a battle between \& Jersey cow anci a Cougar, in which, however, the cow held her own. When I first occupied my ranch on the Sumas, iv 877, the country was a wilderness, there being only fire inhabitants in the township. I was the possessor of five Jersey cows, and one after the other fill victims to what I supposed were Grizaly Bears, until only one was left. At last she disanpeared, and I searched the vooods far and near for two days, but conld find no trace of her. Early on the third morning I was awakened by a loud bellowing, such as the cow only makes when in extreme terror or distress. Hastily dressing, I seized my rifle and ran up the hill into the fir grove from whence the sounds came. Entering tive grove, my attention was at ouce attracted to a large Cougar, which was slowly walling around the bellowing cow. She was backei up against a large $\log$, and a calf, apparently a day old, was lying almost, under the $\log$, directly behind the cow. Knowing that the Cougar conld not espape me, I became an interested spectator of the tight. Whenever the Cougar approached too near, the cow, with a feariul bellow, would charge the Cougar, which in turn woutid avoid her sharp horns, and strike at heavy blow at ber yeek with his paw, which the cow would dodge as yuickly as it was given. I couid see that the Cougar intended to draw the cow away some distance, and then rush up and seize the calf; hat the cow appeared to Le awne of this design, as she would only chase the brute a short distance, then return and take her position over her calf. At last the Cougar seemed determined to end the battle. Walking to a convenient distance for a spring, he crouched in front of the cow, but as he was about to rise in the air, it Winchester bullet entered his brain, and he fell, writhing in the throes of death. The cow made a rush, planted her horns in the

prostrate animal, and gored and trampled him until I drove cher away.

At another time I was a witness of a Cougar seeking his prey, but it was not of so large or so noble a species as that I have just mentioned. One day, while shooting ducks on a marsh near Sumas Lake, I saw a large animal going througlı some eccentric motions, and drawing near, I saw it was a Cougar trying to catch something that was concealed beneath a cotton-wood $\log$ abont ten feet long and three feet in diameter. He would stand erect behind the log, and with his paws would give it a huavy jerk, rolling the log a yard or more, and at the same time would spring over it and strike. heary blows, first with one paw and then with the other, at some object on the ground. I watched him roll the log over several times before he saw me, but when he did, he beat a hasty retreat. Curious to know what he was trying to catch, I, by the aid of a pole that I found near, rolled the log over, and found-two mice. It was a most r: 'iculous and awkward figure that the great brute made in trying to catch his diminutive prey.

There is a popnlar fallacy to the effect that the Congar secures his prey by remaining concealed over some gametrail, on the limb of a tree, and that by a sudden spring from his secure elevation he seizes and strikes his prey dead. In Washington it is usually at least a hundred feet to the first limb of the trees-a very inconvenient height for a Congar, or, in fact, for any living quadruped, to spring from. I havo tracked Cougars several times in the snow, where they were on the trail of Deer, and twice have found them feasting on their quarry. In every case the mode of procedure had been the same. They had crept stealthily behind the Deer until near enough, when, by a sudden spring, they had struck it down. Death in each case must have been instantaneous, as they lay dead in their tracks, and there was no sign of a struggle.
(One of the few anthentic instnnces of a Cougar seizing a large animal is given by Mr. John Harkness, of Clearbrook, Washington. One June evening, he went to drive
home his cows that pastured in a swamp near at hand. This swamp was bordered by a belt of willows. When he reached the willows, he learned, by the ringing of the bells, that the cows were coming home. Seating himself on a log, he awaited their coming. One by one they came through the willow-bordered path, until the last one, a yearling steer, stopped a few feet away from him and began to graze; and just at this time he became aware of a stealthy gray form that was intently creeping behind the steer. It took but a glance to ascertain that the lithe form was that of a large Cougar. John felt rather uncomfortable, but sat quietly, and watched the actions of the Cougar.

The latter, crouching, almost crawling along the ground, slowly neared its intended victim. Every motion of the calf was carefully noted, and whenever it raised its head the Congar would cronch motionless on the grass; but when the calf dropped its head, the snake-like, insidious motion in the long, lithe body of the great cat was resumed until it was at the very heels of the calf. Then, rearing slowly up, it reached its fore paws gently over the shoulders of the calf. The Cougar was a sight to behold. With blazing eyes, and with lips curled upward exposing its white faigs, it waited for the calf to raise its head. Then the long, graceful body would have surged, and with the closing of the fangs on the calf's neck, death would have been instantaneous. But, before it could carry out its intentions, John gave a loud yell, which so terrified the Cougar that he fell backward, scrambled to his feet, and, with one leap, vanished in the willows.

The Cougar will not eat carrion; neither will he refuse an animal lately killed. One day, when shooting rabbits, I tied together a number that I had killed, and hung them on a branch of an alder which overhung the path. Returning along the same path shortly after, I met a Cougar trotting leisurely along with my rabbits in his mouth. Having a shell loaded with buckshot, he paid for his dishonesty with his life.

The gait of a Cougar is the same as that of the domestic cat-either a trot or a plunging run. They are not very swift, and will easily tree to even a small cur dog. There is nothing that the Congar fears so much as a dog, and they will take to the nearest tree at the sight of one. They can climb with the greatest facility.

Sometimes, when the hunter is stalking the.Deer in the deep recesses of the forest, he is startled by a fiendish crya cry so unearthly and so weird that even the man of stontest heart will start in affright; a cry that can only be likened to a scream of demoniac laughter. This is the cry of the male Cougar. If it is answered by the female, the response will be similar to the wail of a child in terrible pain.

The method usually employed in hunting the Cougar is chasing them with dogs. Any dog that will chase a cat will pursue a Cougar. The best dogs I ever used in hunting the Cougar were Collies. I once hunted a season with a wise old Deer-hound, who was infallible when on the trail of a Cougar; but when he had succeeded in "treeing" the animal, and I would prepare to shoot, he would modestly retire. After hearing the report of my Winchester, he would sedately return and inspect the dead Cougar with solemn gravity. He was a scarred hero of the wilderness, and no doubt in his youth lad waged so many battles with the " big kitty" that he had grown cantious in his old age.

Concerning the tenacity of life, I do not think that there is an animal of its size that is so easily killed as that under discussion. I have known them to be killed with a shotgun and No. 6 shot. The gun that I have always used in hunting these animals was $n$ Model '73 Winchester, 44 caliber; but to the novice or umateur who desires to hunt these animals, I would recommend the Model ' 86 Winchester repeater, in any caliber above 38 . In a recent hunt: ing-trip I used an ' 80 Model, $50-110$, and found it to be the most paralyzing rifle I ever used, killing Deer and Cinnamon Bears as if they had been struck by lightning.

There is no systematic manner of hunting the Cougar. When still-hunting the Deer, the hunter often observes a
shadow-like movement among the trees. He listens, then watches in the direction where he saw the shadow. If he should see a tawny form appear, let him fire at it instantly. If the shot has been well-aimed, he will be assured of its success by hearing a piercing scream, or witnessing the most exnberant exhibition of ground and lofty tumbling that he has ever seen. Sometimes he will also see the great Cat come plunging rapidly in his direction. At one time, when hunting on the Chilliwhack River, in British Columbia, I saw what I thought was a Deer, stealing away from me in the bushes. Drawing a bead on the vanishing animal, I fired, and instantly it changed its course and came rushing at me. I saw that it was a large Congar. The next shot was more fortunate, and broke its spine, and even then it dragged its body toward me on its fore legs. I then shot out first one eye, and then the other. In a few moments it ceased to struggle, and when I reached it I fonnd that the first shot had passed through its stomach. A wound in the stomach enrages either a Bear or a Cougar.

If the sportsman, desirous of killing a Cougar, proceeds to any of the settlements in the mountain districts of British Columbia, he will not have to wait long before he has the desired pleasure. Let his wish be known, and it will not be long before he is notified, by some luckless rancher, of a loss of some calf, colt, or sheep. Let him proceed to the scene of slaughter, accompanied by a dog of any kind that will chase a common cat. The Cougar always gorges himself when he kills, and then goes to sleep. He will be found near his prey, and, with little exertion and no attending danger, the hunter may secure the desired animal, as it will take to the nearest tree on approach of the dog, who by barking will notify the hunter of his quarry.

There is no use attempting to still-hunt the Cougar. If aware you are on his trail, he will keep but a short distance away from you; but so noiseless are his steps, so keen his sight, and so accurate is his scent, that the hunter is not likely to obtain a glimpse of his royal catship. Sometimes the game will circle around and follow directly in the trail
of the hunter, dogging his footsteps for miles; but let him take the back track, and he will soon discover that the Cougar has again doubled on his trail.

In order to slow that the Cougar is not the cowardly or nocturnal animal that the naturalists claim it to be, I will relate a few instances in which it has attacked people in day-time. One of these instances illustrates a remarkable case of boyish heroism.

In the spring of 1886 , the children of a Mr. Farnham, who resides a few miles from Olympia, Washington, were returning from school, when Walter, the eldest, a boy of twelve, noticed something that he thought was a large yellow dog, trotting in the road behind them. They paid no attention to it, as large mongrel dogs, of this color, abound everywhere in the vicinity of the Indian camps, but played leisurely along, as is the custom of children the world over. The youngest boy, a chubby little chap of six summers, who was behind his brothers, suddenly came rolling along in front of his brothers, and a moment later the great cat sprung over the heads of the two astonished boys, seized the little fellow in its mouth, and with a spring vanished from sight in the bushes.

A cry of terror rose from the lips of the now terrified boys, that was answered by one of pain, fright, and agony from the jungle. The elder brother did not deliberate on what to do. He had no weapon other than an empty brandybottle, in which he had carried milk for their dinner, and with this he rushed into the bushes. He saw his little brother lying prostrate, grasping a small tree with both hands, and holding on with the desperation of despair, while the Cougar, with his fangs luckily embedded only in the child's clothing, was trying to break the deathlike grip with which the child held to the tree. With a scream, Walter threw himself on the Cougar, beat it over the head with the bottle until the latter was shattered into fragments, and then with the ragged edges of the neck of the bottle, which he still held in his hand, he endeavored to cut out the Cougar's
eyes. At last, the Cougar, with a yell of rage, dropped his hold on the child and ran up a tree near at hand; while the heroic boy, lifting his brother in his arms, carried him into the road, and fell, fainting, upon him.

The other brother had meantime fled, screaming, up the road, and it so happened that two men were chopping wood not far away, who, on hearing the screams of the children, came running to the rescue, and met the boy in the road. As soon as he could, he told them the cause of his cries. Seeing the other children lying in the road, they rushed to them, and found the little hero senseless, still grasping the neck of the broken bottle tightly in his hand. The Cougar's victim was too horrified to speak, but pointed to where the savage beast was lying on a limb, in plain view. One of the men had a revolver, and with a few shots killed the Cougar. Both children were badly scratched and bruised, but soon recovered.

Another instance in which a Congar attacked a man in daylight, happened but a few years ago. A Swedish sailor named Joseph Jorgenson ran away from a British man-ofwar that was anchored at Esquimalt, British Columbia, and found his way througi the woods until he rested under the domain of the starry flag. Arriving at my father's farm, on the Sumas, he was glad to obtain employment and to enjoy the comforts of a ranch home. As there was at that time plenty of Government land, and as Joe, liko the majority of his race, was an industrious, honest fellow, my father advised him to homestead an excellent quarter-section of land in the near vicinity.

Joe was elated with the prospect of becoming a landholder and a citizen of the United States, and as soon as the requisite papers arrived, set off one morning to clear a spot whereon to build his house; but the clearing of that spot was interrupted by a Cougar, in a very unceremonious way. Joe had scarcely begun to work, and was wielding his spade vigorously, when suddenly his arm was seized as in a vise. He wheeled instantly, and found that his arm was in the jaws of a Cougar. He was a young and powerful man, with
an intense desire for a long life; so, without any preliminaries, he dealt his assailant such a kick in the stomach as to break its hold on his arm and to lay it prostrate at his feet.

The Cougar instantly resented this rude treatment. Crouching, it sprung at Joe's throat, but he warded its head from his throat with his left arm, while with his right he dealt it a Sullivanic blow in the ribs that again prostrated it at his side. Quick as a flash, it returned to the attack and seized him by the left hand, driving its fangs through the flesh and fearfully lacerating it. It was a fight for life, and Joe, with his brawny fists and heavy boots, beat and kicked the animal with such force that it released its grip on his hand and retreated a short distance. Then it crouched and sprung at him again, landing on his breast and knocking him heavily against a tree; but again he cuffed and kicked it, until it again retreated and crouched for another spring.

Fortunately, Joe, looking down, saw the spade he had been using lying at his feet. Stooping quickly, he grusped it, and rose just in time to ward off the Cougar's spring by giving it a thrust with the spade. The brute fell at his feet, but instantly rose and seized him by the thigh. Maddened with pain, Joe made a gladiatorial thrust at the Cougar's head. The sharp blade of the spade went crashing through its skull, and it fell dead at his feet.

The place where this battle occurred was a mile from my father's house, and we can imagine the feelings of the poor fellow, so dreadfully bitten and scratched, as he reeled homeward, the blood streaming from every wound. Happily, he was observed when he reached the edge of the prairie, and assistance soon reached him. He was conveyed to the house, where all possible assistance was rendered him. It was many weeks before he recovered, and when he grew strong again, he shipped on an American coaster as a sailor, saying that he had less fear of the sharks of the ocean than of the " big kitties" of the land.

Miss Mary Campbell, of York, British Columbia, now the wife of John Kelly, of Snmas, Washington, had an
adventure with a Cougar that she is not likely to forget. I will give the incident in her own words:
"Let me see," she said; "yes, it was just six years ago last February when I was so badly frightened by a Cougar. The way it happened was this: One afternoon I started to visit the Musselwhite girls, who live six miles from York, on the Cariboo road. My pony was a swift one, and I was riding along at a fast gallop. I was within two miles of my destination, when something splving out of the bushes and landed in the road just at the pony's head. He reared, the saddle turned, and I was, of course, flung on the frozen road, so violently that for a moment I was senseless. When I became conscious and opened my eyes, I was horrified to see two great green eyes glaring in my face, to say nothing of a horrid row of teeth; for standing directly over me, with one heary paw pressing on my breast, was a big Cougar.
"I lay for a moment territied; but you know a woman's last resort is to scream, and I did scream, so loudly that it seemed to frighten the Cougar, for it instantly sprung to one side, and I regained my feet as quickly as possible, but I was so terribly frightened that I could not think or move. I stood trembling in the road, bewildered and dazed, while the terrible monster crouched in front of me, trembling with eagerness, its tail lashing from side to side; but it did not attempt to spring upon me. It kept its glaring eyes fixed intently on my face with a cruel, wicked stare.

- "Seeing that it did not attempt to spring, I began to walk slowly backward. The Cougar did not move then, but kept on intently glaring at me. Unluckily, it was between me and Musselwhite's. It was only two miles there, while it was four miles home; but I did not dare to attempt to pass it. As it did not move until I was quite a distance from it, I turned quickly, and ran toward home as fast as I could, and ran until I had to pause from exhaustion. But judge of my distress when, looking back, I saw the Cougar crouching just behind me. I turned and looked at it again until I got some distance from it, and until I had recovered my breath; then I turned and ran again, but, looking backward,

I could see the Cougar trotting swiftly after me. I ran until I could run no longer, and then wheeled and faced the Congar again, which again stopped and crouched in the road.
"I began to take courage, seeing that the animal did not attempt to do me injury so long as I was looking at it, and so I continued to walk backward. I liad come more than a mile since the Cougar first made his appearance, and I hoped when I got out of the woods into the prairie, which now was not more than a mile distant, that the Cougar would leave me; so I kept on my retrograde way. When I got about a hundred yards away from the Cougar, it rose from its recumbent position and came trotting on toward me, and when it came within a few feet, crouched again. At that time my heart gave a great leap for joy, for on the pebbled road came the sound of the tlying footsteps of a horse. Looking over my shoulder, I saw it was my pony, ridden by a half-breed boy who lived at the farm. But my joy was of short duration, for when he saw the Congar he wheeled the pony, and the sound of his footsteps soon became faint in the distance.
"Walking slowly backward, but with fainting heart, I reached the edge of the prairie. As soon as the Cougar saw the open exparse before it, a change came over it. It grew excited. It came rushing toward me, and instead of crouching as before, ran past me, and stood in the road before me, evidently intending to bar the way and drive me back into the woods. I tried to walk around it, but it would keep directly in front of me, and seemed determined that I should not proceed any farther. It grew bolder every minute, and at last came boldly np and seized my dress. I screamed, and tore myself away from it, leaving most of my dress-skirt in its paws.
"Then came a sight that I hope no other girl may ever be compelled to witness, as an experience of her own. The brute became maddened, and began jnmping quickly around me, keeping its eyes intently fixed on mine. At times it would stop, lie down, and roll over, playfully clutching at the scanty remnants of my dress that it had not already torn
off. I then felt that the end was near. I felt that the Congar was playing with me, as the cat plays with the monse, and that at any moment, when it tired of tormenting me, I would be torn to pieces. A feeling of faintness seizel me. I tried to take my eyes from the basaltic-green eyes that were staring so cruelly into mine, with the triumph of conquering strength and satisfactory possession, but could not. A sound as of rushing waters was in my ears; I reeled and staggered liko a drunken person, and began crying like a child; I felt like one must feel when life and light are fluttering away; then I reeled and fell on the margin of the prairie. But just at that instant two dark bodies went flying past me, there came a loud baying and a deep snarling; then again came a clattering of hoofs, and then the ringing and almost continuous reports of a Winchester rifle. I sprung to my feet and looked toward the Cougar. It was struggling in death, and growling and tearing at it were our two great hounds, Lead and Jowler. Then someone spoks to me; I turned, and there stood father. I fainted again, fell in his arms, and knew nothing more for many days, for this terrible experience was followed by an attack of brainfever."

Mr. Charles Harmon, of Mount Vernon, Skagit County, Washington, had an experience with a Cougar similar to that just described. While engaged in looking for some oxen that had strayed away from his logging-camp, he heard a crashing in the bushes, and saw a large Cougar a little distance from lim, standing on a log. He uttered a loud yell, thinking he would have the satisfaction of seeing the Cougar rushing wildly away from him; but, to his no small consternation, it came trotting swiftly toward him. It did not attempt to spring upon him, but stood at his side, looking intently at lim.

About that time he discovered that he had pressing bnsiness at the camp, and started down the path that led thither. The Congar, with its easy, swinging step, kept right behind him, and frequently would reach up and lick his hand. No
poet ever described a situation more accurately than did Coleridge describe this one when he wrote:
> " Like one that on a lonesome road Doth walk in fear and dread, And having once turned round, walks on And turns no more hils head Because he knows a frightful fiend Doth close behind him tread."

This Congar acted in the same manner as did the one which attacked Miss Campbell, following Harmon right intu the camp. a distance of two miles, and succeeded in tearing most of his clothing off before he reached shelter. When Harmon arrived at the camp, the Cougar crouched near the door until it was shot.

Mr. Cathcart, of Snohomish, Washington, was also attacked by a Cougar in daylight. He was returning from a visit to a neighbor, and was a short distance from his own residence, when a Congar sprung ont of the place where he had been concealed in a dense thicket, and attempted to strike him down, but luckily missed him, and landed in the path at his feet. With a large cane that he held in his hand, he made such a determined fight for his life that he held the Cungar at bay, at the same time lustily calling for help. His falthful dog heard him and came to the rescue, and none too soon, for Cathcart was almost exhausted with his battle with the animal. On the appearance of the dog, the Cougar took to a tree, and was afterward shot.

A Cougar also attacked Mr. John Potter, of Brownsville, British Columbia, while he was riding along the rond, on a journey to New Westminster. Without any warning, it sprung on his horse's neck. The horse reared, and threw his rider, also the Cougar, and when they scrambled to their feet, the man and Cougar stared intently at each other, until the Congar with one leap disappeared into the bushes at the side of the road.

The Congars that attacked Miss Campbell and Mr. Harmon were both females. Some old hunters that I have con-
versed with claim that at certain periods the iemale Congar becomes very bold, and loses the instinct of proy in the desire for companionship, but that when she tinds how helpless an unarued mortal is, she proceeds at once to destroy him.

The following incident was related to me by Hon. Orange Jacobs, ex-delegate to Congress from Washington:
"In 1864," said the Judge, "I was out with a party, high up in the Cascade Mountains. Our party consisted of nine persons, including myself. Onr camp was at the end of a long, narrow prairie, which was about a mile from the Santian River, one of the principal eastern tributaries of the Willamette. Deer were plentiful, but they kept, concealed in the day-time, in the alnost impenetrable loush and farns. One of our party had twice started a fine buck, that on each occasion had rua across the upper end of the prairie toward the river. Meat was getting scarce in camp, and that buck we must have. Your humble servant was accounted the best running-shot in the party, and was accordingly ant to the upper end of the prairie to take a stand, while thi others beat the brush to start the antlered beauty.
"The plan succeeded, and he bounded across the prairis some seren or eight rods from me. I fired, and shot him through the thigh. He plunged on, however, through the dense brush toward the river. I followed slowly after him, clambering over and crawling undel logs, believing that I wonld find him dead or dying at the font of the first embankinent that he descended. I soon cume to a dry gully. I approached the brink carefully, and looking over the bank, there-not more than twenty feet from me--lay the Deer, dend. But immediately over him stood $n$ large male Cougar, gazing intently in the eye of the Deer. . I raised my riffe, took a quick aim, fired, and the Cougar fell dead. For some unaccountable reason, I did not reload my riffe, but quickly slid down the bank, taking my sin with me. I straightened out the Cougar's tail; as he was a very large one, I was in the aci of pursing to get his length, when, to
my astonishment, some tine bark fell on my head and before my face. I turned, and on looking up into an overhanging ash-tree, there, crouched on a !irab, not twenty feet away, was the female Cougar. Her hair was all standing, like that of a mad cat, and her tail was vibrating from side to side.
"I could not rnn, because the hrush and logs were too thick. . My trusty rifle was empty. I fixed my eyes on the maddened brute, raised my powder-horn to my mouth (this was before the breech-loading rifles came into general use), pulled out the stopper with my teeth, felt for the muzzle of the gun, and poured the jowder in. When I thought I lad plenty, I dropped the horn, got a bullet from my pouch, and ran it down unpatched. Taking a cap from my vestpocket, I placed it on the nipple. As I raised the gun, she doubled over the limb. I fired immediately. As the gun cracked, I jumped back, and the animal bounded through the air toward me, brushing my shoulder as she went past. A man will do a great deal of thinking, under such circumstances, in a very short time. I thought, from the way she sprung, that I had missed her; bat she fell on the ground, and did not attempt to rise again. I was glad to see her lying dead, for I must confess that I was a little bit-yes, a great deal-frightened. I had my lunting-knife in my jand, and I was fully determined, had it erme to a hand-tohand encounter, to sell my life as dearly as possible."

Mr. John Davis, of Snohomish, was awakened one night by his hounds barking furiously. From the noise they made, he knew that something unusual was in the vicinity; so, taking his gun, he ran out, not even stopping to dress himself. As soon as the dogs saw him, they made a rush at some large unimal, which immediately jumped over the fence and ran up the hill into the woods. Mr. Davis followed swiftly after, and was soon delighted to hear the dogs barking steudily in one place, as this indicated that the game had treed. Hurrying along as fast us the darkness and the nature of the ground wonld permit, he soon reached
the place where the dogs were. They redoubled their noise when they saw him approach. Looking into the top of the fir-tree up which the dogs were barking, he was able to discern the lithe, tawny form of a Cougar stretched out upon a limb, intently watching the dogs below. Raising his gun, he fired one barrel, aiming at the animal's shoulder. This shot seemed to have no effect; but at the report of the second barrel, the Cougar fell from the tree, striking the ground at his side. Instantly recovering itself, the Cougar crouched and sprung at him, striking him on the shoulder with its chest, knocking him down and falling upon him. At this critical moment, one of his dogs seized the now infuriated brute by a fore leg. Instaritly releasing its hold on the man, the Cougar caught the dog by the head, and one bite was suflicient to lay him struggling in death.

Davis by this tirי 3 had regained his feet, and the Cougar, dropping the dog, jumped at him again. Leaping uside, he struck it with his gun, but with no other effect than to break the stock off the barrel. The brute turned and sprung at him once more; but, moving quickly to one side, he eluded it, and, as it was passing in the nir, threw his left arm around its body just behind its fore legs. Then, throwing his weight upon the animal, he forced it to the ground. Instantly raising the gun-barrel in his right hand, he struck it a terrific blow on the head, and quickly followed it up with another, and then others, until he could strike no longer, and the Cougar had ceased to struggle, and lay dend beneath him.

Strange to say, with the exception of a few scratches, Mr. Davis was uninjured; his greatest loss being his new sixty-dollar breach-loader and a suit of under-clothing that was torn to shreds in the enconnter. Going quietly home, he went to bed, and did not even mention the cause of his delay to his wile until the next morning.

When he and his neighbors went to the scene of the fmy and skinned the Cougar, it measured eleven feet. Cougarskins are no curiosity here-one can be procused at any thme, almost, for $n$ song; but that Cougar's skin was cut into
fragments, every hunter in the vicinity claiming a plece as a memento of the strength and conrage of a brave man.

The following acconnt of a Cougar-hunt was related to me by Mr. L. L. Bates, an old-time friend and fellowhunter, for whose veracity many residents of Seattle and vicinity can vouch:
"It, was in the mọnth of March, 1887," said Mr. Bates, "that I concluded to take a cruise up Charter's Creek, to look for Beaver-signs. I took my rifle and best tree-dog, Spot, thinking I might get some Bears or Fishers while on my cruise. I had just left the spruce timber, on tide-land, and had gained the fir timber, two miles up from Gray's Harbor, when I came to the carcass of an Elk lying in a thicket of salmon-bushes in a bend of the creek. What was left of the Elk was cureitully covered up with sticks and grass.
"'Congars, by gum!' I thonght, out loud. I wanted time to take in the situation before alarming the varmints; so the first thing was to secure my dog before he gathered scent of the Congais. I quietly started on my back track to where I hud last seen the dog.
"Ah, here he is! 'Spot, oll boy, there's work aliead for you.' As I said this, I quickly slipped a collar on his neck and chained him to n small tree. I took off my cont and threw it near him, for I knew he would stay quiet while he had something of mine to watch. I then retraced my steps, and began a careful examination of the dead Elk and everything about it. I soon maile up my mind that there were two full-grown Congars in the seheme, as there were sev eral fresh beds neur by, in pairs, and a well-beaten trail from the carcass down to the water, where they had several times gone to drink.
" I had two more gool dogs at camp, and for a moment I considered whether I had better go bakk and get them, or whether to try the fight with old Spot aloue. It would take me three hours to go for the dogs and get lack. While I was gone, the Cougars might come uround, get my scent,
and skip out. In that case the dogs might follow them out . of my hearing before treeing them, and there wonld be a failure. (You must remember that is a rough, hilly country back of Gray's Harbor, with a great deal of underbrush.) To try it with one dog, I knew would be dangerous for him, for a Cougar will sometimes turn on a single dog. In that case I would very likely lose my dog. But I finally decided to take the chances, and try it with one dog. If I fuiled, and lost him, I still had the chance left of getting the other dogs and making another run.
"I exumined what was left of the dead Elk. It had been a large cow, heavy with calf. The Cougars had probably followed her a long time, watching for a good chance to light on her. This chance came when the cuw went in on this narrow point of land to feed on the salmon-brush. The banks of the creek are about eight feet high, and perpendieular.
"In my mind, I went over again the desperate struggles of this noble old cow for life, against big odds; how the sneaking Congars, with their cruel eyes gleaming, had both sprung at once from a $\log$ near by. Yes, there were their claw-marks, plain as day, in that log; and here the bushes were trampled down, and the ground covered with blood, showing plainly the death-struggles of the poor Elk. These two Cougars, I learned by stepping the distance, had cleared just twenty-six feet in that fatal leap, from the log on which they rested to where the Elk stood when they struck her. 'Yes, Spot, you and I will do our best to bring those two blood-thirsty brutes to their death; and it will be a great comfort to see them stretched out dead, after they have slaughtered such a noble beast as this. And if we don't take home a couple of Cougar-scalps, it will be because you don't put them :us a tree soon enough.'
"The signs indicated that the Congars were up the creek from where the Filk lay, and l knew they conld not be far off; for, like an Indian, a Cougar always wants to lie down and slecp when he gets his belly full. 'Now, old dog, if you'll keep still till we get near them, they will tree soon;
but if you bay them on a cold trail, they will get a long start, and give you a long run. Then I could not keep in hearing, and we would never get them.'
"I had now gone down, got my dog, and come back up. As I glanced over the evidences of that fearful struggle again, I was more than ever anxious to kill those skulking Cougars. I tied a string around the dog's jaws, so that he couldn't give tongue, and held him on the chain until he got the trail fresh. All question as to the varmints being near was soon removed. It would have done you good to see that dog. He rolled, tumbled, and pawed at that string on his jaws, worse than a mad cat. 'I guess this sign's fresh enough,' I thought, out loud; so I loosed the collar, cut the string, and the dog was off as if he had been shot out of a gun. And when he went out of sight in the bushes, every hair on his back stood straight up like porcu-pine-quills.
"I followed with the best speed I could make in the brush and over the down timber. As luck would have it, the dog never said a word for about three minutes. Then there was music. He let out the blamedest string of yells I ever heard from one dog in my life. It lasted for only about two minutes, when the yelling ceased, and I heard the welcome ooln! ooh! ooli!
"' Yes, they've treed, sure as I'm alive, and they must have gone up the nearest tree to their bed!' Former experience with Cougars had taught me to make as little nolse as possible when approaching them in a tree, as they are liable to jump where there is but one dog, and muke off. l erept up cautiously, and coming in sight of the hemlock-tree up which the dog was barking, saw a large Congar about fifteen feet above the ground. His ears were laid back tlat on his head, and his long tail was nervously twisting abont.
"I didn't stop to look for the other one, as one Cougar at a time is enough for me. In a moment I had the sights of my rifle in line with the butt of his ear, and when I pressed the trigger he sprung at least six feet in the air, and came down dead. Ashe struck the ground, I saw a yellow

Hlash in the air, and the dead Cougar's mate left the same tree, a little higher up, and with a bold leap struck the ground thirty feet away.
"I started the dog on the track of this one, and followed up the chase. The Cougar took to the hill-side. I had just succeeded in forcing my. way through a mass of salmonbrush, and had got upon a log that lay in the edge of a fernopening, where I could see a handred yards up the hill; the dog and Cougar had disappeared in the brush on the opposite side of the opening, when I was dazed at seeing a white-and-black object coming through the ferns toward me with the velocity of an arrow. 'What in thunder is it?' I thought, out loud. 'My dog! My noble dog! Now, brave Saxon, hold thy nerve and defend thy friend. A cool head, a steady hand, and you may, by good fortune, save your dog!' These thoughts had but just flashed through my frenzied brain when I discovered the Cougar vanlting in mid-air. Two more leaps like that, and good-bye old dog! As the varmint raised in the air the next time, the report of my rifle waked the echoes of the forest.
"' 0 , you mutton-head! made a clean miss - danged if yon didn't!' The next bound, and the Cougar fell upon my dog. One muffled yell, and all was over with poor Spot! The Couger had crushed his skull with one grasp of his mighty jaws.
"Again my rifle was leveled; but what strange movements are these? The Cougar has straightened out on the ground near my dug. What, deadl Yes, dead; and, on examination, I found that my bullet had passel through her heart, coming out at the fifth rib: And that Cougar killed my dog after receiving that shot! She measured eight feet from tip of nose to tip of tail, and would have weighed fully one hundred and sixty pounds; while the male Cougar-the one killed from the tree-was the finest specimen I have ever seen, measuring ten feet one inch in length.
"Poor old Spot! He died while retreating from the enemy; but I never blamed him. I have never known a single dog to stand a rush like that.

## the cougar.

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"At the root of a hemlock-tree I dug a shallow grave, and covered the poor old dog with earth and rocks; and as the summers come and go, may their softest breezes sigh his requiem."


## THE LYNX.

## By J. C. Nattrase,

.HE Lynx family, though closely resembling the rest of the Cat tribe, are distinguished from their feline relatives-the Cougar, or Puma, Leopard, Jaguar, domestic and Pampas Cat-by their erect, sharply pointed, tufted, and penciled ears, and an abbreviated tail. Their habits and methods of hunting are similar to those of the Cougar.

There ure four varieties of Lynx common to the United States, or at least to the Northern Continent, South America having none. The Canada Lynx, being the largest and best known, will receive the bulk of our attention ịn this paper. Besides the Canada Lynx, we have the Catamount, the American Wildcat, and the Red Cat. The entire Lyncean group embraces-


The European and Canada Lynx closely resemble each other. The European is a native of Europe and Asia. Its color is dark-gray, tinted with red; has a few large, spotted patches on body, and many small blotches on limbs.

The Sonthern Lynx is the most beautiful of all the group, having a beautifnl, heavy, ruddy-chestnut fur, covered with Leopard-ilke spots. It is a native of Sardinia, Purtugul, Spinin, and other smilheri conntries.
(tay)

The Booted Lynx-so named because of the deep-black coloring of the lower part of its legs-is of a reddish-tawny hne of deep gray, spotted with black hairs, the legs being striped, well up, with brown; there are two brown stripes on each side of the face. It is a native of India, Africa, Asia, Egypt, and Barbary.

The Caracal has an extremely short tail. Its color is a reddish, pale brown, darker on back than under parts, spotted slightly with reddish or black spots; lips and chin white; ears black. It is a native of Asia, Africa, India, Arabia, Nnbia, Egypt, Barbary, the Cape, and has a very wide range. The Caracal is an active, lithe animal, though not large, seidom if ever exceeding thirty ponnds in weight. It bears the reputation of being the most morose, surly, and untamable of all the gronp.

The Chans is darker on the back than sides, being of a tawny hue, with black-tipped hairs scattered over the fur, forming rings on the tail and stripes on the body and limbs; tip of tail is black; the cheeks are white, and a white spot is under each eye. It inhabits the shores of the Caspian Sea, Persia, India, Asia, and Africa.

Tlie American Wildcat, though exterminated in many sections, was formerly found over neariy all of the North American Continent. The tail of the Wildcat is its chief distinguishing feature, being short and rather bushy. It stands somewhat higher on its legs, and has a coarser and rougher head, than the domestic cat. Climatic changes cause a variation in color in different localities, which is usually a yellowish or sandy gray; body and limbs striped with dark streaks, similar to those of the Tiger, running at right-angles with the line of the body and limbs; the spine is striped with a dark chain of streaks; the tail has a black tip and dark rings. The fur is rather heavy and thick. The adult measures two to three feet in length, including tail, which is barely half the length of the body. Its home is found among caves, clefts of rocks, hollow treetrunks, or even in the nest of a large bird. It brings forth from one to five kittens at a litter.

The Catamount common to California, Arizona, Mexico, and Texas is similar to the other varieties, excepting that it has longer ears and dark lines along the sides of the neck.

- The Red Cat is also similar, and has a very heavy and soft coat; the back being of a rich chestnut-brown.

The Cunada Lynx is the largest and heaviest of all American species. It has larger feet and limbs; the neck has a pointed ruff on each side; tail short, well covered with fur; claws strong and white.

In some climates the color is almost white, but is usnally a dark-gray, tinged with chestnut, the limbs being darker than the body. Back and elbow-joints are mottled, blotched with large, indistinct blotches of darker color-hairs white at extremities; ears tufted, and penciled at the tips with black. The feet being large, and limbs powerful and well clothed with hair, give the animal a general aspect of clumsiness.

When leaping over the ground, as it does in a series of successive bounds, with back arched, the tail so short as to be almost indiscernible, it presents altogether a quaint, weird appearance, which has been described by many hunters and backwoodsmen as laughable and peculiar in the extreme-some of them imagining it to resemble a ghost; but how a ghost really does look, in life or death, is more than I can conjecture, never having seen one.

The Canada Lynx is not very tenacions of life-a slight blow on the back, or base of the skull, with a club, or a shot from a small-caliber rifle, being sufficient to readily kill him.

As acentracy in a rifle is the main desideratum, the smallbore are weferable as weapons for liunting the Lynx, he being an extremely wary and timid animal, and possessing the factilty of concealment to a wonderful degree. He will, like the Cougar, hide himself on a small limb, flattening himself out thereon so that he is almost concealed; and only the most vigilant and well-trained eye can discover him. His coat closely resembling, in color, his hidins-place, he is


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frequently passed by, even when searched for by a keen and penetrating eye. The surface presented for the sight to cover is a small one, and the more accurate the weapon, the surer the kill.

I would recommend a 38 -caliber Winchester repeater for hunting this animal. The $32-40$ is an excellent arm for the purpose, so far as it goes, but I dislike a single-shot rifle in the woods. Use a repeater, by all means. For sights, I prefer either the Winchester or Lyman ivory bead front sight, and the open rear notch sight.

A white front sight has a great advantage over any other in heavy and thick timber, where semi-darkness often reigns supreme, as the white bead will here loom up conspicuously against the fur of the crouching animal.

A bead taken, if possible, an inch above and exactly between the eyes, will, if the hunter hold right, insure him no waste of ammunition, very little noise-and consequent scaring of other game-and a handsome pelt, which is always sought after and paid liberally for, if properly cured. This shot also insures an instantaneous kill, which is always a source of great pleasure to the true hunter. If such a shot be not presented, a bead taken behind the shoulder, well down toward the brisket, or one taken along the spine, will be almost equally fatal; but no spot can you strike which will cause a more instant death than the firstmentioned.

The Lynx exceeds three feet in length when developed, and I have seen specimens that weighed sixty pounds; forty pounds, however, is a fair average. He is a splendid swim-mer-rapid in his movements-his broad, heavy limbs giving him great power and speed in the water. The dog that can keep within hailing-distance of this big cat, in the river or in the lake, must be a hustler, and no mistake.

I once saw a good-sized specimen take to the water, in Lake Leman, in British Columbia, when hard-pressed by our dogs, and swim clear across the lake, which is about a mile wide. He speedily left the dogs far behind, and would have escaped up the other bank but for a stray bullet which
struck him between the ears. The French colonists designate him as the Pecsho, or Le Chat. The Indians of the Northwest call him the Tenas-Puss-Puss. 'The home of the Lynx is found among the rocks, caves, and hollow treetrunks. The female brings forth from one to four kittens, usually in April.

The principal food of the Lynx is the rabbit, or cottontail, small birds and animals of all kinds. He affects the heads of the grouse in partjcular. A small Deer is a muchcherished dainty. The Cougar contributes unwittingly in keeping his cousin's larder supplied with Deer, sheep, pigs, and beef. What the Cougar leaves carefully hidden away in a secure place for future reference, the Lynx as carefully unearths and feasts upon.

The Lynx has been known to associate with the domestic cat. A beautiful specimen of the latter lies on my rug at the present writing, whose grandfather on the mother's side is believed to have been a full-blood Lynx. The specimen in 'question shows all the markings of her grandfather except the tufted and penciled ears and the heavy limbs. She is a gentle, affectionate, and intelligent animal. The children can tease her with impunity; but game must never be allowed near her, for when her teeth close on a game bird, her wild instincts are aroused. She is then a fury, and will fight to the death.

While cleaning some grouse one day, several of them being laid out on the table, she came purring up, rubbing her arched back caressingly against my knee, when she got her eyes on the birds. Sbo seized one in her teeth, and started to make off with it to the bushes. I seized her by the tail and attempted to take the bird from her, when all her wild instincts sprung into instant play. Her fur turned the wrong way, her tail bushed out, her sharp, white claws were displayed, while hor eyes blazed with fury. Fighting like a demon, she clung to the grouse with her sharp teeth. I became thoronghly indignant, lified ' ${ }^{\circ} \mathrm{r}$ aloft, and banged her down on a log with considerable force; so heartily, indeed, that the pheasant rolled
into the bushes. After the trouble was all over, she calmed down into the same old serene and complacent, purring pussy, showing no malice-in fact, seeming to forget all about the matter.

Her mother is the property of Mr. Perry, the renowned sportsman, and my esteemed friend and hunting companion, or "Sillalicum," as we say here in the Northwest. The mother has a short, thick tail, not over three inches long, and she is similar to all other house-cats in disposition and looks, but is much stronger-in fact, she is a great fighter, and thrashes everything in the cat or dog line in the neighborhood. She is a wonderful ratter, and is withal very shy. She will make friends with no one but her master. Some of her kittens have the regular short tail of the Lynx, while others have a longer one; but none have as long a tail as the common house-cat. Their heads also have a wilder and coarser look. They are all gray, with stripes on the body and limbs; black-tipped and black-ringed tails. In size they are a little larger than the ordinary domestic puss.

Mary Perry, unlike most ladies, was not in the least timid. Refined, educated, a popular writer, she was, like her brother, a good hunter, and loved the gun. She was afraid of no animal that ever skulked in an American forest. She knew the habits of all the game in the neighborhoodknew where to find a covey of grouse, a tlock of mallards, a herd of Deer, a Cultus Bear, or a Cougar; and knew how to kill them, too.

While walking with her mother one day, on a visit to a neighbor, her hound, Prince, put a Lynx into a tree some distance from the trail. Hastening in to where the dog stood barking, and bidding her mother stay and watch the dog and Lynx, she hastened back to the house, got her light, twelve-gauge gun, and hnrried back into the woods where her mother and the hound were on guard. Lying on a limb, blinking, snarling, and spitting at the dog, was the ugly creature. Raising her gun to her face, Mary took a steady aim and pressed the trigger. The gun flashed, the
entire charge entered the head of the Lynx, and it tumbled. to the ground, stone-dead. Prince stood there with dancing eyes, quivering limbs, and open jaws. He sprung upon the limp carcass and shook it to his heart's content. Then his mistress carried her trophy home in triumph.

The Lynx measured three feet and a half in length from tip to tip, weighed thirty-eight pounds, and was a beautiful specimen. Such a powerful animal, if it were to turn its full strength and its natural weapons against the most powerful man, could make short work of him, if unarmed. Though usually considered harmless, the Lynx is a most powerful brute. No dog can match him. He can tear the strongest and fiercest dog into shreds in a few seconds, if he choose to fight. Nor is he as cowardly as the Cougar; many old hunters considering him more to be feared than the latter.

Two young lads, Ernest Holmes and Tom Berry, while passing through a neighbor's ranch with their sheep-dog, Rover, harl their attention drawn to the dog's antics. Rover, aitir circling through the timber some moments, at last settled down to trail some animal which had passed some time before. He soon opened up, and barking wildly, disappeared along the banks of a creek. The boys followed, and the barking at last seeming to locate in a bunch of vine maples. They rushed in, and saw a large animal perched about five feet from the ground, on a swaying sapling within their reach.

They had no weapons other than their penknives, and so, knowing no danger, attacked the Lynx-for such it proved to be-with these. They could just reach the brute by standing on their tiptoes. First one, then the other boy, would reach up and stab the Lynx in the back and limbs, bringing the blood in many streams. So heartily did they ply their knives, that the beast soon loosened its grip on the stunted maple and fell to the ground, half-dead from loss of blood. The dog seized him by the throat, and soon choked the life out of him. His coat was literally cut
to pieces by the boys' knives. He was a little over two feet in length, and weighed twenty-eight pounds.
A. certain ranchman's hen-roost having been sadly depleted by the inroads of some nocturnal visitor for several weeks, his Teutonic blood at last became aroused, and he declared that the varmint that had been so unlawfully depriving him of his chickens had to go-and that suddenly. The ranchman had noticed sundry large and cat-like tracks around the roost every morning, and decided that the poacher was a Lynx. Knowing the habits and resorts of the varmint thoroughly, Hank sat up several nights in succession, with his old musket heavily loaded with powder and coarse shot; but in vain. The Lynx failed to appear while the owner of the poultry was on guard. Weary with his vigils, Hank turned in at dark the next night, leaving his hens unprotected. On the following morning a fresh trail was discovered, and another hen was missing. Hank was thoroughly disgusted, and vowe? that he would not sleep again till the marauder had been summarily dealt. with. Calling in several of his neighbors, who also had suffered by the depredations of the rascal, a solemn powwow and council of war was held; it being ultimately decided that the entire outfit encamp on his trail till death, most cruel and violent, should be meted out to him.

Several good hunting-dogs being mustered, the outfit took up the fresh trail, near Hank's hen-house. A slight flurry of snow had lately fallen, which aided their designs materially. The dogs were taken to the tracks, and after snuffing around suspiciously, the leader took up the trail, and the entire pack followed. They struck up a musical shout, each dog in his own individual key; some loud, some sharp, some deep, but each doing his or her best. The dogs were eagerly followed by the relentless and blood-thirsty poultry-owners.

They crossed the young orchard, plunged into the thick timber on the other side, making for the upland and green timber, where the dogs apparently lost the trail; but the
old leader soon recovered it, and the wild refrain again went forth. Doubling back, they returned to the lake, passed along the shore for some three hundred yards, and then went into the thick timber again. Then they went direct to and across the Canadian boundary-line, and were on British soil. Lake Leman was soon reached and left behind, the timber growing thicker and denser, the undergrowth more difficult to penetrate, till even the dogs could scarce get through. A halt was called, and refreshments partaken of. A short rest, and again the party started forth, with renewed vigor.

After doubling and running, walking and tumblingafter a great deal of profanity had been indulged in-the hunters began to fear they would not be able to overtake the Lynx before sundown. But at last the dogs stopped beneath a tree, howling, yelling, and roaring. The hunters knew then that the end was not far off-that the Lynx was. treed; and hastening into the thick undergrowth where the dogs were, they began to scan the limbs of the tree. There, sure enough, was a big brindled fellow, tired, spiritless, and half-dead from his long run. He crouched against a limb, evidently hoping to escape being seen by the hunters. But no, nothing can escape their keen, experienced eyes, and the loads from six or seven guns are simultaneously emptied into him. He comes down with a thump among the dogs, stone-dead, riddled with all kinds of leaden missiles, from BB shot to forty-five-caliber bullets. The dogs lit into him and shook him till he was a shapeless mass, and then all returned home in great glee.

The Lynx is easily trapped; a rabbit placed in a snare or ordinary trap, or attached to the trigger of a spring-gun, will often result in the death of one of their number. Finding the track of a Lynx in the snow, while shooting ducks on a creek, and being desirous of capturing him, I hurried home, returning with a strong Fox-trap, having powerful springs and sharp, heavy teeth. I set it in the trail, at a place that was much tracked up and tramped upon. There were also
particles of fur, showing where the Lynx had evidently tarried quite often, this being in a secluded, out-of-the-way gulch.

Setting the trap on the ground, I covered it loosely over with snow, and lung a dead rabbit above the trap some three feet, tying it securely to a vine maple, in such position that the Lynx would be compelled to step on the trap to get at the rabbit. Returning home, I repaired to the trap again toward sundown the following day. $n_{n}$ approaching the trap, I discovered my victim securely held by a fore foot, the leg being much lacerated, as, not relishing his imprisonment, he had tried to pull his big paw bodily therefrom. A blow of a stick on his spine soon ended his sufferings.

In regions much frequented by Lynx, an inclosure sometimes is built, to keep out the rancher's or Indian's dog, and to apprise the hunter of the danger within, and a steeltrap, spring-gun, or pitfall prepareu, baited with a rabbit, grouse, or small bird-the inclosure being visited at intervals to ascertain results. Many trappers have a series of such inclosures and traps, which they visit, one after the other, each day. A Bear-trap is set on a run where a Bear travels in search of salmon; a Beaver-trap is placed in a swamp, slough, or other place where the Beaver makes his home and has his dam; one or more traps being set in sections of the woods traversed by the Lynx, Wildcat, or Congar.

While hunting Deer in the Cascade Range, and on our second day out, we wounded a fine buck. We followed his trail for several hours, blood being liberally sprinkled all along it. When almost up to where we expected to find him, certain feline tracks, following the Deer's, attracted our attention. Believing them to be those made by thrs Mountain Lion, we carefully concealed ourselves in the liush, listening intently for the faintest sound ahead. Hearing nothing, we advanced cautiously and silently through the thick timber, great care being taken to step upon no twig or broken limb, nor to cause the slightest sound. Our
breathing almost suspended, we advanced upon the thicket where we expected our game to lay.

The thicket was finally gained, an opening ahead dis-closed-a crawl un hands and knees bringing us to a huge tree-trunk. Then another is gained; a close survey aliead, and from behind the tree, with rifles carefully held at a "ready," a scene met our eyes that we shall never forget.

There lay our big buck fast breathing his last, the blood spurting from a ghastly wound in his neck, while black, clotted blood trickled down from each slender nostril to the velvet forest carpet upon which he lay stretched. At his side, with sharp, white fangs buried deep in his flesh, was a big Gray Lynx. One huge paw rested upon the dying Deer's side, the cruel, white claws tearing through hair, flesh, and sinew. So busily engaged was the Lynx on the Deer, that he stopped to notice nothing else, his only object appearing to be to get on the outside of the largest possible amount of venison in the shortest possible time.

From the side he sprung again to the throat. At this instant two rifles cracked. The smoke, hanging heavily upon the still atmosphere of the forest, for a brief interval obscured our view. We rushed forward, with rifles ready, and trained upon the spot where lay the Lynx. But no muscle quivers; the breath has left his body; he is dead, cut down so suddenly his last breath went out with teeth deeply set in the Deer's neck.

The Lynx is seldom hunted systematically, as are the Deer, Elk, Bear, and other game animals, unless it be by professional hunters or trappers, who value him for his pelt. With them, the usual method is to hunt him with dogs trained to follow the trail by scent. In cther cases, his track is followed through the snow, by the eye, by a party of hunters, who, when starting out, must be prepared to make a long, hard trump of many hours, or possibly several days. I have known a party, who wanted a Lynx badly, to follow the trail of one all day, returning home as darkness set in. They returned to the hunt next morning,
took up the trail where they left it the night before, and followed it all day, and again the next day, till they finally trailed the beast to its lair, treed and shot it. In mountainous, timbered countries, however, such heroic methods are seldom necessary, for if one Tenas-Puss-Puss escapes, another is usually soon found, without traveling days or weeks.

The dog most suitable for the purpose is a Deer-hound, or a cross between a Deer-hound and a Collie. A swift dog is not desirable; the main qualifications being, that he will trail by scent, give mouth boldly, stay to his work, put the varmint up a tree, and keep him there. It is not expected that any dog will be required to kill the beast alone; so size is not so much an object as scent, voice, and staying qualities. The hunter usually wants to do the killing himself. If the dogs have to do that, it will need a good pack of them, well trained, who will worry, harass, and attack him from all sides, aiming to get him by the throat or spine, as his back is easily broken. The dog, in front of those terrible claws and fangs, must have great sagacity, courage, and knowledge of the science of self-defense, looking out for his own skin, first, last, and all the time.

One wild and stormy December night, a trio of hunters, tired, cold, and hungry, in camp on the side of one of Mount Baker's foot-hills, sat around the blazing fire, devouring their evening meal of venison, bread, and cheese; a pot of steaming black coffee hung above the blazing logs. The wind whistled, howled, and screamed through the gigantic fir-tops on all sides. The forest all about was mantled in a shroud of white; the fine snow drifted in through the cracks and crannies of the rude log cabin.

The hunters finished their repast, put away cookingutensils, and those that used the fragrant weed filled their pipes, lighting them with a brand from the fire, and settled themselves down on blankets and furs, with their feet close to the glowing embers. Then came the season of hiyu-wah-woah-heap talk-each in turn relating incidents and advent-

ures of camp-life, of mountuin-life, of hunts on the great plains or the deep forests.

The night waned, but the screaming wind without howled on in dismal, weird, and solemn discord. The snow fell faster and faster. Growing coll, the veteran of the party rose and piled new logs on the fict, sending a cloud of sparks up among the log rafters above.
"A bad night, boys! $J$, ity the poor unfortunate who may be out in this storm.'.

The howl of a Mountain Wolf rose above the roar of the elements. The scream of a l'anther joined in the discord, rendering the night truly hideous. The scent of the game that hung about the camp kept the beasts of the mountains hovering around; but the glare and smoke from the cabin, and the presence of their human foes, prevented them from coming too near.

The attention of the hunters being turned to the Puma, Mountain Lion, or Cougar-otherwise known as Panthermany thrilling and blood-curdling stories were narrated of the sneaking, powerful cat, till the blood of the listeners almost ran cold, and more than one anxious eye wus uneasily turned into a dark corner, or cast into the darkness without, in search for possible prowlers.

The subject next discussed was the Lynx, and him the hunters proposed to hunt on the following day. Several fine Cougar-skins already graced the cabin, a splendid Brown Bear had been killed, a number of Deer and. Mountain Sheep were hung safe above the reach of the prowling Wolves without, but no Lynx had yet fallen to our score. Many big Lynz-tracks had been seen in the snow, but until now no special thought had been given them. It was therefore proposed that the two following days be devoted to this cowardly but powerful animal.

A last look to rifles, knives, and cartridge-belts is taken; hot coals are raked over the ground, then the same removed, leaving a warm bed of earth, upon which the blankets are spread, and three tired but expectant hunters recline their weary limbs thereon. With feet to the fire, and heavy
blankets piled over them, they sleep, dreaming of thrilling encounters with mammoth denizens of the forest and mountains, of skillful shots, instant deaths, herds of game, and beasts galore.

And, dreaming, they reck not of the night, nor of the howling blizzard withont. The night wore on, and as the first faint streaks of daylight came stealing down upon the cabin amidst the virgin forest, one member of the party awakes, and springing to his feet, replenishes the fire, which has almost died out, huge logs being placed thereon. The coffee-pot, a strip of venison, and a slice of bacon are placed above the hot coals. His companions are now on foot, and the steaming breakfast is hastily devoured. The dogs are fed, cartridge-belts adjusted, and away they go.

Only one dog-a Cougar-dog-is taken, the others being left at camp, greatly to their consternation, and long after camp is left can their dismal howlings be heard. The snow in all directions is closely scanned. Deer,'Coon, Cougar, Wolf, and Elk tracks alike are passed by. The track of the Bear is not now seen; he is taking his winter's sleep, and does not meander forth till spring brings him out, ravenous with hunger, to ravish the lands below. Then the skunk-cabbage and the rancher's hogs will suffer.

At last a track is discovered by the engineer, the veteran of the party, who, undecided, beckons the writer to his side. The track is not heavy enough or wide enough for that of a Cougar, nor is it the dog-like track of the Wolf, but yet it seems too big for that of a Lynx. All three hunters now examine the track, which at last they decide to be that of a Canada Lyux.

The dog for to-day's work is a cross between a Collie and a Deer-hound, slowing many points of each, but not having the long coat of the former, nor the short coat of the latter; being, instead, covered with a thick, wiry hair, short and stiff. He has the head and body of the hound, but the color of the Collie. A strong, swift, keen-nosed animal is Badger-the hero of many a Congar, Bear, and'Coon hunt; intelligent and docile, but a ravenous feeder, and cross to

- strangers. He was not a house-dog, but a dog for big game surpassed by few. Alas, poor Badger! He has since passed away, in a most miserable manner, having been poisoned by an Indian who claimed he had bitten him.

Badger's attention was called to the trail, which he sniffed and smelled, and soon took up. With nose to the snow, he slowly trails along; then, lifting up his voice in a deep bay, he dashes away, hot on the trail of the Lynx.

We followed him, over fallen tree-trunks covered deep with snow, under snow-covered and reclining limbs, through thick undergrowths and tangles of all kinds, where one touch of the hand, body, or boot was sufficient to shake down the soft snow upon coat, cap, and rifte, till the entire party are white from lead to foot. Now the dog runs silent, having missed the trail; but soon his keen nose strikes it again, and away he goes, his deep, bass notes guiding the hunters aright.

The storm has abateä; the sun coldly peeps through the thick foliage and towering tree-tops. Warming up as the day grows older, ten thousand diamonds sparkle from limb, leaf, and trunk, till the beautiful snow-white covering, glittering, glinting in the rays of the December sun, dazzles the eye. Nature now in her grandest form calls forth the wonder and delight of the enthusiastic worshipers at her shrine.

But the Lynx is not yet caught, and that, not Natureworship, is the business of to-day; so onward we spring, the footstep silent and noiseless as death, no sound breaking the stillness but the baying of the dog, the chirp of a squirrel, or the whir of a grouse as it starts from under foot, and, straight as an arrow, sails onto a limb, and sits there, a big brown bird with outstretched neck, stupidly allowing the intruder to pass beneath without stirring a feather. The moaning of the wind through the tree-tops alds its melody or riscord, as you may please to term it, to the other slight listurbances, save which, all is a vast, unbroken solitude.

The track of the Lynx is plainly outlined before us, deep cut into the soft snow. Where an extra jump has been
made, the sharp, cruel claws cut into the snow, the heel in places being also plainly marked, making an imprint not unlike a man's bare foot-long, and tapering back to the heel.

Now Badger shows a fresh burst of speed, and we have trouble in keeping within hearing of him. The quarry is started, and probably the dog has sighted it, for he roars on, heedless of obstacles. Sürely, now the Lynx will soon take to a tree. At an exclamation from one of the party, all eyes are turned in the direcin of his gaze. There, upon a bare surface, and in an opening in the brush, is seen a Goat-like beast, with humped back and tuited ears, taking long bounds-an uncouth, ungainly, clumsy gait indeed.

Badger has seen him, too, and with a tremendous burst of speed he passes, like a bolt, before our gaze. Yes, there goes the Lynx up a tree. Now Badger is beneath, howling at the top of his voice. Although tired unto death, the perspiration oozing from every pore, and our limbs ready to wilt to the ground, the sight of the quarry, and the knowledge that the chase is ended, gives us new strength, and we are soon beneath the tree.

A' $50-110$ Winchester Express, a 38 caliber Winchester, and a 45-60 are leveled at the crouching, trembling, and quivering mass of gray fur above. Three reports ring out as one, and down comes the big-limbed animal, perforated with lead enough to kill an elephant. Badger is allowed to shake his enemy a few seconds, and then the limp body is taken away from him to save the pelt, which is a very handsome one. We judged him to weigh at least forty-five pounds.

After skinning and rolling up the pelt, we made our weary way back to camp, which we reached about dark, jaded and worn out, but jubilant at our success.

The next day we decided to still-hunt another Lynx, whose track we had crossed while following our big chap. Now, still-hunting the Lynx, in thick timber and over rongh ground, upon a mountain-side, is an extremely uncertain nndertaking.

But; nothing daunted, the writer and the engineer took up the trail the following morning, while our companion remained at camp to nurse a contused ankle, which he had sustained while jumping from a huge log ths previous day. The hurt was painful, but not serious.

The trail was readily picked up, but, being somewhat old, was discarded for a new one which crossed it, and was evidently but a few hours old. Though not large, it promised good sport, and at least another pelt. This track crossed much of the same ground as that of the day previous, but went down to the lowland, into the green timber. Having reason to believe that the Lynx had lingered, ard was not a great march ahead, we tramped leisurely on.

Sundry grouse-feathers bestrewed the snow where he had been feeding. Being a skillful fowler, the Lynx is seldom at a loss for the staff of life here in the Cascade Range, where birds are so abundant. Like a dog, he will scent his game. Knowing how to proceed, from long experience and a constant necessity of hustling for himself, he advances on his unsuspecting victim, silently, noiselessly, and concealed, perhaps, behind some mound of earth or tree-trunk, he sneaks along, with his belly on the ground, till he is as near as he can get without flushing the grouse. Strutting upon a log, perchance, is the proud bird; every feather ruffled, the black feathers aronnd his neck puffed out, he paces majestically to and fro, ever and anon emitting a slight "cluckcluck," similar to that produced by moistening the lips, holding them together, then separating them with a snap; or, if it be in the spring of the year, he drums and booms, .producing a sound similar to that produced by beating rapidly on an immense bass-drum.

Or possibly the partridge is quietly feeding, pecking at stray morsels of food, unconscious of the treacherous, crawling destroyer so near at hand. The bird's head being turned to one side for a second, there is a streak, a flash of fur, and the next instant the cruel fangs pierce through feathers. flesh, and bone, and the poor bird never knows what struck him.

Even if the grouse is too far off, or the cat has miscalculated his leap, and the bird takes to his wings, which are of great strength, and which often carry him through the hunter's fire unscathed, the Lynx is not yet foiled, nor are his resources yet at an end. No aim is truer, no calculation more accurate, no motion swifter, than the spring which is now made, as the bird rises from the ground, and is caught in mid-air, with a tremendous leap of lightning-like swiftness; and the bird is crushed between jaws of steel.

The feathers show us that the beast has tarried here; and this delay may be fatal to him. Going still slower, we move silently along in the fresh-cut tracks. Here he has turned; now he has donbled back. We must be careful, or we will lose him in this thick jungle.
"Very likely he is in there," we think, as we lift one foot ahead of the other-one eye on the trail, the other examining every limb and trunk ahead of us, and on each side.
"No, he can't be in here."
The tracks continue through; now his jumps are longer; he is fairly humping himself, no doubt having pressing business on hand in some other county. We don't believe he has lieard or seen us, for we have the wind and have come very cautionsly and quietly. No sound can he have heard. Now the trail leads us into an almost impenetrable jungle, along a ravine. A wind-fall blocks our further progre trees of all sizes are piled above each ocher, till it seems an impossihility for even a cat to enter.

A council of war is held, in whispered accents. The area of the wind-fall is not great, so we decide to encircle it, hoping to put puss out if hidden therrin. The engineer climbs down into the rugged, rocky, shelving mountaingulch, carefully watching for the trail. The writer circles in the opposite direction, which proves less precipitous; also watches the snow-covered ground for the trail.

A low whistle from the engineer hastens his footsteps. We are soon together again. The veteran silently points a finger up the craggy sides of the gulch, where a ledge of
rock projects almost perpendicularly above. The footprints of the Lynx, or some other large animal, lead directly to it, and above it there are no tracks.

The veteran's face, suffused with smiles, is benignantly turned upon me.
" There's our varmint; but how will we get there?-that's the question."

The sides of the ravine are closely scanned for a scalingpoint, but none presents itself which will admit of speedy travel. The only course left open is to attempt the ascent, which appears extremely hazardous. Boulders and rocks, big as the Chicago Court-house, have to be scaled, whose sides tower straight up. Then, again, loose rocks of all sizes present themselves, a touch only being required to hurl them below. Still, having come so far for that Lynx, we can not go back now, but must have him, rocks or no rocks. So, strapping our rifles to our backs, we climb up till we get to the most prominent obstruction, a jutting ledge, which it appears almost impossible to surmount. A bank of soft earth is discovered to the right of it, in which our hunting-knives soon make holes for our hands and feet. A tedious, risky climb brings us on the ledge above, which is covered with two feet of snow, where the Lynx-track is again recovered. A fissure in the rock next receives our attention.
" If there is no other entrance to this cave, we' ve got yon, old gray-back!" ejaculates the engineer, as we thrust our rifles into the opening, and endeavor to pierce the gloom within. The darkness is too thick, and at first nothing is to be seen. Presently, however, the eye becomes accustomed to the gloom, and a deep fissure is found which will admit us both. Stooping low, we advance slowly into the darkness. A match is struck, and there, huddled up on a ledge of rock, are two dark bodies. The match flickers and dies. Another is struck, and a pair of rifles thrust in the direction of the two bodies; a pair of large, shining eyes appear on each side of the sight on the business-end of the rifle; two reports thunder together in the cramped quarters.

Darkness, thick and impenetrable, follows. We hear writhing, struggling, and a smothered scream in the direction of one of the bodies, and both our rifles are again discharged in the direction of the sound; then all is still. Another match is now struck; but the smoke hangs so thick and black that we are unable to see through it.

Returning to the mouth of the cave, an oiled rag and a piece of tarred rope are discovered in a pocket. The rag and rope are twisted together and set on fire, and the burning mass thrown far into the cave, bringing brightness and light to every corner of it. We return, and find the two animals dead; two balls having passed through one of them, while the death of the other had been instant as the result of one shot.

Both are drawn out to the daylight, and examined with great interest. One was the largest Lynx we had ever seen, and would have weighed, as nearly as we could judge, about fifty pounds. He was three feet long, exclusive of the tail. The other Lynx was much smaller, and a female, measuring somewhat under thirty inches, and weighing about half as much as the male. Securing the pelts, we retraced our steps. This ended the most exciting Lynx-chase we ever had, and the most prolific of results.

When not more than half-way back to camp, night overtook us, and we lost our way in the darkness. The spertacle of a pair of bosom friends, old hunters, lost on a prairie, or even in most forests, conjures up no feelings of horror in the mind of the reader. To be lost in such a forest and on such mountains as these, where the snow lies from two to five feet deep; the smallest tree three feet in thickness; the darkness so intense that you can cut it with a knife; the only sounds being the sobbing and moaning of the trees, the distant howl of the Mountain Wolf-a savage, coldblooded, cruel beast-or the scream of the Monntain Lion, the occasional "tu-hoot, tu-hoot, tu-tu-hoot" of the screech-owl-is not pleasant, to say the least. Add to these the knowledge that the first huge tree-trunk you come to may harbor beneath its roots, entombed in a bed of snow, a huge

Cultus Bear, sleeping his long hibernal sleep, but needing only a rap or a kick on the trunk of the tree to wake him up and turn him out into the darkness, "madder'n a nest of hornets," and you can readily imagine that we were not exactly comfortable. We would far rather have been tucked up in our beds at home, or be stretched out in camp with a huge log fire hissing and crackling before us. No, dear reader, I advise you never to get lost in the piny forests of British Columbia, or in our Northwest mountain ranges. You'll feel lonesome and homesick if you do.

But lost we were, and we knew that no amount of repining would enable us to find ourselves. After an immense amount of conjecturing and figuring as to where we were, we decided that it was useless to try to reach camp that night, and that our only means of living through it was to build a big fire and keep it up. We ransacked the neighborhood for dry limbs, dry leaves-in fact, anything dry; but alas! dry things were not to be found. The soft, yielding snow encased all in a mantle of perpetual whiteness and wetness.

Strips were cut from our clothing, and matches pulled, and scratiled across any dry spot that we could find; but they soon burned out. The thought of remaining out this cold, windy night without a fire became almost maddening.

One, two, three, a dozen shots were fired, in rapid succession, from our rifles. Hopeless hope! No hunter is nearer than our camp, and the solitary occupant of that is far beyond the sound of our weapons. How gladly would he find us, if only le knew where we were! It being impossible to start a fire, and the cold becoming too great for us to stand idle much longer, we were compelled to resume our march.

We went floundering thrc igh snow and brush, scarcely making any headway in the intense darkness. We tumbled, rolled, and wandered aimlessly on, ho ir after hour, till, almost sinking down through sheer weariness, we were in utter despair. At intervals we fired our rifles, in hopes of reaching the ear of some distant camp.

At last we fancy we hear a shot. Then another. Yes, there are three more. We are saved! Blindly groping our way in the direction of the welcome sounds, we fire the last shots remaining in our belts, and keep yelling at the top of our voices. At last we hear the answering shouts, and soon see the torch, carried by the party who so opportunely had heard our shots.

We are soon among them; they are Lummi Indians. Leading us to their camp, we are soon seated by a blazing fire. For several minutes we absorb the warmth, too glad to utter a sound. Though no questions are asked by our rescuers, many questioning glances are cast in our direction. Finally, having got our limbs and tongues thawed out, the engineer proceeded to enlighten the Indians, in Chinook, as to the reason of our strange appearance amongst them. They set before us a piece of venison and a bowl of corn-mush, which soon disappeared; then the pipe was passed, and they all settled down again into gloomy silence.

A motley group were they-some young, some old; darkskinned, black-haired, broad-faced, heavy-limbed; short of stature, but broad and long bodied, with short legs, receding brows, and prominent cheek and skull bones.

Tiey sat cross-legged, gazing into the glowing coals, paying no further attention to us. They were a hunting.party who were out after the Big Horns, the Deer, Elk, Cougar, Bear, and 'Coons. Their only weapons were the ancient pieces of iron, with the wooden handles, such as are bartered by the Hudson's Bay Company in exchange for furs. They are, however, carefully cleaned every night, oiled, and put away in the woolen or buckskin sack, for further use the following day.

The Puget Sound Indian is not, as a rule, a good shot, but understands the habits of all game, and wild animals. He is very saving of his ammunition, and wastes no powder or balls on uncertainties. He must be close to his quarry before his ancient piece of ordnance is discharged. Snaking himself through the woods on all fours, traveling, perhaps, not more than a hundred yards in an honr, he is a
mlentless foe to the Deer or Elk. He is dirty and filthy in his habits, subsisting principally on smoked salmon and salt meat-living a life several degrees below that of a beast.

The glowing accounts of the noble red man which we have read in our youth, and the exalted opinion we have held of his manly attributes, brave deeds, and daring mien, are all dispelled upon being bronght face to face with the filthy reality. Gratitude or generosity are unknown elements in his make-up. There are many powerful, hardy specimens of manhood among them, but this is attributable to their out-door life, and wanderings in the forests and mountains. Shrewdness and cunning they possess in a marked degree, in all that pertains to their own interests. Patience, also, is one of their leading characteristics.

A night in an Indian hovel under ordinary circumstances would be unendurable, but on the occasion I have described anything was preferable to the midnight howlings of the woods. We passed the night as best we could among our red brethren, but were up and off at the first streak of daylight in the morning. Our homeward way was soon discovered in the brightness of the sun, and a long, hard tramp brought us again to our cabin, where we found our comrade in a great state of fear, not knowing what had happened to us.


## THE WOLF.

By Whlink Pittrax Lett.

> Hark to that minstrelsy, ringing and clear! Tis the chorus of death on the trail of the Deert The flerce forest Blood-hounds are gathering in might; Their echoing yells wake the silence of night, As relentiess they stretch over mountain and plain, The blood of their fast-speeding victim to drain. They close-he stands proudly one moment at bay; 'Tis h!s last-they are on him to ravage and slay!

边HE Wolf belongs to the genus Canis, or Canine family. According to Audubon and Bachman's "Quadrupeds of America,'" the Wolf has six incisors in the upper and six in the lower jaw, one canine tooth in each jaw, and six molars above and six below. The three first teeth in the upper jaw and the four in the lower jaw are trenchant and small, and are also called false molars. The great carnivin jus tooth above is bicuspid, with a small tubercle on the inner side; that below has the posterior lobe altogether tubercular. There are two tabercalous teeth behind each of the great carnivorous teeth. The muzzle of the Wolf is elongate; the tongue soft; the ears erect, but sometimes pendulous in the domestic varieties. The fore feet are pentadactylous, or five-toed; the hind feet, tetradactylous, or four-toed; the teats are both inguinal and ventral.

The Gray. Wolf of Canada-i. e., the large Wolf of all Northern America-is about five feet six inches in length, from the point of the nose to extreme end of the tail; ordinarily about twenty-six inches high at the shoulder, larger ones, however, measuring twenty-eight inches in height and weighing from seventy to one hundred pounds. I give the latter measurement and height from the bodies (453)
of Wolves that I have killed, and I am confident that I am under rather than over the actual size and height of the Gray Wolf.

There are several varieties of American Wolves, differing so much from each other, chiefly in color, as to lead some naturalists to the conclusion that they are different in species, and that they do not originate from the same primeval stock. They are all about the same size, and band together in the same pack; the white, gray, and red varieties being specifically identical.

In size and other peculiarities, all the larger Wolves differ from the Prairie Wolf and the Coyote; both of these smaller varieties burrow in the earth, are much less savage and destructive, and much more docile and affectionate in a state of lomestication, than are those of any variety of the larger species. According to the best zoölogical authorities, all the larger Wolves are dwellers upon the surface of the earth-sleeping in the open air, or making their dens in caves or crevices of rocks.

The most valuable skins are obtained from the White Arctic Wolf; the next, in thickness of fur and costliness, is the skin of the Gray Wolf of Northern America; and so on down to the pelt of the black variety, which, being a southern animal, ranging in a warmer habitat, carries the thinnest and coarsest coat of the entire genus, and consequently is of the least value.

The Gray Wolf, the variety most common in Canada, bears a very striking resemblance to the European Wolf. There are, however, differences between them, which at one time appeared to be distinct and permanent. Naturalists of late years appear to be unanimous in the conclusion that the larger Wolves of the Old and New World all belong to one species. The American Wolf, notably the Canadian variety, is at least equal in size to that of any other country.

Billings tells us that "the body of the American Wolf is lung and gaunt; muzzle elongated, and somewhat thicker than that of the Pyrenean Wolf; head thick, nose long,
ears erect and conical, as is the case with all true Wolves; pupil of the eye circular; tail struight-the animal does not carry it curled over hils back, like n dog."

To this excellent description, I may add that the eye of the American Wolf is of a light greenish color; its expression is sneaking and sinister, intermingled with an aspect of cunning similar to, ulthough surpassing in force, the yellow eye of the Fox. As stated above, the tuil of the Wolf is bushy; but it is neither so long nor so elegantly rounded and heavy as that of a Fox.

At one time, the Gray Wolf was found all over the Continent of America, as fur south as the Gulf of Mexico. It is still to be met with in considerable numbers on the great plains of the West, on the slopes of the Rocky Mountains, and in more or less abundance, according to location, in all the remote and sparsely settled portions of Canada, Newfoundland, and Cape Breton. In voice, form, generic character, and manner of hunting their prey, all the varieties of the large North American Wolves are essentially similar.

In the early history of Canadia and the United States, not less than in the valley of the Ottawa, Wolves were dangerously abundant. In those old times, in all new settlements, sheep -when a farmer was fortunate enough to own any-had to be penned up carefully every night, otherwise wool would certainly be flying before morning.

It was not alone that in one of those nocturnal raids many sheep were devoured-that was not the worst feature of the transaction. A couple of those blood-thirsty marauders, in one night would kill fifteen or twenty sheep, simply tearing open their throats without otherwise matilating their carcasses.

After such a catastrophe, cheap mutton was easily proourable; frequently, too, at a season of the year when the I I pioneers were obliged to live without meat of any kind, $f$, sh or salt, for months at a time. For the information of those unacquainted with the hardships and privations of the men who cut down the wilderness and cleared the land,

I may say that this enforced economical fast usually did not terminate until the pigs were killed, in December.

Apart from the information which I have derived from the authentic records of natural history, I have had a somewhat intimate personal acquaintance with this ferocious bandit of the wilderness, through practical observation, as well as by the agency of steel-traps.

Now, it is a generally receivel opinion-like many other popular fallacies-that the Fox surpasses all other animals in cunning.- I have had what I consider good and sufficient reason to doubt the correctness of this ancient conclusion. I think anyone who tries to catch a Wolf in a steel-trap will'agree with me, that the Wolf is a much more cunning animal than the Fox.

In my younger days, I trapped many Wolves and Foxes, as well as fishers, minks, and muskiats. I used no pungent oils or other extraneous attractions to wile them, but simply matched my own intelligence against their instinetive cunning; and in the case of the Wolf, I have often, for many successive days, found myself completely circumvented.

In proof of the persistent cunning of the Wolf, I may relate a circumstance of some weight. While trapping, in the month of December, 1840, I iastened a piece of liver upon the knotty spike of a henilock-tree, about three feet from the ground, and set a well-concealed trap under it. The Wolves frequented the spot every night; and although they tramped a circle in the snow six feet from the tree, or twelve feet in diameter, their dread of the trap prevented them from touching the meat, notwithstanding the fact that it remained in its position until the first day of April.

A short distance from the same spot, during the same winter, I canght three Wolves, twenty-seven Foxes, three fishers, and one marten. I experienced more difficulty in capturing the Wolves than all the others put together. I took the Wolves in the following manner: I deposited a quantity of pigs livers and other offal in the center of a
dense cedar-swamp, near the present site of the Carp Village, in the Township of Huntly. I had hearad the Wolves howling after Deer on several occasions previously; and I was also aware that they had killed a number of sheep and a few young cattle in the immediate vicinity.

The Wolves soon scented the bait, and gathered around it-as I frequently had the pleasure of listening to their inimitable music in the swamp. I visited the spot three times in each week, always stepping in the same tracks going and returning, from and back to the main traveled road. I found that, during three weeks, they had not ventured nearer than about six or eight feet of the bait, and that up to that point the snow all around it was beaten down by their tracks.

At the beginning of the fourth week, they attacked and devoured the greater part of the offal. I then renewed the bait, and set a tiap in front of it where they had commenced eating. J was particular, after the trap was placed, in leaving the surface of the snow exactly in the same condition as I found it. Next morning I found the springs of the trap bare; the snow had been scratched away, and the bait had been eaten on the other side. I then set another trap on the opposite side, and next morning found both traps bare. I was somewhat puzzled, but I determined to persevere. I then set both traps in such a manner that, should the Wolves attempt the scratching trick again, the first part of the traps that could possibly be touched would be the pan. They came that night, and one remained there; for, to my great satisfaction, J. found him, in the morning, fast in one of the traps. He was a fine, large specimen, twenty-eight inches in height at the shoulder, and correspondingly long-bodied and bulky. His weight must have been at least eighty pounds, or perhaps more.

As it has fortunately turned out, for the purposes of this sketch, I pnt Mr. Lupus through a somewhat critical examination. I poked him up smartly, and experimented upon him, with the view of learning something which I did not then know about the amiable members of his interesting
race. I endeavored to make him give tongue, but failed. Like a hound without a scent, he was silent $\mathrm{t}_{2}$ I could not induce him to utter a sound; nor did he attempt either to snarl or growl. I noticed that when I stepped off a few paces, at each step he raised his body until standing at his full height. At each step as I approached him again, he lowered himself gradually until flat on the ground, with his head bet" oen his paws, in which position he remained as long as I stood beside him. He seemed exceedingly shy and timorous, but made no attempt to escape; while he was far too cunning to display any ferocity. An otter, a fisher, or a marten would have snarled, growled, and fought viciously under similar conditions.

I feel convinced that with a dog-collar and chain, after freeing him from strap, I could without difficulty have led him home. I put this idea to the test in the following manner: For the purpose of fastening the trap, I cut down a balsam sapling, about three inches in diameter, the root end of which I cut off square. Into this I drove a staple, to which I locked the chain of the trap with a small padlock. I then planted the tree precisely in the position in which it grew, and where the Wolves had been in the habit of seeing it, night after night, for weeks.

When I had completed my zoölogical experiments, never then expecting to tell my readers anything about them, I unlocked the trap, and walked quietly off toward home. The Wolf got up and followed me, without any resistance, for about a curarter of a mile, when I accidentally tripped over a large pine-root and fell. Had I not known something about the history and character of my companion, there might then and there have occurred a tragedy. The instant I fell, and before I attempted to rise, I turned my head quickly and looked my prisoner straight in the eye. I found him with eyes flashing and his whole body gathered for a spring. The moment I caught his eye, he cowered before my gaze. Had I not been prompt, it is quite possible that my present story might never have been told. However, I was yoang, strong, and active then, and the reader
may rest assured that I could not have been silenced without a determined and sanguinary struggle. Long before this, I had learned that it was dangerous to fall in the presence of even a domesticated Wolf.

I need scarcely say that I did not trouble my $:$ :niable companion to follow me any farther, lest I might get another fall. With one blow of a stick which I usually carried for the purpose, I laid him out ready for skinning; as doubtless, in his time, he had treatei many a beautiful Deer prior to derouring it.

As I have before remarked, the three Wolves which I had killed formed part of a pack that, during a few weeks before their tragical departure to the happy hantinggrounds, had committed many serious depredations. I put the succeeding two, each of which was equal in size to the first one, through a similar investigating process, but failed to elicit anything new. I had frequently heard the pack in full cry, at night; and although, if heard close at hand, the sound might have proved terrifying to persons not gifted with an ear capable of appreciating Nature's magnificent harmonies, so far as I am a judge of music, the moonlight concert of those Wolves seemed to me to be the ne plus ultra of forest harmony.

The Madawaska River, which was once, so far as unrivaled natural beauty could make it so, the rushing, foaming queen of Ottawa's peerless tributaries, has along its turbulent course many rapids and chutes of wondrous grandeur and beanty. One of those chntes, about one hundred miles from the City of Ottawa, is cailed the Wolf Portage. It was so named on account of the Wolves chasing Deer into the water at that point during winter. The hunted Deer were in the habit of rushing into the rapids to escape the fangs of their sanguinary pursuers. In catching the Deer at the Wolf Portage, the Wolves displayed nuch cunning. When a Deer took to water at the head, it was quickly carried over the rough chute and down the rapids into the gradually narrowing, ice-inclosed glade, or chamnel, at the foot. Just at the spot where the current drove
it against the ice, under which it would immediately be whirled, a number of the Wolves stood on the ice, and the instant the Deer touched its edge, it was seized by the fierce and hungry animals, dragged out upon the ice, and devoured. In the early lumbering-times upon the Madawaska, the skeletons of Deer could always be seen, in winter, lying on the ice at the foot of the Wolf Portage.

So numerous were the Wolves on the Madawaska, that, during the years 1840 and 1841, the Deer were driven completely out of the large section of country lying between the High Falls and Keminiskeek Lake-a distance of sixty miles. In 1844 the Deer began gradually to reappear; and when they returned in force to their old haunts, the Wolves followed them, hunting them back to their old habitat, where for years they have been comparatively abundant.

The old Stony Swamp, on the Richmond road, in the Township of Nepean, twelve miles from Ottawa, was at one time much infested by Wolves, chiefly on account of its having been a famous fastness for Deer. The Wolves of the Stony Swamp did considerable damage amongst the flocks in the neighborhood.

In connection with this old road, I remember an incident which took place there in the year 1830. In that early period in the history of the County of Carleton, oxen were chiefly used for all purposes of travel and draught by the farmers, simply because they had no horses. Farm produce, such as hay, oats, wheat, corn, and potatoes, were then hauled to Bytown market on ox-sleighs; and then, as now, the journey was partly performed in the night.

One clear, moonlight night, a farmer from the westerly part of Nepean was driving his heavili iaden oxen along the lonely windings of the road through the Stony Swamp. The season was winter. He had a small dog with him, which was running along a short distance in front of the team. Suddenly, he heard a piteous howl from the dog, and looking in the direction of the sound, saw an enormous Wolf darting away through the trees with the struggling dog in his mouth.

During the first few years after the early settlement of Hull, Wolves were numerous and destructive in the neighborhood. They had killed many sheep, and had, also, very much disturbed the minds of timid people by their nightly howlings. Something decisive had to be done to abate the nuisance. A hunter set a trap, and succeeded in capturing one of the offenders. He muzzled him, and skinned part of his head and sides, and then fastened a broad, red collar, to which was attached a bell, around his neck. The Wolf was then liberated; and, according to the story, Wolves became scarce around Hull, and remained so for many years.

In October, 1839, when the trees, the stately sentinels of earth, seemed to wear the livery of heaven, I was out, one morning, duck-shooting. The time was the interval of twilight just preceding the dawn. Suddenly, I heard the voices of a large pack of Wolves in full cry after a Deer. The River Goodwood, upon the bank of which I stood, is about forty yards wide. The Wolves were running in thick cover, a short distance from the shore, on the opposite side. The moment was an exciting one, but I have no recollection of having been frightened in the least. I stood close to the edge of the water, ready to tackle them with a singlebarreled muzale-loader charged with No. 3 shot, and regretted that they did not show themselves. The Deer and its pursuers passed rapidly on through the thick undergrowth; and shortly afterward the Wolves caught the Deer, as indicated by the ceasing of their howls. Clear daylight then appeared; and, if I remember correctly, ten wild ducks constituted the result of my morning's tramp before breakfast. I had no dog with me, and consequently had to swim after every one of them.

On various occasions, in many a hunt since the occurrence referred to, I have listened to the matchless melody of the hounds in full cry upon the steaming trail of the Deer. I need scarcely tell the sportsman who has been there, how far such a chorus surpasses the highest and most scientific effort of a full cornet-band. Nevertheless,
such a wild, weird, clear-sounding, musical performance as that with which I was favored on the moruing in question, I have never since heard.

The "angry growl" attributed to the Wolf by the novelist and the literary story-teller-who possibly never saw or heard one, and knows, perhaps, as little, either practically or theoretically, about the animal as the generality of ordinary writers do about the correct mode of writing the Tipperary idion-is just as far from the natural habit of the Wolf as is its capacity for playing the Highland bagpipe.

Talking of the bagpipe, I once read an account of a benighted piper in an American fores: who was surrounded by Wolves, and, as a last resort, he struck up "The Campbells are Coming," and the result was that the Wolves took flight as if pursued by a prairie-fire. Neither Lion, Tiger, Wolf, Jaguar, or Cirizzly Bear could face, for one minute, the charge of a Highland piper in full blast with the pibroch.

Personally, if accompanied by two thorough-bred Bullterriers of good size, and armed with a Winchester repeat-ing-rifle, I should be delighted at any time, in daylight, to pay my respects to six of the largest Wolves in America.

About twelve years ago, the hunting-party to which I have the honor to belong was encamped on the bank of Bear Brook, about twelve miles from Ottawa. It was during a very cold time, in the month of December-a fact which I distinctly remember, in consequence of having to cut a large supply of birch stove-wood to keep the tent warm.

During our stay in camp, on one occasion, about midnight, we were awakened by the howling of Wolves near at hand, accompanied by a noise like that made by a large animal jumping through the snow. Rifles were grasped, but the noise suddenly ceased, and all again became still. By the tracks found in the snow, next morning, we learned that a large buck had run within less than twenty feet of the back of our tent, and had then turned aside. Upon follow. ing the tracks of the Deer a short distance, the foot-prints
of the Wolves were discovered. We did not follow the trail far; had we done so, we should doubtless, sooner or later, have found the mangled remains of the Deer. Had the buck given one more jump from the spot where his tracks appeared at the back of the tent, we should have had an immediate row of more than ordinary interest and excitement. I have often regretted that the Deer and the Wolves did not land amongst us. In that case, I could have given you a true story eclipsing the most florid narrative of the nost ingenious and accomplished newspaper reporter of the present day.

Wolves were quite numerous in the Township of Gloucester, adjacent to the City of Ottawa, up to a fow years ago; and doubtless there are many still, in the solitudes of the vast tamarack and cedar swamps still existing within less than twenty-five miles of the City of Ottawa.

In December, 1868, Doctor Bell, of New Edinburgh, was driving through the long swamp below Eastman's Springs. At that time there were many Wolves within even ten miles of the City of Ottawa. While jogging along at an ordinary rate, the Doctor's horse suddenly became restive, pricked up his ears in a startled manner, and stood still. Just then . a Deer crossed the road a few yards in front of the horse. The howling of Wolves close by greeted the ears of the Doctor, and after a few seconds eleven of these ferocious sleuthhounds of the forest rushed across the road on the trail of the tired Deer, which, withont doubt, was soon pulled down and torn to pieces. What a glorious chance for a repeating. rifle! The worthy Doctor, however, although a keen sportsman, was armed only with what modern pathological science regards as the most killing weapon, at short range, of the faculty-his lancet.

Roman history tells us that Romulus and Remus, the founders of the City of the Seven Hills, were suckled and reared by a she-Wolf. If this story be true, the fostermother of those distinguished sons of the Tiber in her nature was not all Wolf. This incident has been partially paralleled by the story of Androcles and the Lion, as well
as by that of Maldonata and the Puma. All three of these interesting incidents are highly creditable to the character of the brute creation. It is certain that the ancient Romans, as a race, inherited none of the characteristic cowardice which fine-drawn physiological science might trace to the source of their ancestors' early sustenance. Nevertheless, the blood-thirsty and predatory instincts of the Lupine race were amply exemplified by the humane and gentle rule of many of the Roman Emperors-notably, Caligula, Nero, Galba, and Vitellius.

In the history of America, the instances have been rare indeed in which Wolves are authentically reported to have attacked human beings. Emboldened by numbers and stimulated by hunger, the Wolves of Russia and Siberia have for ages been a standing threat and terror to night travelers in the inhospitable countries mentioned, in the dangerous mountain fastnesses of which they are met with in such multitudes. In a part of the world in which the humanizing influences of a refined civilization for hundreds of years found no resting-place, it was the custom in intestine wars to leave the dead and dying on the field of battleto rot, or be devoured by beasts of prey. Is it any wonder that, under such conditions, like the Bengal Tiger, the Wolves of Russia became man-eaters?

In contradistinction to the habits of their European congeners, North American Wolves, although comparatively bold under the pressure of hunger, dread the presence of man, and flee from him, as do the Deer and the Black Bear.

I remember a story current in old times, about a gigantic Indian named Clouthier-a rather Gallic designation for a pure Algonquin-who was well known to the late Squire Wright, the founder of the ancient Village of Hull. My story may be quite true in every particular, for the Indian in question was of Herculean proportions and almost superhuman strength. On one of his hunting excursions, Clonthier was attacked and torn to pieces by a large pack of Wolves. It was surmised by those who discovered his remains and fragments of his clothing, that after he had
shot one of his assailants with his single-barreled, flint-lock gun, he had drawn lis tomahawk from his belt, and fought desperately for his life. From the number of skulls and other portions of the bodies of the Wolves found at the scene of the tragedy, it was concluded that the Indian had killed fourteen of the Wolves before he had been over-powered-all of which had been devoured by their fellows excepting the bones. Like his scriptural prototype, the Algonquin Sampson did not fall unavenged.

In connection with my subject, the following story may prove interesting. It is an old tradition now. I shall give it as told by a great-grandson of the hero of the tale, who died, in this county, about ten years ago. Whether true or not, it is a credited tradition amongst the Tete du Boule Indians, who inhabit the region surrounding the upper and head waters of the Gatineau, one of the largest tributaries of the Ottawa River, the point of confluence of which with the latter stream is within about one mile of the northeastern limits of the City of Ottawa.

During the early settlement of Canada by the French, an adventurous hunter named Baptiste Sabourin penetrated this northern wilderness, and began trapping and hunting within the limits of the hunting-grounds of the Tete du Boule Indians, about two hundred miles north of the Ottawa River. His adventure was a daring one, but the temptation was great, as, at that early day, the forests were full of game. Moose, Caribou, Otters, Beavers, Bears, and Black Foxes abounded in those primeval solitudes, the peltries of which could be advantageously disposed of at Montreal and Quebec.

Sabourin had been liunting but a short time when he was discovered and surprised by a party of Indians, who took him prisoner and brought him before Wanonga, the chief of the Tete du Boules. A council was called, and after the usual deliberations, the daring hunter was condemned to death; but, as in the case of Pocahontas and Captain John Smith, the execution of the sentence was
arrested by the hand of a woman. The French hunter appears to have been a fine, handsome fellow, twenty-five years of age, six feet tall, and of lithe, manly proportions. His admirable proportions and physical beauty had made a strong impression upon Tamiroo, the only daughter of the chief, a lovely girl of eighteen, whose stately, upright figure, finely cut features, and flashing black eyes had not escaped the notice of the condemned man.

When the prisoner was about to be delivered over to the tender mercies of the elder Indian women, the chief's danghter interceded with her father for his life. Her intercession proved successful, and Sabourin became a member of the tribe. A mutual affection, or a case of "love at first sight,'' seems to have influenced the two young people, for, after a short residence with the Indians, the couple were married according to the nuptial ceremonial of the tribe, and Sabourin remained to the end of his life among his dusky friends. In the course of time he became the most expert and daring hunter amongst them.

Late in the fall, on one of his hunting excursions, the white hunter encountered two large bucks of the Woodland Caribou species. They had been fighting, and their antlers became interlocked in a most inextricable manner. Strange to say, and entirely contrary to what a pare Indian would have done, he did not kill them, but immediately repaired to the camp for assistance to take them alive. In company with a number of Indians, he returned to the scene of battle, and the two animals were secured, and bound with strong thongs of Deer-skin. Afterward, they were separated by cutting away a prong or two from the antlers of one of them.

The animals, securely bound, were then drawn on toboggans to the camp. A suitable inclosure was then formed, in which they were placed. They were liberally supplied with mosses, lichens, and other food, by the younger members of the community, and soon became tame and docile. After a few months' confinement, they became great pets, and in due time were liberated, and the gate of the inclos-
ure was left open. For many days they did not leave the. vicinity of the camp. Finally, they became ulmost as domestic in their habits as cows. They frequently wandered off in the woods, but invariably returned in the evening and slept in the inclosure; although on many occasions they remained feeding upon the plains all night, and then would come back in the morning.

About a year after the capture of the animals, and when they were unusually tame, Sabourin conceived the idea of training them to harness. He made a set of rude harness out of the thick, strong hide of the Moose; and before hitching them to his traine sauvage, he drove them around abreast for some days, at the first trial having them led by one of the young Indian boys. After about three weeks of patient training, he had the satisfaction of being able to drive them wherever he pleased, as the Laplander does his Reindeer. In his hunting excursions, Sabourin found his horned team of trotters of the greatest use. On the wide, open plains, he was accustomed to drive close up to a herd of Caribou without alarming them in the least, and thus was enabled to obtain many a sure and successful shot without subjecting himself to the labor and fatigue of a slow and protracted stalk npon this wary game.

According to the story, the two Deer remained with the hunter for eight years. They were frequently absent in the forest for two or three days at a time, but, strange to say, never appeared to separate, and never failed to return. The younger members of the tribe wondered at what they thought the magic of the white man, attested by the taming of such proverbially wild and shy animals. To some of the elders of the tribe, however, the accomplishment of the difficult task did not seem so unaccountable. They appeared to have had a dim recollection of a tradition, handed down from one generation to another, from the far-back past, that their remote ancestors, in other lands, had been accustomed to use the Reindeer for similar purposes.

Can it be that a possibility exists of a lineal relationship existing between the Laplanders and the aborigines of the

North American Continent? There certainly appear to exist some strongly marked physical similarities between the Tete du Boule Indians and the Laplanders.

Now I am obliged to come to the melancholy and tragic part of the story, which, were it a mere fiction, instead of a generally accepted tradition in the unwritten records of the tribe, I should tell in a different manner.

On one occasion, as usual with him, Sabourin was out alone, hunting Caribou. He had driven his team up to a herd, and had succeeded in killing two of their number. He was then about twenty miles from home. Shortly before sunset, he had fastened the carcasses to his sledge and started for home, which he expected to reach in a couple of hours.

Night had fallen, and while passing through a pine forest, he was suddenly startled by the howling of Wolves close at hand; and before he could unloose and throw the carcasses off his sledge, the savage animals, in great numbers, rushed upon his team, both of which they pulled down and tore to pieces in a few minutes. Meanwhile, the hunter had climbed to the branches of a pine-tree. He carried his gun up with him, and commenced firing down upon the dark mass of Wolves. He killed a number of them, as was seen afterward, which were soon devoured by their fellows; but his ammunition soon became exhansted. Still the blood-roused monsters kept watch.

Daylight at last came, and all was silence in that dreary solitude. Not having arrived at the camp, fears were felt for his safety, and a searching-party started upon his trail next day, and on arriving at the scene of the last night's tragedy, they discovered the missing man still seated on a branch of the pine, about twelve feet from the ground. One of the Indians climbed up, after vainly uttering many shouts to wake him from his sleep, as they imagined, and upon touching the lunter, he found that he was dead. He had been frozen stiff.

It is well known that intense cold superinduces sleep. The Indians rightly concluded that poor Sabourin had

"ENFANT PERDU."
fallen asleep; and so it was. Worn out by fatigue, anxiety, and watching, he was seized by that fatal and everlasting slumber which, in this world, knows no waking.

Tamiroo was stricken with frantic grief at the tragical death of her husband, for whom she had entertained the most constant ard fervent affection. She mourned sincerely for him for many months. After the period of her devoted mourning was at an end, being still comparatively young, her hand was sought by a number of the most distinguished warriors of the tribe; but, ever true to the memory of the last partner of her life, she turned a deaf ear to their entreaties, and acvoted herself to the rearing of her two sons in those valued branches of wood-craft essential to the character of a brave warrior and expert hunter. At the present day, the very best blood of the Tete du Boules can be traced back to the intrepid hunter, Baptiste Sabourin.

Were my narrative simply a romance of fancy, I might have ended it by causing the faithful, leereaved wife, under the influence oi a paroxysm of grief, to precipitate lierself from some convenient cliff, or to end her sorrows beneath the waters of some placid lake. I have preferred, however, to relate the incidents of the tragedy as they have been chroniclet and handed down by the traditions of the tribe. I have said chronicled, for it is well known that, in many of the aboriginal tribes, records of famous and notable events are perpetuated by signs and symbols inscribed or depicted upon rolls of smooth birch-bark.

Hunting the Wolf in Canada is chiefly confined to trapping, or poisoning by strychnine, the latter being a questionable and unsportsmanlike mode of destroying wild animals, which, except in very peculiar cases, ought to be frowned upon and discouraged. Many of the animals killed by poison wander off a long distance before they die, suffering dreadful torture, and are never found.

Wolves are seldom seen in the woods, even by those whose vocations oblige them continually to travel through the most solitary fastnesses. So keen is the eye and the
ear, and so acute is the Wolf's sense of smell, that the hunter or bush-ranger is either seen, scented, or heard before he has any idea that a Wolf had been near. Now and then an accidental shot may be obtained, but even such chances are few and far between.

Six years ago, I saw an enormous Wolfo the Madawaska River. He had been started $b_{y}$ anati. nunter from the top of a mountain, and had rushed ravine, at the end of which I was watching for him. When nearly within range, he jumped up, and stood upon a log behind two pine-trees, which concealed every part of his body but his nose and the end of his tail. Neither of the visible paits being as vulnerable as the nose of a bear, I waited for him to advance one more step. This he did not do, but jumped off the $\log$ and disappeared in the thick brush and tall weeds. Thus I lost my chance of getting a grand trophy, and thus, owing to his escape, I feel convinced that many a beautiful Deer afterward lost its life.

Spearing the Gray Wolf on the open prairies, in the style of "pig-stioking" in India, is a most exciting kind of sport. Some of the more expert cowboys also have great sport roping him. This is usmally only practice 3 , lave several of the men are riding together, in order : $4: \%$ may horass and turn the Wolf at frequent intervals, this breaking his speed and playing into each other's hands.

These runs are not, however, always unattended by danger, occasioned by badger-holes and prairic-dog towns, which are frequently encountered in the chase. But the grandest sport with the Gray, or, as he is called on the plains, the Timber Wolf, may be enjoyed in coursing the animal with strong and courageous Greyhounds. Although the Gray Wolf is an animal of gre 2 s.s.red and endurance, he is soon overtaken by the fleet-fc •. . Gazehorw snap at and wound him with their powerful jaws $u$ nin; $;$ th, and by their extreme agility avoid his dangerous attacks, keeping him at bay until the mounted hunter arrives and terminates the chase hy a velididirected pistol-shot. In consequence of the siriftnese ziti great staying powers of
the Wolf, for a time this kind of hunting taxes all the energies of the hounds. The speed of the Wolf, nerertheless, when contrasted with the lightning performances of the telephone of the prairies-the jack-rabbit, or great lare of hia plains-is comparatively trifling.

It has been affirmed by the earlier naturalists that the aborigines of North America, before the advent of white men, had domesticated Wolves instead of dogs. This account can readily be credited by anyone acquainted with the character and appearance of the Indian dog of even the present day. While smaller in size-a condition superinduced by ages of starvation-the Indian dog of the present is peculiarly and positively wolfish in appearance.

It is a notable fact that an irreconcilable antipathy has always existed between our domestic dog and the tamed Wolf of the Indians. In their constant combats and quarrels with each other, the former are always the aggressors. The Indian dogs always act upon the defensive, usually trying to avoid a conflict with their more courageous kinsmen.

During the period when the lordly Bison frequented and ornamented, with the grandeur of his magnitude, the limitless prairies of the Great Northwest in countless millions, the Wolf was his persistent and perpetual eneny; tracking the calves, the old, the wounded, and the helpless, until an opportunity presentid itself for a safe attack. Wolves never cared to attacl, a herd, or even a full-grown animal in full vigor, but waited patiently for a chance to fall upon the disabled. A single White Arctic Wolf will rnn down a Barren-ground Caribon, and by one savage bite in the tlank disable the largest buck. Sir Joln Richardson-a celebrated Arctic explorer, who has contribnted many interesting and valuable facts pertaining to the fauna of Northern America to the general fund of natural historytells us that the Wolves of that region run down and capture Foxes whenever they find them on the open plains at a distance from their underground dens. A large White Wolf has sufficient strength to carry off an Arctic Fox in
his mouth, at a rate of speed far surpassing that of hunters upon snow-shoes. They frequently, also, attack and carry off the sleigh-dogs of the Indians.

The Northern Indians improve the breed of their sleighdogs by crossing them with the Wolf. This process adds to their size, speed, and strength. The voice of the Wolf and that of the Indian dog, to mpron personal knowledge, in volume and sound are strikingly similar. I remember laving hunted Deer, many years ago, with a large-sized Indian dog. He was one of the best dogs that I ever turned loose upon a Deer-track. As he unflaggingly pursued his quarry, his tongue was distinctly and ummistakably the howl of a Wolf-lond, clear, and prolonged, without a single sharp bark like that of a dog. This dog, true to the blood of his ancestry, never failed to find a Deer, if there was one within reach; and when once the game was found, he stuck to the trail, like his wild progenitors, until he tasted blood.

When I speak of Indian dogs, I do not mean the miserable, diminutive race of curs generally found in starving annoyance around an Indian camp to-day. Such attennated whelps, in my opinion, can trace their origin to tho Fox; certainly not to the Wolf. I allude io the strong and hardy Wolf-dogs as the traveler iinds them, drawing the sleighs of the Indians in the Northwest, and speeding the Eskimos over the snow, beneath the crackling tlame of the Aurora Borealis, in the Arctic Circle.

The late Sheriff Dickson, of Pakenham, who during many years of his life was a most successful Deer-hunter, and an enthusiastic student of geology, in an article on the Gray Wolf, published many years ago in "Billing's Canadian Naturalist and Geologist," gives us many interesting particulars respecting the Wolf. From nersonal experience, he bears testimony to the proverbial cowardice of Wolves. He states that when caught in a trap, wounded by a gunshot, or cornered up-so that they could notescape, he invariably killed them with a club or a tomahawk without meeting any resistance. When in numbers, he had seen

Wolves display boldness after they had pulled down a Deer; but they always gave way when a shot was fired among them. The experience of Mr. Dickson corresponds in all points with my own.

When pursued by Wolves, Deer make for the nearest water, in which they have a chance to escape, being able to swim much faster than their enemies. Should the river or lake be narrow, the Deer generally swim either up or down, seldom straight across; frequently landing, after a detour, on the same side in which they entered the water. By this means the Wolves are puzzled and put off the scent. If there are thick weeds or brush along the shore, a Deer frequently sinks his body under water so that no part will appear above the surface but his head, and by this means is enabled to evade the cunning of his pursuers. On glare-ice, the Wolf soon ends the chase. When frightened, the Deer falls at every bound, and is easily overtaken.

Should the Deer be driven into a strong rapid, and the Wolves attempt to follow, they get swept off their feet, and are carried down the rapids. Should one of them hold his own, and approach close enough, a large back will often kill him with a blow of his sharp hoof. Courageous hounds are often killed in the same manner. When there is a crust on the snow which will bear the Wolves, but which is not strong enough to support the Deer, vast numbers of the latter are killed by those sanguinary marauders.

From personal experience, I have no hesitation in assigning to the Wolf of the Ottawa Valley-the typical Gray Welf of North America-if not a preëminence in size and weight, at least an equality in magnitude, and in all other amiable characteristics of the genus Lupus, with his blood rulations of any other land.


## COURSING THE GRAY WOLF.*

## By Duncan s. Cage.

$\frac{2}{4}$
LIVED some years in the Texas Panhandle, where the question as to the best dog to use in conrsing the Gray Wolf was a vital one, and my experience in the matter may prove of interest to other lovers of that grand sport. Let me premise by saying that I firmly believe that any dog-no matter of what breed or strength-that will, single-handed, seize and hold his grip on a Gray Wolf will hardly survive his first encounter. The thick hair and tough, loose skin of the Wolf protect him from serious injury from the dog's teeth, while his own powerful fangs cut at each snap like a circular-saw. Of course, where a number of large dogs, of almost any breed, close in on a Wolf, they may, in a combined attack, easily pull him down and kill him, whereas it would be suicidal for any one or two of them to attempt it alone.

My conclusion was, that if destruction of the Wolves is the only object, the ordinary Fox-hound is by odds the best; not that dogs of this breed can capture or kill his Wolfship, but they trail him to his den, and this once located, his death is easily compassed. We used to use balls of cotton soaked in liquid carbolic acid and turpentine, and, igniting them, throw them in. In most cases this. soon brought the game ont, so nearly suffocsted that he could be killed with a clnb-though I must say we did not practice this mode of dispatching him. A wheezing, foaming, staggering Wolf might well bluff the Sorosis Club itself; so we generally preferred to pierce him with bullets,
while we stood at a safe distance. This method was effective in the whelping-season, and men were employed specially for this work on the ranch where I was then working -one of the largest in that section. There is, however, little sport in this; but, with the proper accessories, the Wolf furnishes as exciting a run as the most enthusiastic rider could wish.

To my mind, there is always something lacking in a sport where the game is helpless when caught. No matter how the pulses throb during the wild chase, there is always a sharp revulsion when the hoarse, agonized bleat of the Antelope tells that the fangs of his fierce pursuers are rending his fleet limbs, or even when the sharp scream of the jack-rabbit ends the chase; but there are no such compunctions when the cruel Wolf feels the tortures he has so often inflicted on others; and he is a formidable adversary when, grim and bristling, he turns at bay.

As to the question of speed, it is mostly a matter of condition. A gorged Wolf is not fast, and I have shot several in this state by running up to them on average cowponies; but when properly "gaunted," few horses can catch a Gray Wolf; and they have tremendous endurance.

On the ranch I mentioned, we had seven cross-bred Staghounds and Greyhounds that ran and fought well together, and we all looked forward each season to the brief interval between the close of winter work and the spring round-up, when we would have leisure for hunting. Though we killed many Gray Wolves, it was always necessary to shoot them after the dogs overhanled them. They could keep the Wolves down, but could not kill them.

I shall never forget the first one they caught. Wolves had shown up numerously that winter, and in my camp we were all eager to go into headquarters in spring and take the dogs out after them. Many were the speculations as to how the dogs would come out-whether they would tackle the Wolf, etc.

At last the momentous day arrived; and behold us, six in number, monnted on our "top-horses," sallying forth in
search of our wily foes. How the day comes back to me now as my mind reverts to it, and

> " Old memories crowd upon me; Old formis go trooping past."

The day was perfect. The breath of spring was in the air; a subtle perfume rose from the tender grass crushed onder our horses' feet as they moved under us with that strong and springy step which is in itself a joy. Our gallant dogs were all eagerness as they threw their lithe forms in the air and bounded with delighted yelps around us. We were all true friends and comrades. What more could mortal wish?

In the distance rose the abrupt wall of the great Staked Plain, and around us stretched the gently rolling Valley of the Canadian, with its emerald carpet of buffalo-grass-an ideal coursing-ground. Antelope were in sight in many places; but to-day our thoughts were on fiercer game, and we avoided them, keeping the dogs close to us. Thus we rode for several miles, keeping a sharp lookout for Wolves, but beginning to fear that we were doomed to disappointment.

At length, glancing toward a ridge on the left, I caught a fleeting glimpse of some animal disappearing over its crest. Hardly daring to hope that it was a Wolf, we galloped to the top of the ridge, and a simultaneous yell broke from our lips as, less than two hundred yards away, moving along with that indescribably lazy and insolent lope he assumes when he thinks a safe distance is between lim and an enemy, we saw a large Gray Wolf.

At the sound of our voices, he glanced back, and, dropping his insouciance, lit out like a gray streak; and well he might, for behind him the dogs were vaulting across the prairie with the velocity, almost, of so many arrows, and were closing in on the fated prowler despite his most strenuous efforts to leave them behind. The horses, straining every nerve, as in a quarter-race, were keeping well up; while, to ease our minds, encourage the dogs, and rattle the Wolf, we were giving vent to yells which would not have discredited a Comanche. The dogs were running well
bunched, and gaining rapidly. Now a quarter has been run, and hardly twenty yards separate them from the chase. Our yells redouble as, with a magnificent spurt, our favorite, Kate, shoots out from the press, and, with strides the eye can scarcely follow, closes on the Wolf as if he were tied. Quick as thought he curns at bay; but Kate avoids the gleaming fangs, and seizes his hind leg as she flies past. Both come to the ground with the shock, and before he can rise the pack is on him. In a moment more we are up. Each man shouts encouragement to the dogs, holding aloft his ready six-shooter in one hand, while the other restrains his plunging horse as the animal rears from the writhing, growling mass almost under his feet. Several sharp yelps tell of cuts inflicted by the clashing jaws of the grim quarry, and each of us is waiting for a chance to fire without danger to the dogs or horses. The dogs fight with courage and skill-with quick, sharp snaps-leaping back out of reach; for the dog that holds his grip on a Wolf, in the language $o_{\text {: }}^{\text {. the range, " may linger, but he can't stay." }}$

Suddenly, with a mighty effort, the wolf shakes himself free from his foes and gains his feet. What a picture of ferocity !-his rumpled hair bristling, jaws dripping bloody foam, gray eyes glaring with demoniac fury. Small wonder that the dogs shrink for a moment into a wider circle! He sees his chance, and makes a dash for liberty; but it is fatal, for it brings him past the best shot on the range. Judy, the nearest dog, bounds on the Wolf; but, ere she touches him, the shot has sped, and he lies quivering on the ground.

The dogs rush in, worry and mangle him to their heart's content. We dismount, and placing our hats on the ground, pour the water from our canteens in their indented crowns to refresh onr panting allies. A brief rest is taken, during which praise and petting is lavished on our proud dogs, Kate coming in for a double share; and having secured the scalp of our victim, we return leisurely to fight the battle over again over the bountiful ranch dinner, and plan new forays against the marauding Wolves.

## THE WOLVERINE.

## By C. A. Cooper ("Sibyllene").

$\sqrt{6}$XCEPT to naturalists and dwellers in the Arctic regions, the characteristics of the Wolverine are but slightly known. In the temperate and torrid zones, we find people able to minutely describe the hoopsnake; but ask these people, or even their better-informed neighbors, what they know about the Wolverine, and if you do not get the answer, "Well, there are plenty of them in Michigan, but I never happened to see one," you will probably be given some of the fifteenth-century theories of Olaus Magnus, a better archbishop than naturalist, whose writings upon this animal have been handed down with clock-work regularity.

Naturally, there are various causes for this lack of knowledge, the first and foremost being that the Wolverine has virtually been exterminated within the borders of the United States. Even in the "good old days" there were comparatively few of tiem.

The menageries and zoölogical gardens know him not, and his stuffed form is principally noted for its absence from a majority of the musenms throughout the land. Were it not for the frequent revival of the name, through Michigan being known as the Wolverine Staie, the fact that such an animal exists would be unknown to a majority of the busy people of this continent.

Being nocturnal, wary, and solitary in habit, it is not surprising that the Wolverine is so seldom seen; especially as it now inhabits only the boreal regions, or the most secluded portions of elevated forests in the north temperate zone. With the exception of ne or two points in British America, it can not be said to have been abundant
at any time, as the following partial comparative record of Hudson's Bay Company's sales conclusively shows: "Sables, four millions; mlnks, two and a half millions; otters, one and a half millions; Wolverines, one hundred thousand."

Except when some overwise old Wolverine has taken a contract to persistently destroy their traps, the Hudson's Bay trappers do not make them a particular object of pursnit, on account of their extreme cunning, and scarcity, and their mid-rank in value among fur-bearing animals. When, too, we consider that the severe winters, and insect pests at other seasons, keep all save a fe- udy adventurers from invading its domain; that on] outlying districts receive nocturnal visits from the animal when it is on the verge of starvation, and that until recently the outskirts of its territory have been free from railroad encroachments, we see why the few sober and reliable articles upon this species have failed to dispel the mystery and exaggeration of centuries.

In Northeru Europe and Asia, the animal is generally known as the Glutton, the term Wolverine being an Americanism of the eighteenth century.

Owing to the difficulty of getting reliable data, nearly every country or tribe has seen fit to invest the animal with a name which, in the opinion of the original investigators, had some distinguishing reference to the supposed form or character of the beast; but, in addition to Wolverine and Glutton, the only one not substantially local is the French Canadian Carcajou, which is also well known to residents of portions of British America and the United States.

Until about the year 1850, the Glutton of Europe and Asia was thought to differ materially from the American Wolverine. Later investigation, however, has shown it to be identical. The latest edition of Webster's Unabridged Dictionary is not at all clear on this point. It not only defines the Carcajou as "the American Badger," but presents cuts showing the Glutton to be epicurean and
lamb-like; while the Wolverine, on another page, is appar: ently sprightly, and ever anxious for a fight.

In fact, all of the well-known names applied to this carnivorous mammal seem to have originated in misconception and error. The Latin Gulo, signifying glutton, selected by writers as early as 1550 , and still used by modern authors to prevent confusion, gives but a faint idea of the gastronomic feats of the species as related by Old World naturalists, who seemed determined that the animal should do justice to the name they had given it. The repasts of those ancient gentlemen, Milo of Crotona and Theogenes of Thasos, who could each devour a whole ox in one day, are insignificant affairs as compared with the voracity imputed to the Glutton, which, weighing only thirty pounds, could finish an Elk at one meal, stopping only occasionally to unburden itself by squeezing between two trees. One of these ancient authors, Linnæus, gave to the "American form of the creature" the name of Ursus luscus, which signifies a Bear with one eye; the foundation for his conclusions being a single unlucky specimen from Hudson's Bay which had lost an eye.

The wariness, the nocturnal habits, and the exaggerated ferocity of the Timber Wolf, were all ascribed to the Wolverine at an early day; hence the name. At least, a preponderance of evidence favors this view, and agrees in its being a more appropriate name than Glutton.

Dr. Elliott Coues, who has written much the best scientific article on the Wolverine I have yet seen, is of the opinion that Carcajou, or Carcajou quincajou, said to have been first applied by Charlevoix to either the Wolverine or some animal of the cat kind, is derived from the Cree Indian word O-kee-coo-haw-gew, and that Quickhatch, or Qui-qui-hatch, another term familiar to the whites of British America, has the same origin. Richardson and others agree with him.

The Wolverine belongs to the family Mustelida, sub-. family Mustelince, genus Gulo, and is known to the scientific world as Gulo luscus-a very absurd name indeed. In
the structure of its teeth it resembles the martens; in its eyes and incomplete plantigrade walk, the Bear; the markings suggest the skunk or badger; while its habits, sndurance, and ferocity have vaguely connected it with the Wolf.

As in the case of the Bear, the after parts droop, and the head is usually carried low. In general appearance, it would somewhat resemble a fat, three-months-old Cinnamon Bear, were it not for its bushy tail. A casual front


Wolverine.
view would render the deception complete. The liead is rather large and short, and tapers rapidly to the muzzle. The ears are short and broad, the neck and body rather long, and the eyes very small and black. In length, the body of an adult specimen, including the head, measures about thirty-two inches, the extreme length of the tail adding slightly more than a foot to the measurement. The legs are short and large. The feet are also large, and make tracks in the snow so nearly resembling those of a small Bear that the inexperienced hunter is generally deceived. To the practiced eye, they are readily distinguished by the short steps of the Wolverine.

Perhaps the most prominent and distinguishing external feature is the stubby tail, which is covered with sofi, dark hair seven inches long. This, while soft and inclined to droop, is still remarkably fluffy and bushy, the impression, at first sight, being that something droll or defective has been dressed in gorgeous raiment.

On account of the feet being semi-plantigrade, its gait approaches the awkward and shambling walk of the Bear, which, together with its short and thick legs, conveys the idea of great strength.

The fine and valuable fur is partially concealed by a growth of coarse hair, whicin attains a length of four inches along the sides and hips. Like some of the other furbearers, the anal glands contain a very unsavory liquid, as the subjoined narrative of an experience of Captain James Ross will show:
"At Victoria Harbor, in the middle of the winter, two or three months before we abandoned the ship, we were one day surprised by a visit by one (Wolverine), which, pressed hard by hunger, had climbed the snow-wall which surrounded our vessel, and cane boldly on deck, where our crew were walking for exercise. Undismayed at the presence of twelve or fourteen men, he seized upon a canister which had some meat in it, and was in so ravenous a state that, while busily engaged at his feast, he suffered me to pass a noose over his lead, by which he was immediately secured and strangled. By discharging the contents of two secretory organs, he evitted a most insupportable stench. These secretory vessels are abont the size of a walnut, and discharge a fluid of a yellowish-brown color and of the consistence of honey."

The claws of the Wolverine are horn-colored, inclining to whitish, and about an inch long. Johnson's Natural History says: "The women of Kamohatka use the white pazos of this animal in dressing th irir hair." As the paws are black, the intention is not clear.

There is considerable variation in the light colors of the body. A light-colored stripe, varying from reddish-brown
to creamy-gray, and usually about two inches broad, extends from the top of the base of the tail, along the middle of each side, to the shonlders. Rarely, tnis stripe is thiea inches broad, and almost white, and when thus found, in connection with gray hairs throughout the dark of the specimen, is an indication of old age. Most of the specimens I have seen have had more or leas gray upon the front of the head, and small, irregular blotcles of white w.00n the throat and brisket. With the exception of the aforementioned light colors, the whole of the animal is a darkbrown, shading into black upon the back and feet. $\mathbf{A}$ specimen in the Chamber of Commerce library at Denver, Colorado, from which our illustration is drawn, has a gray stripe across the forehead, and large white blotches on neck and chest, but the body-stripe is hardly distinguishable.

Four adults taken at Trappers' Lake, Colorado, in the winter of 1889 , were beantifully marked, the broad, lightcolored bands contrasting magnificently with the surrounding dark and glossy fur. A specimen in the possession of J. A. Murdock, an editor and naturalist of Pilot Mound, Manitoba, has, in addition to the irregular throat-marks, considerable white aronnd the nose. Audubon says: "A white stripe extends across the forehead;" but this is by no means regular.

The fur of adults does not change color in winter. I have never seen the very young, which are said to be quite woolly and of a dirty-white color; neither have I been able to find anyone who could say anything authentic concerning them. As the oft-repeated "dirty-white" color would be something of an absurdity in nature, I do not accept it readily, but, instead, believe the young to resemble the parents; in which event, they would easily be mistaken for young minks, sables, or possibly otters, by all except anatomical naturalists.

Notwithstanding its want of great agility, and the con sequent apparent difficulty of procuring food in the bleak North, the Wolverine is usually very fat. Thirty-five
pounds may be said to $b_{0}$ the average weight of those in good condition.

There are eighteen teeth in the upper jaw and twenty below, divided as follows: Incisors, twelve; canines, four; pre-molars, sixteen; molars, six. As in the marten, the upper back molars are set transversely in the jaw.

The Wolverine may be said to be confined to the northern parts of Europe, Asia, and America, and is usually found only in wooded districts. In the Rocky Mountain region, its sonthern limit is probably $38^{\circ}$, and near the eastern coast of the United States, about $42^{\circ}$. Audubon killed one in Rensselaer County, New York, in 1810. In severai natural histories we find accounts of occasional specimens having been taken, previous to 1850, at abont latitude $42^{\circ}$ and $43^{\circ}$, in the States of New York, Massachusetts, New Hampshire, and Vermont; but I can not recall a single account of its occurrence in the Ohio or Mississippi Valleys, nor in Can: 't though it is probable the animal is still to be found in the latter country.* We have late and authentic records of its occurrence in the Rocky Mommatins as far south as latitude $39^{\circ}$, thongh I have nerer heard of one in this latitude below an altitude of nine thons.med feet. As we proceed toward the Arctic regions, along the Continental Divide, we hear of its presence from time to time; 1 $t$ mintil we reach the Peace and Mackenzie River regions, in British

[^6]America, it can not be said to be, nor has it ever been, plentiful. On the west, north, and east, the range of the animal extends to the ocean. The four skins which I had the pleasure of examining at Trappers' Lake were from specimens trapped in the winter of 1889, at an elevation of ten thousand feet, in Garfield County, Colorado, on the fortieth parallel.

While crossing the mountains between Middle and Egeria Parks, Colorado, in the winter of 1883 , I was fortunate enough to kill one of these animals. I say fortunate, because for twenty-five years I have annually passed from two weeks to three months in the wildest portions of Colorado, Michigan, and Wisconsin, and never have seen but this one living specimen at large.

It was late in the afternoon of a day that promised snow, that I had seated myself in the edge of a clump of pines ior a moment's rest, before starting upon a down-hill journey of ten miles. While mentally discussing the chances of gettirg lost in a snow-storm, were I to leave a well-known creek for a more direct but untried route, a Wolverine caine out of a gulch, and was about to pass within fifty yards of me. It caught the movement as I raised my rifle, and sat upon its haunches, when almost instantly its neek was broken by a bullet in the throat. It proved to be a male in good condition, and was killed so quickly that it gave forth no fetid odor. The lateuess of the hour, and my heavy load, prevented taking more than the hurriedly stripped skin; and even this was given to a friend to keep as a memento of our hunt.

The following account of the capture ef a Wolverine, written by Frank T. Wyman, of Boise City, Idaho, I take pleasure in quoting verbatim:
"The Wolverine spoken of was killed by my brother, Charles M. Wyman, in February, 1889. He had spent the night in a cabin on the top of Lion Hill, about forty miles south-southeast of Salt Lake City, Utah. The alti.ude is about nine thousand feet above the sea. Early in the morn-
ing, some miners passed the cabin, following what they called the tracks of a Mountain Lion. My brother followed them, and found the tracks ended at the opening of $a$ mining-shaft. A heavy fall of snow had nearly covered this over, and the animal had accidentally fallen some forty feet to the bottom, where a foot or two of snow prevented any serious injury from the fall.
"Charles lowered himself to the bottom, when a shotgun loaded with heavy shot, and a lantern, were sent down. The miners above were opposed to his proceeding, and wished to haul him out, but in vain. From the bottom of the shaft a drift extended about thirty feet, and then branched into a 'Y.' At the point of branching was a large timber to hold the roof. Pausing here a moment before proceeding to explore the right-hand opening, Charles pointed the gun into this drift, and started to advance, when, with a snarl which sounded loud enough in the narrow drift, the Wolverine came from the other branch. My brother was unable to point the gun into that drift in time to shoot, because of the timber, and so was defenseless.
"Acting on the principle that wild animals are usually afraid of an artificial light, he swing the lantern into its face, which caused it to retreat. As quickly as possible, the gun was brought to bear upon the proper point, whereupon the Wolverine uttered another snarl and came again. Taking as good an aim as possible in the uncertain light. a shot was fired, which of course extinguished the light. After waiting for a time, with one finger upon the other trigger, Charles relighted the lantern, and found the Wolverine dead, just in front of him.
"There were no other Wolverines in the vicinity, so far as known. A sheep-herder, near by, had complained during the summer of losing sheep and lambs, supposing them to have been taken by Mountain Lions, which had been seen in the vicinity."

As Scandinavian naturalists have so often spoken of the Glutton's fondness for mutton, it is probable that the
sheep-herder, in this case, could justly have charged part of his loss to the Wolverine. M. Hedberg tells us that three were captured young in the Parish of Gellivaara, in Lapland. "They were allowed their full liberty; but in the autumn, the servant having forgotten to fasten the door of the building wherein the sheep were confined, the Gluttons found their way into it and killed several sheep."

As before stated, the Wolverine is nocturnal in habit, and there are but few recorded instances of its having been seen during the day. An aged trapper once told me of having seen one in Pot-hole Valley, Colorado, one wintry day; and Mr. Lockhart, in Coues' "Fur-bearing Animals," mentions two cases, in each of which the animal sat upon its haunches and shaded its eyes with a paw, the inference being that it could not see well in the sunlight. It does not hibernate, but in winter prosecutes its search for food with even more vigor than in summer.

Examples coming within my own observation show the male and female to be equal in size.

Without doubt, its most conspicuous habit is that of following the trapper and destroying his wooden traps. To the Hudson's Bay rrapper, who was formerly unable to obtain poison and steel-traps, except at ruinous prices,* this was highly exasperating. Imagine the feelings of a man who has built, set, and baited one hundred and fifty traps, extending over a circuit of fifty miles, and who finds on his first visit, perhaps a week later, every one destroyed, the baits eaten, and the catch torn in pieces or carried away!

[^7]Fortunately, there is nothing on record to show what these hardy adventurers said when thus irritated, though we can imagine it might sound better if told in an unknown tongue. Very often they would capture the destroyer of their equanimity and traps, but sometimes his cunning surpassed their best efforts, and they would abandon their lines until their tormentor had found other pastures.

The cunning, strength, and perseverance displayed by these animals, and which will be referred to further on, is so truly wouderful that we may well excuse the early writers their exaggeration. The posts composing the back of the dead-fall were frequently pulled up and carried away, the small sticks destroyed, the logs scattered, the clogs to the steel-traps chewed in two, and the traps and contents carried for miles and buried in the snow. When Gulo luscus had taken the danger out of the contrivance, he would cheerfully eat the bait. By the way, this seems to be his idea of a practical joke. Alas! were he addicted to Latin and guava jelly, we might admit his instinct to reach the borders of reason.

For several reasons, he prefers to use, when traveling, the trails of the marten-trappers; his legs are short, the snow is deep, and often light, while his body is lieavy. Moreover, the wise old Carcajou appears to like the idea of matching the cunning of his would be captor, knowing, probably from experience, just how and how not to get at the baits.

The Woìverine's long nocturnal journeys, in deep snow, show his endurance, while his usual plethora is prima facie evidence of success in foraging. It is true he has a lieener nose than the Fox; but how a carnivorous mammal so energetic as the Glutton can keep fat during the Arctic winters is considerable of a mystery. His fare during the srowy months is, generally speaking, limited to grouse and rabbits, and various fur-bearing animals, which he generally steals after they have been trapped. Richardson says: "I have seen one chasing an American hare which was at the same time harassed by a snowy owl." At long intervals,
our poacher finds the carcass of a large animal, when for a time he lives luxuriously. In summer he fares much better; mice, moles, marmots, rabbits, and Foxes are then dug from their burrows, while his keen nose directs him to all the carrion in his neighborhood. He also preys upon nesting birds, particularly water-fowl, and their eggs; and some writers have added decaying fish to his warm weather bill of fare. Judging from his ferocity and strength, it is probable that he also preys upon both young and disabled Deer. Buffon, I believe, is responsible for the statement that it is a common practice of the animal to lie secreted near Beaver-ponds, and pounce upon the unsuspecting laborers, when they come ashore. Of one he had caged, he speaks as follows: "His voracity has been much exaggerated; he ate indeed a great deal, but when deprived of food he was not importunate. He is rather wild, avoids water, and moves with a kind of leap. After eating, he covers himself in the cage with straw. In drinking, he laps like a dog. If indulged, he would devour more than four pounds of flesh in a day. He is almost perpetually in motion."

Audubon thus describes one he saw in Denmark, which had been exhibited two years: "We took him out of his cage; he was very gentle, opened his mouth to enable us to examine his teeth, and buried his head in our laps while we admired his long claws and felt his woolly feet. He seemed pleased to escape from the confinement of the cage, ran around us in short circles, and made awkward attempts to play with and caress us. He had been taught to sit on his haunches and iold in his mouth a German pipe. We observed he was somewhat averse to the light of the sun, keeping his eyes half-closed when exposed to its rays. The keeper informed us that he suffered a good deal from the heat in warm weather. There was in the same cage a marmot, from the Alps, to which the Wolverine seemed much attached."

It is customary with the Wolverine to pass the day, especially the hours of sunshine, in some subterranean
cavity, nsually the one in which he makes his home. He does not litter his den with a surplasage of food, but chooses to bury it elsewhere, invariably leaving unsavory evidence of his visit above his treasures to conceal them from the Fox or other inquisitive prowler. The bed is ordinarily a large heap of leaves.

Each year, in June, the female gives birth to her young, which she protects until the following winter, when they are forced to provide for themselves. A naturalist, who lived four years in the spruce-forest country lying between the southern prairies and polar barrens of British $\Lambda$ merica, informs me that the litter consists of two--usually a male and a female. This, coming from a close observer, together with the general belief of northern residents to the effect that Wolverines are found in pairs throughout a greater part of the year, naturally leads one to believe the species monogamous; but, on the other hand, Mr. L. Lloyd informs us that four young Gluttons weie seen together on a stone in a rapid, fishing for grayling. Excellent anthorities also unite in asserting that the litter may consist of four; and, despite the aforementioned belief, I am of the opinion that the Wolverine is oftener found alone than in pairs. The rutting-season is believed to be early in March. They utter no cry or call at any time when undisturbed, though when attacked they give vent to their rage in growls.

They sometimes climb rough and soft barked trees, in quest of food previonsly located by their keen powers of scent, but never to escape from a lone enemy. For similar reasons, they also swim rivers. When transported to hot countries, they show no aversion to water, but rather seek it as a means of reducing their temperature.

The rather heavy body and short legs of the Wolverine convey an idea of clumsiness and a slothful pace. Like the stove-pipe hat, which is laid away through sprinting-that sport and dignity being at variance-so is the Wolverine often brought to grief through an untimely pride or bravado; but do not try to catch him when once he has concluded that safety lies just over the next mountain chain,
for you will surely fail. A Manitoba friend is with me in this assertion, and further confirmation comes from an incident which happened during an outing in the summer of 1888. At the time, my companion was hunting Deer in Rock Creek Cañon, Egeria Park, Colorado, and upon coming to camp, told of having seen a strange animal, at dusk, which ran through the scattering quaking aspens with such speed that he was unable to bring his rifle to bear upon it. When he described the animal, we became certain that he had seen a Wolverine.

At this date, there is practically no market value upon the skins. The very few which reach Colorado buyers sell at from six to eight dollars each; those fit for mounting commanding the best figures. Formerly, they were considered nearly worthless in commerce, as is evinced by the post-traders intrusting many of those bought at low prices to the care of certain Indians, who traded them to distant tribes for salable peltry. As the possession of a skin marked the owner as a skillful trapper, and the middlemen received liberal commissions, considerable trading of this kind was done; the skins finally finding their way to the trading-stations again whenever the wants of poor Lo were great.

The Cree Indians, who have the best opportunities for studying the breeding-habits of this species, say the mother boldly defends her young when molested by man or beast. Unless provided with some means of defense, the Indians avoid the mother at this time, notwithstanding the statement of Johnson to the effect that the Wolverine flees from the face of man, and that he requires no other arm than a stick to kill it. Though a suitable green club would surely win, a large majority of hunters would prefer a weapon of longer range, and favor pitting the chances of a miss or a misfire against that of being disrobed in an animated set-to, in a frigid country, where the clothing-stores are often two handred miles apart.

A curious trait of this animal is the suspicion with which it at first regards anything that has been touched by the
hand of man, and the pertinacity it shows, after one day for deliberation, in gaining possession of it. Mr. P. De Graff, of New York, who passed one winter in the Peace River country, has this to say concerning this peculiarity:
"The Carcajou mast be very hungry indeed if he will touch a baited trap the first night, and so it is with game left in the woods. About the time we built our camp, I killed a Moose, and hung the head on a branch of a tree, ont of the reach of wild animals. Some time afterward, I thought I wonld test what I had heard about this habit of the Carcajon, and knocked the head down after a fall of snow. Next day, I found a Carcajon had been within three feet of it, but had not touched it. Then I turned the head over, and the result was the same; but three days after this the head was gone. We did not consider the experiment conclusive, for we found that traps which had been set early in the morning sometimes contained a Carcajou next morning, but as we did not make a practice of visiting our traps every day, we could not always be sure abont it; yet we concluded that generally they were too suspicious to tonch a trap as long as the scent of our tracks remained."

Mr. Ross, quoted in Coues' "Fur-bearing Animals," vouches for the following: "An instance occurred within my own knowledge in which a hunter and his family having left their lodge unguarded during their absence, on their return found it completely gutted-the walls were there, but nothing else. Blankets, guns, knives, kettles, axes, cans, and all the other paraphernalia of a trapper's tent, had vanished, and the tracks left showed that a Wolverine had been the thief. The family set to work, and by carefully following up all his paths, recovered, with some trifling exceptions, the whole of the lost property."

Steel-traps and dead-falls are commonly used in the capture of the Wolverine, although when he has once escaped from a trap, or been frightened by the fall of a log, some other means must be devised for his snbjection. In time they even become suspicious of poisons which have no taste or smell, and it is the same with castoreum or any
other far-reaching odor when used as a lure. The survivors in each district somehow learn to associate the death of their congeners with the thing habitually used to destroy, and thus become world-wise in a degree highly distressing to the trappers. When ordinary means have failed, a quadrangular trap of heavy logs, having the appearance of a cache, will usually succeed. In these contrivances the bait is buried or concealed, and steel-traps covered with snow or leaves often placed therein. Touching this, I quote from Mr. De Graff's letter:
"I caught a troublesome Carcajou that winter in this way: I scourct a heavy steel-trap, and set it, and then hung it in a tree until the odor from handling it had clisappeared. Then I dug away the snow, and piled it in a hard bank around the spot. The bait was put in one corner, and the trap, by the use of a stick, in the center. Then I covered them over, and laid small logs across the top of the bank, on top of which I piled snow and rubbish two feet deep. It worked like a charm, and I got the beast the first time I made my rounds."

That my readers may know why the Wolverine is regarded by many as an "insatiable glutton, a blood-thirsty demon, and a prowling monster," I will quote briefly from some attractive bnt not wholly reliable works at handsuch as were often given us in boyhood by well-meaning parents or friends.
"The Glutton," says Mr. Lloyd, "approaches his prey with caution, crawling toward it till within a short distance, and then, with a few sudden springs, pounces upon it: He is very destructive to the wild Reindeer, particularly in the winter; for when these animals are necessitated partially to bury their heads in the snow, for the purpose of getting lichens and other vegetable substances lying below, he is enabled to approach them with facility. When once seized by the blood-thirsty beast, it is in vain that the wounded Deer endeavors to disengage itself from its enemy by rushing among the surrounding trees; no force can oblige him to quit his hold; he maintains his position, and continues
to suck the blood of the tlying victim till it falls down exhausted with pain and fatigue. When the Glutton has captured a large animul, he hides the carcass, after having satisfied his present hunger, in the cleft of a rock or in a thick brake, carefully covered with moss if in an exposed place. Even the upper part of a tree serves him for a larder, so that the Fox may not have access to the good things."

Bingley, in 1870, spoke of the Glution in n similar strain: "We are informed that they climb into trees in the neighborhood of herds of Deer, and carry aloug with them a considerable quantity of a kind of moss to which the Deer are partinl. As soon as any of the herd happens to approach the tree, the Glutton throws down the moss. If the Deer stops to eat, the Glutton inst:-ntly darts upon its back, and, after fixing himself firmly between the horns, tears out its eyes, which torments the animal to such a degree that, either to end its torments or to get rid of its cruel enemy, it strikes its head agninst the trees till it falls down dead."

Pontoppidan, while correcting a belief of his time as to the Wolverine being the third cub of a Bear, tells us this: "A friend of mine, a man of probity, has assured me, from ocular demonstration, that when the Glutton is caught alive (which seldom happens), and is chained to a stone wall, his hunger does not decline the stones and mortar, but he will eat himself into the wall. . . . . By the practice of squeezing between two trees, he exonerates his stomach, which has not time to digest what he has so voraciously devoured."

Bingley gives a good description of the Wolverine. He had evidently received trustworthy information from British American sources, though seemingly he did not suspect the Wolverine and Glutton to be identical. His statement, on information, relating to a Wolverine which upset the greater part of a wood-pile, more than seventy yards in circumference, to get at some provisions hidden in the center, is generally considered too heavy for discussion, though I
believe the animal would win could we find some way to reduce the size of the wood-pile about one-half.

Cuvier, Hearne, Griffith, and nearly all the Old World writers, also fell into the error of supposing the Gluiton and Wolverine to differ in form anu character.

Coves has critically compared the European Glutton with exampies from the nited States and the British Possessions, and finding only such differences as frequently occur in specimens fron any given locality, modestly concludes in the following language: "The identity of the animals of the two continents is to be considered fairly established, whatever range of variation in size and color either may present."

Previons to the construction of the Canadian Pacific Railway, nearly everyone who had written more than a few lines upon the habits of this animal, had gladly accepted whatever they could get irom the courteous officers of the Hudson's Bay Company, who, in turn, were usnally obliged to get their information from the Indians and white trappers of that region. While it may now seem an easy mutter to testify to the correctness of this hearsay evidense, it should be remembered that no one man can do so from personal experience; that many of the Hadson's Bay posts no longer exist; that the home of the Wolverine is still hundreds of miles north of the railrond; that the most desirable points have only one mail a year, and that in that srarsely settled region the few competent to furnish information are either unknown to the outside wurld or do not wish to trouble themselves for the advancement of science alone. Under these conditions, verification has been difficalt; and we may well forgive the exaggeration of the earlier writers, while quoting from Pope in my own behalf:

> "If I am right, Thy grace impart Silll in the right to stay;
> If I am wrong, oh, teacli my heart To find the bétter wny."

From a mass of manuscript relating to the fauna of the North, collected by the Smithsonian Institution in times
past, Elliott Coues selected and embodied in his exhaustive article the matter he considered reliable and best calculated to show the nature of this wonderful animal. Some of these entertaining passages I give, adding a few anecdotes rrom other reliable sources, which it is hoped will prove interesting reading.
"The winter I passed at Fort Simpson," writes Mr. Lockhart, "I had a line of marten and Fox traps and Lynxsnares extending as far as Lac de Brochet. Visiting them on one occasion, I found a Lynx alive in one of my snares, and being indisposed to carry it so far home, determined to kill and skin it before it should freeze. But how to cache the skin till my return? This was a serious question, for Carcajou tracks were numerons. Placing the carcass, as a decoy, in a clump of willows at one side of the path, I went some distance on the opposite side, dug a hole with my snow-shoe (about three feet deep) in the snow, packed the skin in the smallest possible compass, and put it in the bottom of the hole, which I filled up again very carefullypacking the snow down hard, and then strewing loose snow over the surface till the spot looked as if it had never been disturbed. I also strewed blood and entrails in the path and around the willows. Returning next morning, I found that the carcass was gone, as I expected it would be, but that the place where the skin was eached was apparently undisturbed. 'Al, yon rascal!' said I, addressing aloud the absent Carcajou, 'I have outwitted you for once.' I lighted my pipe, and proceeded leisurely to dig up the skin to place in hy muskimost. I went clear down to the ground, on this side and on that, but no Lynx-skin was there. The Carcajon had been there before me, and had carried it off along with the carcass; but he had taken the pains to fill up the hole again and make everything as smooth as before.
"At Peel's River, on one occasion, a very old Carcajou discovered my marten-road, on which I had nearly a hundred and fifty traps. I was in the habit of visiting the line about once a fortnight, but the beast fell into the way of
coming ofteuer than I did-to my great annoyance and vexation. I determined to put a stop to his thieving and his life together, cost what it might; so I made six strong traps at as many different points, and also set three steeltraps. For three weeks I tried my best to catch the beast, without success; and my worst enemy would allow that I am no green hand in these matters. The animal carefully avoided the traps set for his own benefit, and seemed to be taking more delight than ever in demolishing my martentraps and eating the martens-scattering the poles in every direction, and caching what baits or martens he did not devour on the spot. As we had no poisons in those days, I next set a gun on the bank of a little lake. The gun was concealed in some low bushes, but the bait was so placed that the Carcajou must see it on his way up the bank. I blockaded my path to the gun with a small pine-tree, which completely hid it. On my first visit afterward, I found that the beast had gone up to the bait and smelled it, but had left it untouched. He had next pulled up the pine-tree that blocked the path, and gone around the gun and cut the line which connected the bait with the trigger, just behind the muzzle. Then he had gone back and pulled the bait away, and carried it out on the lake, where he laid down and devoured it at his leisure. There I found my string.
"I could scarcely believe that all this had been done designedly, for it seemed that faculties fully on a par with human reason would be required for such an exploit, if done intentionally. I therefore re-arranged things, tying the string where it had been bitten, but the result was exactly the same on three successive occasions, as I could plainly see by the foot-prints; and what is most singular of all, each time the brute was careful to cut the line a little back of where it had been tied before, as if actually reasoning with himself that even the knots might be some new derice of mine, and therefore a source of hidden danger he would prudently avoid. I came to the conclusion that that Carcajou ought to live, as he must be something at least
human, if not more. I gave it up, and abandoned the road for a period.
"On another occasion, a Carcajou amused himself by tracking my line from one end to the other, and demolishing my traps as fast as I could set them. I put a large steel-trap in the middle of a path that branched off among some willows, spreading no bait, but risking the chance that the animal would 'put his foot in it' on his way to break a trap at the end of a path. On my next visit, I found that the trap was gone, but I noticed the blood and entrails of a hare that had evidently been caught in the trap, and devoured by the Carcajou on the spot. Examining his foot-prints, I was satisfied that he had not been caught, and I took up his trail.
"Proceeding about a mile through the woods, I came to a small lake, on the banks of which I recognized traces of the trap, which the beast had liai down while he went a few steps to one side. He had hen returned and picked up the trap, which he had carried across the lake, with many a twist and turn on the hard crust of snow to mislead his expected pursuer, and then again entered the woods. I followed for about half a mile farther, and then came to a large hole dug in the snow. This place, however, seemed not to have suited him, for there was nothing there. A few yards farther on, however, I found a neatly built mound of snow on which the animal had left his mark; this I knew was his cache. Using one of my snow-shoes for a spade, I dug into the hillock and down to the ground, the snow being about foir feet deep; and there I found my trap, with the toes of a rabbit still in the jaws. Could it have been the animal's instinctive impulse to hide prey that made him carry iny trap so far merely for th, morsel of meat still held in itl Or did his cunning nature prompt him to hide the trap, for fear that on some future cccasion he might put his own toes in it and share the rabbit's fatel'"

Cones also selects the following from Captain Cartwright's journal: "In coming to the foot of Table Hill, I
crossed the track of a Wolverine with one of Mr. Callingham's traps on his foot; the Foxes had followed his bleed. ing track. As this beast went through the thick of the woods, under the north side of the hill, where the snow was so deep and light that it was with the greatest difficulty I could follow him, even on Indian rackets, I was quite puzaled to know how he had contrived to prevent the trap from catching hold of the branches of trees, or sinking in the snow. But on coming up with him, I discovered how he had managed; for after making an attempt to fly at me, he took the trap in his mouth and ran upon three legs. These creatures are surprisingly strong in proportion to their size; this one weighed only twenty-six pounds, and the trap eight, yet, including all the turns he had taken, he had carried it six miles."

The Earl of Southesk, in "Saskatchewan," has this to say of his experience with the Wolverine, at Fort Pelly, on December 11, 1859:
"A few nights ago, Mr. Murray heard his dog barking incessantly for no apparent reason. Happening next morning to open a half-finished store-house, the dog rushed furiously in, but came out again with still greater quickness, upon which his master looked -into the shed, and there beheld the cause of the disturbance in the shape of a Wolverine, who, after his nocturnal prowlings, had taken refuge in this convenient hiding-place. The beast was slowly retreating, with his face to the door through which the dog had entered; but an ounce of shot soon tamed his courage by ending his life. . . . No beast is so cunning as the Wolverine-the Fox is a sucking dove compared to him. . . . Where he haunts, it is useless to store meat on stages, for, Beaver-like, h $\Theta$ cuts through great trees with his teeth, and soon brings down any edifice of wood. His courage is dauntless; he flies neither from man nor beast, and woe to the dog that comes within reach of his jaws."

In the ensuing description of a cache, in "Ocean to Ocean," by the Rev. G. M. Grant, the above-mentioned
propensity of the animal for tree-cutting is again hinted at, as well as his keenness of scent:
"Brown advised that, as this was a good place, some provisions be cached for those of the party who were to return from Jasper's; and Valad selecting a site in the greenwood, he and Beaupré went off to it from the opposite direction, with about twenty-five pounds of pemmican and flour, tied up first in canvas and then in oil-skin, as the Wolverine -most dreaded plunderer of caches-dislikes the smell of oil. Selecting two suitable pine-trees in the thick wood, they skinned (barked) them to prevent animals from climbing; then placing a pole between the two, some eighteen feet from the ground, they hung a St. Andrew's cross of two small sticks from the pole, and suspended their bag from the end of one, that the least movement, or even puff of wind, would set it swinging. Such a cache Valad guaranteed against bird and beast of whatever kind."

Whether his gaarantee held good, or whether the Wolverine, disregarding the cross and defying the ingenuity of the voyageurs, plundered the cache, the historian does not state.



## THE WILDCAT.

## By Dakiel Arrowsmiti ("Sangamon").

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$7)^{2}$HIS animal is common to the whole of the Middle and Western United States; but it is not nearly so plentiful now as formerly, when those States were comparatively a wilderness. At present, it is only found in broken, hilly, rocky, brushy, and thinly settled districts.

In size, the Wildcat is about two and one-half feet in length, fifteen inches in height at the shoulders, and weighs from twenty to thirty pounds. It is of a dark brindlegray color on the back and down to mid-sides; the groundcolor becomes lighter as it approaches the belly; the lower sides and belly are covered with ronnd, black spots, edged or circled with a yellowish hue. These spots are from the size of a hickory-nat, on the sides, to that of a small pea on the belly.

The tail is about four inches long, and has a curtailed, stumpy appearance. The eyes and ears are large, the former being about the size of those of the great horned owl, and bearing a striking resemblance to them; the feet, about the size of those of the Gray Fox, and armed with strong, hooked, and very sharp claws, which are concealed when at rest, as is the case with all Felidec.

The whole body is covered with a dense fur, somewhat longer than that of the house-cat, to which, in fact, he bears a striking resemblance in body and form; but the Wildcat is about two and one-half times as large as the largest "Tom" of our domestic cats.

The Wildcat dens in clefts of rocks, and old hollow logs, and preys upon birds, rabbits, and other small animals, being particularly destructive to young pigs. One pair of
these "varmints" has been known to destroy a whole litter of from eight to ten pigs in a single night. They will steal up to a hog bed, spring into it, snatch up a pig and make their escape almost before the old sow is aware of their presence. They generally go in pairs -male and female; and where you find one, you may certainly count on the other being near.

The rutting-season of this Cat is from the middle of December to the middle of January, and they drop their young - of which there are from three to six-from about the middle to the last of March. During the love-making season, they are not unlike the domestic Thomas and Maria in making night in the woods and hills hideous with their ear-splitting screams and caterwauls.

The Wildeat is a savage fighter. An old Tom can stand off a whole pack of common dogs, and indeed it takes a very resolute dog to seize and kill one; for while the dog is worrying him, he is getting in his work on the dog, in a most lively and vigorous manner, with teeth and toe-nails. About this time, one can safely wager that there is some hair flying.
The most successful method of hunting these animals is to st:it them up with the Fox-hound, before which they mak. a good, exciting run of from one to two hours; and in this run they are as cunning to dodge and double as Reynarl. But when close pressed, they will take to a tree, from which they can easily be shot.

They are often caught in steel-traps. While residing in Southwest Missouri, I knew a boy who caught eight or ten, during the winter of 1867-68, by building in the woods, with small poles, a pen, in which he placed some old live roosters, and covered the pen so as to protect them. He then placed steel-traps along each side of the outside of the pen. The crowing of the old cocks would attract the attention of any Wildcat that was near, and lure him to the pen; and in his endeavors to get at the chickens, he would get $u$ foot into a trap, and then fall an easy victim to "Bent" Shelton's old musket in the morning.

My first introduction to this variety of sport was late in the fall of 1868, while on a hunting-trip in Cass County, Missouri. One night, there came a light fall of snow. The next morning, by the time it was light, I was in the woods, near a large, open prairie-bottom about one and a half miles long by half a mile wide. This bottom lay on the south side of Grand River, just below the mouth of Pony Creek. I was looking for Deer, as this region was at that time a famous place for both Deer and wild turkeys. Wolves, 'Coons, Wildcats, and other "varmints" abounded. It being but a short time after the close of the great fratricidal strife that agitated our country, during which there was a general let-up in the hunting of the natural fauna of the woods and prairies, these animals had multiplied and were abundant. I had just come out, and was standing inside the brush, on a little ridge just above the bottom, when I saw a large buck coming out of the woods some eighty yards below me. I bleated for him to stop, and on his doing so, fired and shot him through, but too far back to down him at once. Upon being struck, he plunged off down into the bottom, and was soon lost to sight in the tall "rail," or slough-grass, with which this part of the bottom was covered.

Reloading my rifle, I took up his trail and struck out after him, hoping to soon find him dead. Getting out into the long grass, I almost stepped on a large doe, which bounded up; and by the time she made her second jump, I put a bullet through her, and laid her out. At the crack of my rifle, up bounded two tremendous bucks that had been lying some twenty feet ahead of me, and made off through the high grass. After noting the place, so as to have no trouble in finding my dead Deer, I went on and tried to trail up my wounded buck. Because of the lightness of the fall of snow which here lay upon the high grass, it was difficult trailing. The sun coming up clear and warm, soon melted the snow, so I gave it up as a hard job. I then went across to the timber which lay along the river, and followed it down to the eastern or lower point of the open
bottom, and had jast turned to go back up to where my dead doe lay, when I heard a pack of Fox-hounds open out in full cry on some high, brushy, and rocky points at the extreme upper end of the bottom through which I had just been hunting.

A loud "whoop-ee" told me that a chase of some kind was on hand. The hounds seemed to be coming down through the north side of the little prairie. I concluded they had jumped a Deer; and in hopes of getting in a shot, I slipped on up the south side of the bottom to a narrow point of timber which jutted out into it, and there took a stand to await developments. I soon saw some five or six horsemen scatter out and take favorable positions for shooting; two of them on my side of the bottom, the rest on the river side.

The hounds were discoursing some lively music, and running rapidly, keeping well out in the high grass. I soon fonnd that it was not a Deer they were chasing, for had it been, I could have seen it bounding through and over the grass. I was satisfied on this point. The hounds, after running the entire length of the bottom, were thrown off the trail for perhaps ten minutes. They then treked about and started back up through nearly the center of the strip, making the woods fairly ring with their musical notes.

I walked up to the nearest horseman, whom I found to be "Bart" Holderman. He said that he, his brother Billy, George Pulliam, and the Stephens boys were out after Cats, and that the hounds were now making it hot for one of the critters. This being a new game to me, I determined to see it, and he in at the death if possible. After a run of perhaps three-quarters of an hour, during which the quarry doubled some two or three times, they finally overhauled and brought it to bay, on the ground in the high grass, abont one hundred yards from the timber, and some two hundred yards above our stand. We struck out at our best gait for the scene of combat, and there, in the center of a small area, where the grass had been knocked down by the hounds in the scuffle, lay, on its
back, one of the fiercest-looking animals, for its size, that I had ever seen. It seemed that when the hounds had overtaken it, they had seized it, and, in turn, had been forced to let go, and get out of reach of its teeth and sharp claws.

This was' plainly evident from the bloody marks on their heads, necks, and sides. The more resolute dogs, on being urged, would spring forward to get a hold; but with a fierce "spit" of rage and a swift stroke of the paw, the brute would send them flying back out of its reach. The boys had all come riding up except two, one of whom was Pulliam, who was farthest away when the Cat was overtaken. He soon showed up, too, and with him was his large, ugly, dark brindle-colored dog, named Stump-a regular "varmint dog"- a combination of meat-ax and bull, whose tail had been discounted fifty, twenty-five, and ten per cent.; hence his name. His chief and only reputation was that he would fight to the death with any varmint, no matter what were the odds. With the boys, on occasions like this, he was a necessary adjunct, and the main stand-by.

As soon as Bart saw George coming, he called to him to hurry up with old Stump.
"Here, Stump, here, here, whoop-ee!"
All this time, the baying of the hounds-eight of them -together with the cheers of the hunters, made a most deafening racket. Old Stump, guided alone by the noise, soon put in an appearance, and was not loath to lay hold, notwithstanding the severe punishments he had in former times and on similar occasions received, one of which was the loss of an ear, which had either been clawed or chewed off so close to his head that the remnant resembled the upper section of a coarse-toothed buzz-saw; and of the other, but little more remained, and that pretty well split up. He seemed to know just what was expected of him. With a growl and a rush, he seized the Cat across the breast, just below the arms, crushed and shook it as a ratter would a rat, and soon took all the fight out of it. No sooner had he laid hold than in rushed the other dogs, only to get a further
touch of terrible punishment from the feet of the Cat in its dying struggles.

On another occasion, a gentleman by the name of Harrison, and myself, with a puir of Fox-hound puppies belonging to him, started and put up, after a two-hours' run, a large male Cat. A four-inch snow lay on the ground; the day was still ard clear, and quite warm-a fine day for the sport. We came across the tracks of the animal where it had been rustling around on the previous night. Putting the puppies on the trail, we soon jumped him from some large rocks where he had been lying, sunning himself. In the run that followed, he tried his doubling tactics four or five times; but we being well mounted, and there being no fences to bother us, kept close to the puppies, and would put them to "rights" when the Cat would attempt its dodges. We also had with us a Greyhound. When, after about two hours' chasing, this Greyhound got sight of the quarry, we witnessed some tall running for about two hundred yards. Then the old "Tom" ran up a shell-bark hickory-tree, and ensconced himself in a body-crotch about forty feet above the ground. From this perch, Harrison tumbled him out, dead, with a load of buckshot from an old Harper's Ferry musket which he carried. This Wildcat was the largest of the species I ever saw, and would have cleaned ont, in a fair fight, all three of our dogs.


in at the death.

# 'COON-HUNTING IN SOUTHERN ILLINOIS. 

By Daniel Arrowbmitil ("Sangamon").

號HE Raccoon is found throughout the whole of the United States and the southern parts of British America. It is one of the smaller species of the Plantigrade, or Bear tribe, and is about three feet in length from nose to tip of tail, the latter being about ten inches long. The body is covered with a long, dense coat of dark-brown fur, the outer tips of a grayish color. The tall has five black rings of coarse fur, some two inches apart, and the tip is black. The animal when in full flesh, in late autumn, weighs from fifteen to twenty-five pounds-some few specimens exceeding the latter figure by a few pounds.

The Raccoon is one of the valuable fur-bearing animals of North Amierica. In the early settiement of the Mississippi Valley States, when money was scarce, the 'Coon-skin passed as current funds, and was usually valued at twentylive cents.

The Raccoon is a nocturnal animal. It scarcely ever skows itself during the day-time, but lies coiled up in the upper hollow of some old, decaying tree, and then comes forth after night-fall to rustle for ite food.

It is omnivorous. In the spring and early summer, it feeds on craw-fish, frogs, birds, and eggs, and will make frequent visits to the hen-roosts of the farmer. It also eats berries, wild grapes, acorns, and corn, of which it is as fond as a hog. It frequents the corn-fields from the time of roasting-ears until the corn is all gathered. On such food, it becomes exceedingly fat, and when in this condition, makes a splendid roast for the table.

Like the Black Bear, the 'Coon hibernates during' the cold storms of winter; but should the weather be open, he will be out every night.

Their rutting-season is from about the 20th of January to the middle of February, and they bring forth, about the 1st of April, from three to six young.

The Raccoon is easily taken in steel-traps; and to be successinl in their capture, the trap should always be set under water, near the edges of swamps or running streams. But the best sport to be had in their capture is to hunt

them in the night, with dogs trained for the purpose. The best dog for this sport is the black-and-tan Fox-hound.

It has been asserted that the 'Coon leaves the least footscent of any known animal; but I beg leare to differ from those who make this assertion. He is a night traveler, at a time of the twenty-four hours when the temperature is the lowest; while animals like the Fox, the rabhit, or the Deer, are geuerally chased during the clay, when the tomperature is higher. Take a Fox-hound and put him, in the early part of the day, when the temperatme is rising, on a 'Coontrail which was made in the early part of the previons
night, and he will invariably trail the 'Coon to where it has holed-up for the day. This, with my hounds, I have repeatedly done; and I have seen it done by hounds owned by others.

During the winter of 1864-65, I saw a Fox-hound bitch, owned by Mr. Henry Fry, trail and tree Raccoons at midday which had been running the previous night, there being a ten-inch snow that liad been on the ground for some time. The warm sun during the day had softened the snow, and at night it had frozen hard enough to form a crust sufficiently firm to bear up even a dog; and it being the rutting-season, the 'Coons were out on their amorous trips every night, racing around, when the crust would bear them.

On the following day, Fry and myself would take our axes and his hound into the woods, and just so soon as the warm mys of the sun would soften the snow-crust, making it damp. she wonld, on coming to where a 'Coon had been. take its trail and follow it to the tree up which it had gone, and in an upper hollow of which it was then ensconced. We would then cut the tree down and get the 'Coon. Sometimes we would get two out of the same hollow. It is not the "cold foot" of the 'Coon, but the time of the night or the day in which it has left its trail, that hinders or aids the dog in following it. This is why the best nights for 'Coon-hunting are when the wind is from the south.
"Hark! Listen! What noise is that, away off in the Old Town woods?" was asked, by a recent arrival in this region, of a resident friend with whom he was riding along the road skirting the above-named woods, one dark night in November. They halted their horses, when "Boo-wooouh!" "Yonck! youck! yonck!" "Whoop-ee!" came floating to their ears, on the gentle southwest breeze, from the dark and lonely forest.
"Oh," answers his companion, " that's Fry and Arrowsmith, out with their hoands after a 'Coon."
"After a'Coon this time of night I Is that the way to hunt 'Coons? Certainly, there can't be much sport in tramping through the dark woods on such a night as this. Why not hunt them in the day-time?"

Poor, unappreciative fellow, who has never known the fun of racing through the dark aisles of the forest, falling over twisted roots or rotten logs, dodging under low, outstretched limbs, keeping time to the enlivening music of a dozen hounds in full cry! Yes, and how well would either of us like to have him with us, to initiate him by losing him and leaving him to keep up with us as best he could! The latter he wonld be compelled, under the circumstances, to do; for it would be worse than useless for him to undertake to find his way, unaided, out of these dark, wild woods, to light and civilization. A few brier-scratches, a slight rent or two in his coat, or a few beggar-lice adhering to his garments, would go a long way toward taking all the taste for'Coon-hunting out of him. Many's the time we have cooked such fellows. Once was enough; they wanted no more.

But softly, my dear friend; before you condemn such sport, come with us, and enjoy the music of the woods after night-fall-the low, murmuring trill of the brooklet, the soft, gentle breeze in its whispers through the tops of the lofty oaks, the tall shell-bark hickories, the towering maples, and the wide-spreading elms; the silence broken occasionally by the ghostly "to-who-who-who-who-alh" of the great homed owl, as he calls to his mate from his perch on the dead limb of some anclent monarch of the forest. The very stillness is of itself music to the ardent lover of Nature and Nature's God.

Silently we travel from point to point, gulded, in our wanderings through the trackless woods, by the constellations of Orion, the great Northern Dipper, Ursus Major, and the Pleiades, whose silent tongres tell us our course.

Just at dusk on a warm evening in early November, as a gentle breeze came up from the south, Henry Fry rode up to my gate, accompanied by his two black-and-tan hounds,

Drummer and Blucher, and called to me to get my rifte and hounds, and come with him, for it was going to be a "bocss" night for 'Coons. Having put his horse in the stable, I got my old Remington riffe and hunting-horn. On the latter I gave three blasts, to enthuse the hounds and make them keen for the sport, and we started for the woods.
"Where shall we hunt to-night, Henry ?" I asked.
"Well, as the moon don't rise till late, and the fore part of the night will be dark, so that we can't see so well to shoot, we'd better strike for the Funk woods. Funk has reserved this tract for the special benefit of us 'Coon-hunt ers. Here we are allowed to cut and carve. If the moon was up, we'd hunt along the edges of the timber, where they don't allow chopping, for there we could shoot."

Funk's woods was a tract of some six or seven hundred acres of the heaviest and best timber in the State, and owned by un old land speculator by the name of Funk. On it no chenping was allowed, save the cutting of "bee.trees" and "'Coon-trees." Funk lived in a remote part of the county, therefore it would have been a luge undertaking to find out and prosecute trespassers, even had he wished to do so.

Soon after entering the woods, old Drummer opened up on a fresh trail, some two hundred yards ahead of us. Soon every honnd responded to the deep, musical bell-tones of the old "strike-log," and joined him in hot haste, making "the welkin ring." To all was given an eucouraging "whoop-ee" by the hunters.

The hounds for a few moments appeared to be at fault, which generally is the case on tirst striking a trail, no mutter how fresh it may he. This is clue, perhaps, to the zigzag course that the Raccon generally travels in, especially if he be feeding under beech or burr-oaks, or in a corn-field. Now, howerer, they have straightened out on the trail, and are taking it uy fast and furious. The voice of each is easily distinguished from that of another. Tenor, soft and deep bass are blented in melodions hamony, making the
dense woods fairly vibrate. They soon wake up the echoes of the far-off hills, as they speedily close up the distance between them and the old plantigrade, who is now beginning to realize that he is about "to be caught out in a lard sliower," and had best betake himself to slelter, which he does by scaling the largest tree within reach. He is none too soon, for the seemingly wild and furious demons are already at the roots of the tree ere he has reached a place of concealment.

Finding that the 'Coon has gone up the tree, the tones of the hounds change from the musical bawl to sharp, defiant barks, plainly announcing the fact that they have treed, and need our assistance. An encouraging "tally-ho" tells them we are coming. Now it is a blind race to the dogsevery fellow for himself-through brush, over fallen logs; stubbing our toes against grubs or twisted roots; batting our heads against saplings that we didn't, or perhaps couldn't, see; or, if your course lay, for a time, in an old road, plunging from ankle-deep to knee-deep in water and mad. Such is the wild race, and no one is worse for the wear. Indeed, who ever heard of a real enthusiastic 'Coon-hunter getting seriously hurt while marching on the double-quick to the exciting music of the hounds. No matter how dark the night, or how many wild grape-vine tangles he may encounter, or how rough the ground he passes over, he lands at the tree, "top side up, with care," every time.

I once hit a young hunting-friend a severe blow, with the muzzle of a long, twelve-pound rifle, across the eyebrows, felling him to the ground; but he claimed that "it didn't hurt him a bit," although his left eve was black for a week. We had put up a 'Coon with our hounds, one dark night, on a large, tall red oak, and had inilt a ronsing fire near the roots of the tree, to keep us comfortable until daylight, when we would be able to locate and shoot the 'Coon. On the apprach of daylight, I saw the old corn-stealer high up in the tree, and knew that from its position it was likely to fall, when shot, right into our fire.

I told my friend to be ready to snatch it out should it fall there. He was standing just behind me from the fire, and at the crack of my ritte, sprung forward as I lowered it from my shoulder, and received a murderous blow. Nevertheless, he regained his feet, and snatched the 'Coon up out of the embers as soon as it fell. I was well aware that such a blow did hurt, but he insisted that it did not; and since then I have had nany a laugh at lim about it. He was doubtless so excited at the time, over the securing of the game, that he didn't feel the blow.

Fry and myself soon reached the point where our dogs were baying, found they had treed the 'Coon on a large sugar-maples and soon located him, in a crotch pretty well up toward the top. A well-directed bullet soon brought him crashing through the branches to terra firma.

After allowing our dogs to worry him a few moments, as a recompense for their chase, we stripped off his jacket, and started on for another chase. We soon reached the deep woods of the Funk tract, when, far off to onr left, we heard Bogus-a splendid, heavy, young hound belonging to the writer-give mouth to a long-drawn, deep, wailing tone.
" A cold track," said Henry.
"Yes; he's come out early."
We gave a "whoop him up, old fellow," and almost immediately he was joined by others of the pack. Here they were delayed for some time. "Let's go over to them and encourage them, and aid them in working it up," was suggested.

## "All right."

The woods here being free from dense underbrush, we soon came to where the hounds were trying to unravel the trail, beneath some large burr-oaks, whete there was an abundance of acorns on the ground. Here a 'Coon had been rustling around early in the evening, feeding on the oak-mast; had gone first in one direction and then in another, and had crossed and recrossed his tracks so often as to make it almost an impossibility for the dogs to follow him.

The dogs were scattered about, endeavoring to decipher and solve the problem. One would mount a log; running along upon it, and scenting it closely, he would find where it had, in its course, crossed the log. Then he would throw his head ligh in air, and give vent to a long-drawn wail, when the other dogs would run to his aid, to take up, if possible, the trail.
"But where is old Drummer? He was here just before we came up."

This old hound, being up to the tricks of the Raccoon, had struck off to make a wide detour on the outside, and soon gave tongue, in a livelier tone, some one hundred and fifty yards away, apparently leading toward a large swamp or pond near a field of corn. He was soon joined by the others of the pack; but the trail being cold, they could not move off on it much faster than we could walk. Having now got the general course the 'Coon had taken, they were not hindered much when at fault, bnt would strike out in a half-circle in that direction, and soon strike it again.
"Yes, le's going for that pond, where he will play awhile, and then he'il go over into that corn-field, where no doubt he now is," said Fry.

The hounds are working out his trail, and making good healway; but occasionally coming to some burr-oak or chinquapin, where the 'Coon had rambled awhile, they would follow his windings and then strike out again.

The pond was reached. Here the game had meandered again. The dugs mace hack and forth through the shallow water, und give tongue wherever they can find the scent.
"Hark! Old Spuing has found hilul dist Jisten."
Sure enough. She hat tired of the slow work of trailing hini in tetail; inili limil strmik off into the corn-field. There In the ilense cotn, where the falling temperature could not so readily reach the groumit, the track of the 'Conn was "pharently fresli; mind inw it was a regular Sionx war-cry of "HI-yi-ki-yl," Lit her lhe rotet. Thenther hommis hear-


through and over the fence into the standing corn. Here, as well as in the woods, Master Plantigrade had made numerous and various windings, but the scent being strong, this did not serlously hinder the now excited pack. On they went, the music of their voices starting every farmdog in the country to barking. No doubt these curs regretted that they were not hounds, that they too conld have some of the fun.

The hounds soon reached the far side of the corn, some twenty ncres, and again turned toward the woods.
"Let's get on the fence down in that low piece of ground, and keep still, for he is likely to pass out there when the dogs get close to him; and if he does, we'll ;wobably hear him."
"Yes, here they come; and they are warming him to his work-in fact, making him walk his chunk. Hark! Hear him, as he strikes some down stalks that are in his course?"

Yes; and he's quite a distance ahead of the hounds. But hold; the dogs are at fault. He has tacked on his course to throw them off, but not for long, for they soon find it again; and here they come, knocking down the corn, in their wild career, like so many scared cattle. Soon they turn back into the field. The moon now lifts her golden head, away off in the northeastern horizon, as if to ascertain the cause of so much racket-lighting up the gloomy aisles of the forest; while two or three old cat-owls begin their "wah, wal, wah, wah-o-ah," from the dead top of an old red oak nêai by.

Hark! The hounds have again turned, and now, distant some three hundred yards, are coming almost straight through the corn to where we are on the fence; each vying with the other for the lead. The trail is fresh and hot, and ench is giving tongue, fast and lively. Listen! We hear a slight rustling among the dry corn-stalks, some ten yards fistanit, and soon hear Mr. 'Coon creeping through between the mils if the fence. Now we hear him making off throngh the dry lenves that lay thick on the ground.

None too soon, old fellow, for here they come; the whole pack not five yards apart. They have reached the old eight-rail fenoe, and no time is lost in scaling it, as they make the top rails rattle in their displacement by their tiying heels.
"Look ! do you see that, Cottie ?" as a rabbit dashed out of a corner of the fence, near where the dogs crossed, and took down through an open path parallel to the fence.

Our old owls, too, have made haste and sought some other part of the woods, where they can see just as well, and not be disturbed by the pandemonium. The old plantigrade, finding things rather livelier in his rear than he had bargained for, after running about one hundred yards from the field fence, took shelter in the upper branches of a large burr-oak. The moon having risen sufficiently high, there was no trouble in locating and shooting him. And. now, having had sport enough for one night, we turned our steps homeward.

One morning, about the first of June, 1888, just at sunrise, I had taken a bucket and started to the well, distant about eighty yards from the house, when Mrs. A-, who had been feeding her poultry, called to me, and said there was a young turkey missing. I started on down the path leading to the well, when I saw in the dust of the path the tracks of an uncommonly large 'Coon, made some time during the past night. He had followed the path down to the well and past it, toward a large swamp, of some five acres, that lay ten or fifteen rods beyond, and extended into the big woods. After returning with the water, I told my wife that I had got on the track of her turkey-thief, and that while she was getting breakfast, I would get out a writ and have him arrested.

I took my rifle, got my ax, whistled up old "Boag," and pointed out the track to him. He sniffed around a little while, threw up his head, and gave one of those long blasts of Fox-hound music that always means business. He then struck off toward the swamp, from which he had already, in times past, sturted many a Raccoon, and
run it to its death. After a few moments of slow truiling among the red willows and small swamp ash-brush, he led off into the old woods, making things fairly jingle in his course.

After trailing some three-quarters of a mile, I heard him change his tune into baying. Knowing he had treed, I hastened on, and found him baying at the root of a tall, red elm-tree, up which the 'Coon had gone and entered a hole formed by the top being broken off. I could not cut this tree without felling it across a wire fence, over which it leaned. Like the old man who found the rude boy stealing his apples, I said, "If I can't get you, old sinner, by felling the tree, l'll just try a plan on you, some time during the day, that no doubt will elevate


Blown Out. yon ont of your cozy den." So I returned to the honse, ate my breakfast, and went about my work until the afternoon, when I got an old half-pint flask, filled it with gunpowder, took about one foot of tape fuse, put one end into the bottle and fastened it tight. I then got some matches, and a strip of old cotton rags to tie to the other end of the fuse, so as to make a slow match, thus giving me time after lighting it



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to descend from the tree. I took my rifie, called old "Boag," also a full-grown younc pointer that was as plucky as a Wildcat in a tussle with a 'Coon, and put out to try what virtue there was in gunpowder. Arriving at the tree, I got things in readiness. A good many small branches grew from the trunk near the ground, and were distributed from thence to the top, making the tree easy to climb. I climbed up the tree to a height of about fifty feet, and within ten feet of the top, where I came to a hole that woodpeckers had dug out and that reached into the hollow. Through this hole I could see the old cuss coiled up just a little below, inside. The hole was hardly large enough to admit the bottle of powder, so I took my pocket-knife and enlarged it so that I could pass the bottle in. This the old 'Coon didn't like at all, and resented the intrusion by savage growls. He made several attempts to snap my fingers while I was at work.
" But never mind, old boy; I'll give you something to chew on directly."

I struck a match, set the cotton rags on fire, coiled the fuse around the Hlask, dumped the infernal machine in on top of the 'Coon, and then made haste to get down the tree; for I wouldn't have been up there when the mine exploded for all the 'Coons in Old Town woods.

Some fifteen minutes after reaching the ground, I heard the fuse begin to sputter, and also heard the 'Coon scrambling ip the hollow-concluding, no doubt, that a bumblebee had gotten into his bed; when presently-"Whang!" went the powder, like the roar of an old army-musket fired into a large barrel.

A dense column of smoke, rotten wood, and other débris flew from the top of the hollow, and in the midst of it, out popped the old plantigrade, with a tremendous leap clear from the tree, coming down and striking the ground like a bag full of wind, but apparently none the worse from the effects of the powder, save that the wool on his rump was somewhat scorched. The Pointer bounced him as soon as he struck the ground. The 'Coon was as large-framed as
any I have ever seen, and gave both dogs a lively fight for several minutes before he was overcome. They finally laid him out, however; and when I took him to the house, my wife said she knew, from his full stomach and his sneaking look, that he was outside of her pet turkey.


# FOX-HUNTING IN VIRGINIA. 

By Dr. M. G. Ellzey.

7HERE are, in America, two modes of hunting the Fox; one with hounds and horse, the other with hound and a gun, after the manner of driving Deer. With the latter of these methods, the writer has no acquaintance. It prevails at the North, in country impracticable for the chase as practiced at the South, and is said by those devoted to it to be very exciting and enjoyable sport. They desire a slow hound, which is a good trailer, that they may stand at a likely place, along the run, and shoot the Fox as he ambles along in front of the hound. The sale of the pelt is the ultimate object, the apparent raison d'etre of the sport. Leaving the description of this method to those who are familiar with its enjoyments, I proceed to attempt a description of the Fox-chase as I have known and enjoyed it in Old Virginia, where a pack of hounds is used to kill the Fox, or run him to earth. The chase here is similar to the English hunt in its main features, though differing in details, so far as it is rendered necessary by the nature of the country, the habits of the people, and especially ly the differences between their Foxes and ours. I am persuaded that the American Red Fox, as found in the States of Maryland, Virginia, Wert, Virginia, North Carolina, and Tennessee, is an animal far superior to the English Fox, in speed, endurance, cunning, and resource, when in front of a dangerous pack. He laughs an inferior pack to scorn.

I will preface the proposed account of the sport by a brief sketch of the Fox. We have about half a dozen sorts of this animal, including the varieties of the far North. Authors divide them up for classification and nomenclature
as Sam Weller gave the orthography of his name, "according to the taste and fancy of the speller." "For my part," observes Mr. Weller, "I spells it with a we."

The Fox is mutually fertile with the Wolf and domestic dog, which seems to be true of all existing canine species; whether the cross-bred offspring presents the character of mongrels, or of fertile hybrids, has not been determined. Not even, as a rule, have naturalists, all run to morphological views as they are, clearly recognized these differences; for the greatest naturalists have confounded atavic variation with the reversion of hybrids to a parent form. Leaving this question of specific distinctions as we find it, the sportsman's distinction between our Foxes is, broadly, into red and gray. The cross-Fox is merely a Red Fox thus marked; the kit-Fox., a dwarfish individual.

The Gray Fox, treated by some naturalists as being a mere color variety, has habits entirely different from the Red, in almost all possible respects. So far as my personal observations inform me, the following are some of the principal distinctions: First, as to reproduction, the Red Fox nearly always brings forth its young in an earth den; the Gray Fox, generally in a hollow log or tree, or, at most, under a rock. The last one I found with her young was a Gray. The young, only a few hours old, were in the hollow stump of an old rotten tree, broken off about five feet high. As I came up, the old one jumped out of the top of the stump and ran off. I looked down the hole, and saw, at the bottom, five young ones, scarcely dry. I have seldom seen a Gray with more than five, and often with only four young. I never found a Red with less than five. I have seen one with nine, and several with seven. I think it certain, therefore, that the Reds are more prolific.

Second, as to hunting for prey and subsistence: The Reds are bolder in pursuit, and hunt over a much greater territory than the Grays. Whether the Grays ever climb trees in pursuit of prey, I am uncertain; but they take to a tree as readily as a cat when hard rum by hounds. I think it nearly certain that they climb for persimmons, grapes,
and berries. Red Foxes never climb trees under any circumstances; when hard-run, they go to earth.

Gray Foxes run before hounds only a short distance, doubling constantly, and for a short time, when they either hole in a tree or climb one. I have known the Red Fox to run straiglit away nearly twenty miles. Very commonly, they run eight or ten miles away, and then run back in a parallel course. I have known them to run the four sides of a quadrilateral, nine or ten miles long by about two miles broad. It is doubtful whether a first-rate specimen of a Red Fox, taken at his best in point of condition, can either be killed or run to earth by any pack of hounds living, such are his matchless speed and endurance. It is but a sorry pack which fails to kill or tree a Gray Fox in an hour's run.

The young of the Gray Fox closely resemble small, blackish puppies; those of the Red Fox are distinctly vulpine in physiognomy when only a few hours old.

The above are striking varietal distinctions; characteristics of less significance are often given much higher value by capable naturalists. Yet, from such information as I possess, I am of opinion that all living, and most likely. all extinct Canida, constitute a single physiologica! group, mutnally fertile, and their cross-bred offspring fertile inter se. This group is at present broken up into many good and distinct morphological species. I think the above facrs clearly show that the Red Fox differs from the Gray in many important particulars, and that they are in error who seem to regard the two as mere color varieties-the distinctive marks being graded away and disappearing when large series of individuals are compared. Any Fox-hunter, not a greenhorn, can tell whether it be a Red or a Gray Fox in front of his pack on the darkest night, as readily as if the animal were in plain view; and yet the color variation of red and gray may bring the two sorts nearly together in extreme specimens in a series. I think that, in this manner, a comparison of series of kins may lead the best naturalist to erroneous conclusions. In this case,
we may safely conclude that some Red Foxes are colored much like Gray Foxes, and that some Gray Foxes are colored mach like Red Foxes; but if we go further, and conclude that in all other respects the two sorts are one sort, we fall headlong into an error as groandless as absurd-an error which a pack of hounds will soon demonstrate, and at which anyone in the least degree experienced as a Foxhunter will laugh.

In this place, it is proposed to offer a few thoughts and suggestions as to the true position of Fox-hunting among the manly and athletic sports of the field. The proposition is boldly advanced that no other riding-school in the world can compare with the hunting-field in the production of the highest type of horseback-riding-bringing into full play, as it does, all the nerve, strength, skill, and judgment of tie rider. Often, in a moment, some great difficulty presents itself, immediately in front of him, to surmount which requires a great feat of horsemanship. It must be surmounted, or he will simply be left. Is it a thing simply not to be gotten over? Then, being in nowise a fool, the great horseman will draw rein, and see how best to get around it, even though that implies not even being within hearing at the kill. Is it a vigorous difficulty, surmountable by good horsemanship, or only by great horsemanship? Then the bold horseman summons all his own faculties, rouses all the resources of his steed, and goes over it in grand style, as if he had never recognized its presence. Courage, good sense, decision, presence of mind-these are the qualities brought out by this grand sport. Such qualities must be possessed by the horse no less than by his rider; otherwise the greatest horseman will be paralyzed in the presence of such a difficulty, if mounted on a duffer, or a lunk-headed fool and coward of a horse.

Now, a second proposition is boldly advanced. The first place, therefore, among all manly sports of the field, must be awarded to riding to hounds. We advance immediately to a third and final proposition, viz.: The manliest of manly sports should be the recognized national sport of the
greatest, the most enlightened, and the most progressive nation of the modern world, to wit, the United States of America. No argument need be advanced in support of such a proposition; the trath of it appears to be self-evident upon the mere statement of the case.

I take it no well-informed person will question the national value and importance of the preservation, the extension, and the development of superior horsemanship as a national characteristic of our people. This will carry with it the preservation, the development, the improvement of that fountain-source of all excellence and greatness in horse-flesh, that is to say, the English race-horse. If we are to have Fox-hunting as our national sport, we must have an American-bred hunting-horse. No horse can be bred fit to ride to hounds without large recourse to the blood of the race-horse. No horseman will deny that.

It has been said by one of the greatest of English writers on the horse, that the very best hunters in England were very nearly, though not quite, thorough-bred. This is equally true of the greatest of American trotters. The two-minute trotter will be common enough after awhile, and will be nearly, but not quite, thorough-bred. It will be, practically, the race-horse slightly modified in breeding, handled, trained, and selected for a different way of going. This statement is liable to paralyze certain people with astonishment, not unmingled with scorn. Nevertheless, what is writ is writ.

The hunting-horse fit for the American Fox-chase will have to be nearly, thongh not quite, thorough-bred, but not a trotting-horse. Rather a running and jumping horse, bred, selected (for temper, especially), handled, and trained for the hunting-field-not a race-horse, bred, selected, trained, and handled for the turf. Doubtless a skilled horseman, versed in the science of heredity, and himself a practiced rider to hounds, may select as the foundation of a breeding-stud strictly thorough-bred horses, and produce from them unequaled hunters. We are not to believe there is anything lacking to the blood of the thorough-bred
disabling it, when pure, from producing hunters of the very highest attainable excellence.

If such horses as Sir Archy and his great son, Timoleon, or Black Maria, had been trained for the hunting-field, they could have carried a rider six feet two inches, weighing two hundred and twenty-five pounds, a distance in advance of any field of hunting-bred horses ever mounted. Or, take such an animal as American Eclipse, or Revenue, or Planet, for riders, say from five feet ten inches to six feet, and from one hnndred and sixty to one hundred and eighty pounds; or, fancy old Ariel, the fairy queen of the running-turf, carrying a high-spirited lady rider. We may fancy a highbred maiden, in the first bloom of her beauty, riding through a dashing chase at the head of a gallant field of hunters. Cold runs the blood in his veins whose whole being does not dilate with the thonght. I admit that my own heart bounds with the conception.

I confess that I have, for some years, felt that there must be some sustaining demand to back up the breed of racehorses, outside of the current demand for fast mile-horses for the gambling needs of the racing-turf. Are the great old four-milers, along with the great race of men who produced them, gone without return? I have an opinion that a horse may be protuced, phenomenally fast for a mile and phenomenally unfit for every useful common purpose, whether he be trotted or run. If the breed of race-horses deteriorates, everything lower in the scale of horse-flesh will correspondingly go down. Does anyone believe that any fountain of excellence can be led higher and maintained at a level above its source? Believe it not!

If Fox-hunting be established as our national sport, there will arise a demand for hunting-horses, for ladies and gentlemen, which can not at first be met. It will of course ultimately be met. No demand can be made upon the creative genius of the American people which can not be met in due time. In the earlier stages of that demand, the breeders who have the knowledge, the skill, and the means combined to produce first-class lunters, for ladies and gen-
tlemen, will be able to sell them for "big money." To go further with the technical description of the hunting-hoise, in this place, would lead out of bounds. We must turn our attention to the pack, and then to the hunt.

Less than three couples of hounds can scarcely be called a pack. Some persons fancy odd numbers, and would prefera pack of thirteen hounde to one of fourteen or of twelve. More than thirteen hounds are, in my judgment, too many to run well together, or to be kept well in hand. I have seen thirty couples in a chase, but not more than nine of the best hounds did the real rumning. A gentleman of moderate means will find that six or seven hounds, well trained and kept, will afford better sport than will a greater number than can be well used.

One of the most beantiful and exciting chases I remember ever to have witnessed, was made by a couple of back-and-tan spayed bitches. In a run of about forty minutes, they killed a fine Red Fox, which for three miles was not over five to fifteen feet.in front of them; nor was there for that distance, at any time, three lengtlis between the bitches. This pair-little sisters - owned by my father, were certainly the fastest pair of hounds he ever owned in forty years' devotion to hounds and to Fox-hunting. Running with the pack, they always led, frequently running neck-andneck thirty or forty yards in advance of the pack. They were named Juno and Vanity, and each of them was known, in several instances, to start, run, and kill a fine Red Fox alcne.

It may be said, then, that a single hound may catch a Fox; it pair of hounds, if of the very best breeding and training, may afford good sport; that six or seven make a nice pack; and that the best number is thirteen. These, three neighboring gentlemen niay own and keep between them, when they will do quite as well, or even better, than when all kept in one kenuel. Spayed bitches are to be highly recommended, if spayed when not more than two to six weeks old, which is the best time, for they do not exhibit the tendency to become fat and lazy which results
from the operation at an age subsequent to sexial development. They are as fast us the best dogs; their scenting powers are equal to any; their sagacity in managing the working of a Fox in all its details can not be surpassed; they are easier to break and train; they are quiet about home, and seldom go off, on their own hook, to observe the country and make mental notes of the grazing-fields of a neighbor's sheep. It is certain they are far less prone to mischief than dogs. In the matter of tongue, they generally incline to treble, and their notes are often of a flatelike sweetness. In the matter of endurance, they are not surpassed. These observations are the results of personal knowledge based on a wide experience.

The color of hounds is a mattel of taste. I have known great Fox-dogs of almost every variety of color. The best I ever knew were black-and-tans; the handsomest and deepest-mouthed were hounds of the old blue-mottled breed from the famous Crawford pack of Maryland. I should say color is a matter of taste, music a matter of science in selection, speed a thing to be tested, and it, as well as endurance, belongs to particular strains. If you want to breed a litter of Red Fox hounds, you will have to breed the fastest bitch to be had to the fastest dog. You can do it successfully in that way, and in no other.

There are few strains of hounds, perhaps, now living, which are at all reliable to kill a Red Fox. I do not believe that any dogs bred, owned, trained, and run in Eng. land can kill our Red Foxes. It is not by resort to importations, therefore, that Red Fox dogs are to be had here. They must be bred from the few American strains which have demonstrated their ability to kill American Red Foxes. This is no random, unsupported notion. I have seen many imported dogs run, and never saw one capable of staying with our own best packs.

No doubt this declaration will bring loud jeers from some people. Very well, let them jeer; I have no objection to that sort of thing. In this maiter, I feel that I know what I am talking about. In the sinucer of size, English
hounds are too large for the country we hunt. It is beyond doubt true that medium-sized hounds are best for our work. They should not be above ifty pounds in weight. Some years ago, I knew an imported pack which I think would have averaged eighty poumls, and they could not stay with a native pack of small 'onnds of only noderate excellence.

The kennel riscipline of hounds shonld be simple, and all the accommolations inexpensive. When not in the kennel, they ought to be coupled together, in pairs, by an iron rod about a foot long, with a ring in each end, through which passes a leather collar to be buckled around the neck. My father's kennel was simply a big, square-built log house, with a dirt floor, on which clean bedding was kept. During the hunting-season, the dogs were kept altogether in this house. Out of season, they were compled, and went in and ont at pleasure. They were called to be fed with the horn, and always worked with the same horn for everything they were required to do. They were fed, inexpensively, on coarse corn-meal, with the husks left in, and baked in large pones. They also had scraps from the tables, and sour milk, buttermilk, and bonny-clabber from the dairy. A case of disease or sickness among them is a thing which, during thirty years, I can scarcely remember.

Probably an average of twenty were kept; sometimes the number ran up to thirty; sometimes there were not more than thirteen in the kennel. The entire success of these simple kennel arrangements, during so many years, seems to entitle such a method to grent confidence. My father, who was doubtless the most enthusiastic and successful Fox-hunter of his time, in Virginia, pursued, also, in breaking his young hounds, a method perfectly simple. Whenever he went out on horseback, which was well-nigh every day of his life, $u_{i}$, to within a "reek of his death, he took the young hounds with him, and so accustomed them to obedience and a love of companionship with himself; and when they were to be taught to run the Red Fox, he took them out with a few of the best Fox-hounds he had, and let them run. They soon learned all there is for a
hound to know; and, be it known to the inexperienced, there are few more sagacious animals than the Fox-hound. I myself doubt whether any other dog, except the Collie, has equal capacity to acquire a knowledge of his work as thie Fox-hound, if not spoiled by ignorant or incompetent handlers.

There is left for description the hunt itself. The crowd which goes out with the hounds in a genuine English hunt is apt to be distasteful to our best Fox-hunters. Their idea of genuine sport is, for half a dozen real friends to meet quietly, and have the chase to themselves. If, however, a neighbor or two joins in uninvited, they are not unwelcome; and if the chase goes through a farm, and all hands leave work and run for a hill-top, mount the fence, get up a tree, or scramble to the top of the straw-rick, to see as much of the chase as may be, the hunters take real pleasure in adding a pleasaut episode to the sameness of the simple lives of country work-people. What is meant is, that the bustle and display of an English meet is not in accordance with the tastes of our country gentlemen; not that they are at all selfish or exclusive in the enjoyment of their sport. In the case of wealthy clubs of city people, a different feeling prevails. Generally they are more after display than sport. An anise-bag, or a dead Fox, or some other drag, suits them equally as well as, or even better than a genuine hunt.

Enough has already been said of the hunting-horse; we may, however, re-affirm that there neither is, nor can be, any real sport in a Fox-hunt for any person poorly mounted. A horse not sufficiently well-bred can not carry a rider through a severe chase with either comfort or safety. It is a genuine misery to ride a jaded horse; and, moreover, unless ridden with great caution, the rider's neck is not safe; and consciousness of the unfit condition of the horse is fatal to that enthusiasm and élan which are the life and soul of everything deserving the name of sport. Therefore, the first thing essential to the enjoyment of Fox-hunting is a well-bred, sound, safe horse. The best horses are about
fifteen and one-half hands high, and weigh about eleven hundred pounds. It is much more difficult to find a large horse, sisteen hands or upward, of that high form which is essential to carrying a rider, at speed, safely over difficult country.

A man who has sense enough to value his own neck, must ignore the fashionable taste in choosing a horse to hunt on; and if not himself a skilled judge of the points of a horse, he should take the advice of a man who is, and upon whose impartial friendship he can rely. There are ten good medium-sized horses to one good large horse; hence it is far easier to mount a man of medium size than one above medium height and weight. A small man is unsuitably mounted on a large horse; a large man, more unsuitably mounted on a small horse.

Our best hunters do not jump their horses over everything they can find to put them at; often they hunt a great part of a season, or a whole season, without taking a single considerable leap. It is not practicable to follow the hounds as seems to be done in England; for, in the tirst place, our Foxes, in almost every case, take such a course that no horse can possibly go over it. They take to the bluff, along water-courses, and through pine-thickets, that no man can ride a horse over or through at speed. The hunter must, in such a case, perforce make a detorr and strike for the open ground, where he may again join the chase.

No sensible man goes Fox-huntiug for the mere sake of leaping his horse over fences and ravines; he goes over such places when the exigencies of the chase render it necessary. He does not leap his horse over a stone wall if there is an open gate three rods out of his line, unless he is riding for the brush, close to the hounds in the act of running into the Fox. A good hunter rides farlessly when he has a rational object in view, and always judiciously, reserving his own powers and those of his horse to be put to the test when necessary. He takes no stock in the absurd cavortings of the riding academy. It is also true that our Red Foxes run farther and faster than any horse whatever can
follow them, over their own course. The best horses, in the best condition, carrying light weight, over our finest race-tracks, can scarcely maintain their rate through four miles. A Red Fox, in front of a dangerous pack, scarcely gets down to business in less than three times that distance. I have seen a chase in which the Fox's course was twenty miles, the running being desperate from start to finish. I was never out of hearing, and much of the time in full view of the chase; but I did not ride more than two-thirds as far as the pack ran.

At this point, I can not forbea. to turn aside to comment brietly on the remarks upon the speed and endurance of our Red Foxes, by a distinguished scholar. In a costly and pretentious work on natural history, he says: "It runs with great swiftness for about a hundred yards, but is easily overtaken by a Wolf, or a mounted man." Even great authors must slip sometimes, but probably a more complete display of ignorance was never made by a competent writer than in the above brief sentence. I doubt if any creature lacking wings is fully equal to the American Red Fox in speed and endurance combined. I have seen him, when at his best, outfoot and run away from as fine a pack of hounds as ever was seen, and also leave out of hearing a whole field of sportsmen, not one of whom was meanly mounted. I know but little, practically, of Wolves, but I do know something of mounted men, and I doubt whether the finest rider in the world, mounted on the finest horse in the world, can easily evertake an American Red Fox, or overtake him at all, or in a race of twenty miles keep within four miles of him. I have seen the thing tried many and many a time, by many distinguished riders finely mounted; I have tried it myself often-but never yet saw a race between a mounted man and a Red Fox in which the Fox was easily outrun.

The best season for hunting the Fox is, with us, in the months of October, November, and December, or as late in winter as the weather may be open and the ground not frozen. Some persons hunt in the spring months, until the vegetation is too far advanced to permit either hearing,
seeing, or riding well, and with pleasure and safety. Some have a run any day in the year they may have a mind to do it. Fox-hunting is for pleasure, for health, and for the acquirement of skill on horseback, and it onght net to be pursued under circumstances dangerous to the health of the hunter, nor cruel to his horse or hound; as when the weather is severe and the ground icy, or soft and miry. The best weather is a temperature of about $60^{\circ}$ Fahrenheit, and a relative humidity of about $75^{\circ}$, clear, and without wind beyond a moderate breeze. This will be an atmosphere sufficiently moist for good scent and not tor cool for the rapid movements of the chase, which greatly iscreases evaporation, both from the pulmonary and cutaneous surfaces, which of course implies rapid loss of animal heat; and a great strain is thereby thrown upon both the great organs of circulation and respiration, in man and beast.

Therefore it is that dry, cool wind makes the very worst hunting-weather, and therefore it is that horses have commonly made their greatest records on the turf on very hot days. Observations made by the writer on temperature and relative humidity, in connection with the air-supply of the Hall of Representatives at Washington, led him to the conclusion that a temperature of $60^{\circ}$ Falrenheit, and a relative humidity of $75^{\circ}$, gives us our most delightful vernal and autumnal weather, and those conditions are recommended as constituting nearly the optimum of huntingweather. In such weather, Foxes lie much in the open fields, or on the border of some glade or open woodland. We often ousted them from such spots, before Setters and Pointers, when out shooting on such autumn days.

In describing the modus operandi of the hunt, I will detail our own nsual practice; not that it is the best practice, but it is the result of long experience, and has been found satisfactory in the region where we were accustomed to hunt. It is by no means necessary to get up shortly after midnight, and hastily swallow a cold, uncomfortable b. takfast; to be in the saddle and unkennel the hounds while it is yet dark. It is better to eat a comfortable early breakfast,
have the hounds fed lightly on stale bread, and to be in the saddle a little before sunrise. The horses should have, the night before, a good feed of oats and only a little hay, and in the morning, an hour before the start, a moderate feed of oats. When brought out, they should have a dozen or so swallows of water.

The hounds should be kept well in to heel until the place for making the cast-off is reached. They should be handled, as far as possible, by one person, and one person should have general direction of the hant. When the start is made, the Fox lays out the course, and, in racing parlance, cuts out the running. The hunt will, in a good degree, take shape at its own wild will. Often a crisis will arrive when everything is at sea, every man is for himself, and the cry is, "Devil take the hindmost," whether that hindmost be Fox, hound, horse, or huntsman. Nevertheless, an experienced Fox-hnnter never quite loses his head, and acts always with care and judgment.

I will now attempt a description of one of the greatest races in which I can remember to have been a participant. A few brief notes as to the scene of the hunt will facilitate an understanding of the narrative. The residence of my father, in the old commonwealtin of Virginia, was sitnated centrally in the grand old county of Loudonn, about two miles from Goose Creek, the beautifnl Indian nam which was To-hong-ga-roo-ta, and abont the same distance from Aldie Gap, in the Bull Run spur of the Blue Ridge Mountains. It was about eight miles from our home eastward to the month of the creek, where its waters are emptied into the Pc .omac, at the upper end of Selden's Island. In this part of its course the creek is a bold and rapid stream, from seventy-five to one hundred yards wide. Its banks in places are long, level bottoms; in other places rising into precipitous bluffs and rugged cliffs, covered with hemlocks and dense ivy-thickets.

In the fields, thickets, strips of woodland, and glades bordering this creek, it was always an easy matter to start
a Red Fox. I have never heard of a Gray Fox being seen there, although in the King country, seven or eight miles to the southeast, Grays are numerous.

In front of us, to the north, was the creek; west of us three miles, the mountains. Eastward four or five miles, running north and south, was a low line of hills called the Old Ridge, covered with black-jack and broom-sedge; and in many parts lay huge boulders, and more or less extensive tracts of loose magnesian shale, seamed and scarred all over with galls, washes, and gulleys. In places, these hills were densely covered with scrub-pine and tangled masses of green-brier, hawthorn, and grape-vines. Behind us, to the south, extended an open country, from the foot of Bull Run Mountain eastward, some ten miles, to Broad Run, a considerable tributary of the Potomac.

Our Foxes usually ran a quadrilateral, going up the creek west to Negro Mountain, a low, brushy range of hills extending from Bull Run Range; along Negro Mountain from two to five miles southward; thence eastward to Broad. Run, and thence northward along the Old Ridge to the creek, and up the creek to Negro Mountain. My father's estate extended northward to the creek, and eastward down the creek several miles, occupying a central position in the quadrilateral described, the circuit of which was about twenty miles as the Foxes ran it. Foxes started in front of us, almost invariably ran down the creek to the Old Ridge, southward along the Old Ridge to Broad Run, up that run and across the open country to Negro Mountain, northward along Negro Mountain to the creek, and again down the creek.

In what we called the mill-dam field, a splendid old Red dog-Fox had taken up his quarters, and my father, sometimes alone, sometimes in company with some friends, with select hounds from their packs, ${ }^{\prime}$ had run him around the quadrilateral divers times without being able to do anything with him other than to put him in perfect training; and it began to be thonght that no pack could either kill him or run him to earth.

My father himself doubted whether this Fox was not superior to any pack in the world. However, he determined to try a final conclusion with him, and, with this end in view, took measures to get nine of his best hounds in the highest attainable condition. He had in his pack, at that time, a strain of black-and-tan hounds which he had owned and bred for thirty years, and which his father had long owned before him. At this time, there were in the pack, besides the brood bitch and four or five dogs of that strain, the two spayed bitches already mentioned, named Vanity and Juno, which were undoubtedly the best pair of hounds which the strain, great as it was, ever produced. Of course, these great bitches were first choice for this race. They were backed by two dogs of the same strain, but not full brothers in blood, called Leader and Rogue. The next selections were blue-mottled hounds from the Crawford strain of Maryland; three dogs, Drummer, Farmer, and Trump, and a spayed bitch, Countess. In addition to these, a lemon-and-white hound of great excellence, called Frowner, was put in. My father believed that these were, in all points, as good Fox-hounds as were ever seen, and he thought the great sisters, Juno and Vanity, the very best he had ever seen run.

Our friends were notified that all was ready for the race the next day, and that the meet, for those who did noi breakfast with us, would be at the upper end of the milldam field, within a few minutes after sunrise.

My father and I saw personally to the feeding and bedding of the lounds, and each of us to his own horse. We went early to bed, after a light supper, and so slept well all night. At early dawn we were up, and quickly dressed in hunting-clothes, and ont to attend to matters at the kennels and stables; for our experience hal taught us that such details must have our personal attention.

By the time these matters were settled, some of our neighbors arrived, and brought several additional couples of hounds. Breakfast was a simple affair. As soon as dispatched, we mounted and rode to the meeting-place,
arriving there three or four minutes before the sun rose. We found most of those expected already at the spot, and the others arrived almost simultaneously with our party.

After brief and simple morning salutations, and a couple of minutes' chat, my father annonuced all ready, and the hounds were cast off. In less than three minates, Drummer challenged, and the whole pack (fifteen in all) closed in and took the trail. In about two minutes, and before we had advanced three hundred yards into the field, the invincible old Red rose over the rag-weed, and took a deliberate view of the forces advanciug against hin. "Tally-ho!" rang out in chorus from the horsemen, and the pack burst into full cry, as the gallant quarry bounded away on the race for his life, with not more than one hundred yards start of the hounds.

The Fox made direct for the upper end of the cliffs, where a man and horse could not pass between the rocks and the water, and where, for half a mile down-stream, the running would be over rocks and through dense timber. As the course to reach this point was up-stream, whether the Fiox would make a short turn, and adopt the nsual tactics of breaking away down-stream, we could not know. If we role to the edge of the cliffs, and the chase turned down-stream; we should gain nothing; for half a mile below, a rocky ravine, impassable by horses, made up from the creek, about three hundred yards, to a spring in the field. We therefore held our position for a moment, to await developments. The wily Fox, fully realizing the importance of increasing his lead by taking advantage of the rough ground, turned short down-stream at the head of the cliffs, as was instantly detected by the practiced ears of my father and his friend Mr. Edward Jenkins, who was as great a man at all points afield as ever bestrode a horse. At this point, the echoing music of the rack was splendid beyond description, and seemed equelly inspiring to horseman and to horse. My father gave the word, and we bounded away at speed for the spring at the head of the ravine, expecting the chase to continue its sweep around
the horseshoe curve of the creek. If so, position at the spring, being on the chord of the are when we should arrive at that point, would give us a view of the race for about a mile, when we could join in the chase as it turned into the long stretch of bottom-lands at the lower end of the mill-dam field.

When we reached a point within one hundred yards of the spring, the roar of the mill-dam, mingling with the thunderous echoes of the pack behind the cliffs, was like the peal of a great organ along the aisles of some vast cathedral. The splendor of the early morning scene may be imagined, but it can not be adequately described. My father reined in to a full stop, and called out:
"Gentlemen, they are coming up the ravine to the spring. Hold in, or we shall ride over the hounds;" and immediately shouted "Tally-ho!" pointing to a spot near the head of the ravine, where Reynard appeared for an instant, and then disappeared in the bushes. It was obvious he had not increased his lead by many yards, as the tremendous cry distinctiy showed the hounds were already coming well up the ravine; and my father's marvelous ear must have detected the turn at the very instant it was made. The Fox had now cleared the head of the ravine, and broke away across the open field toward the Broad Rock, in a southeasterly course, toward the far side of the quadrilateral, leaving the water-course entirely.
"Did you ever see so bold a rascal?" said Mr. Jenkins.
"Aye," responded my father. "I do not understand him, but that is a fatal mistake. Nothing can save his brush to-day but a decree of fate."

The pack by this time had cleared the ravine; the Fox had two hundred yards start, and a mile and a half across the old field to reach cover. Vanity leading, Juno at her flank, the rest closed up; the pace was so tremendous that some of us thonght we should run into him before he struck Broad Rock.
"Hark! away!" shouted my father, touching old Alice gently with the spur; and away we went. The first fence


TALLY-HO:
was three hundred yards away, a tritling affair, and over it Reynard led like a bird on the wing. Like screaming eagles swooping on their prey, followed the fiercely clamorous pack. Pell-mell the horsemen pressed upon their heels; and over we went.

Here followed a run perhaps never surpassed in the hunting-field. Gallantly did Reynard maintain his lead; gallantly followed the flying pack, and gallantly the horsemen rode, As the last quarter of the stretch was reached, Vanity showed three lengths in front of Juno, who just maintained her place at the head of the pack, and, as it were, by inches she began to close the gap between herself and Reynard's brush, which was still flaunting defiantly in the breeze. She had crawled up to within forty yards of him, with several hundred yet to run before the Broad Rock was gained. She was now twenty yards ahead of the pack, Juno just clear of the bunch. The horsemen were well closed up to within from fifty to one hundred yards of the pack. In nearly this position, this splendid panorama closed by Reynard leaning both fences of the highway and sweeping directly aci uss the face of the Broad Rock, gaining cover at the head of a bad rocky ravine leading to the banks of Beaver Dam Creek, about two miles above its mouth, where it falls into Goose Creek.

Going over the fence, the horsemen gathered in the road at the Broad Rock, and there.was a panse, while the chase developed its future course. My father and his friend sat side by side on their horses, following the pack by the sonorous music of their furious cry, and gazing intently into the woods toward the run.
"They are going up Beaver Dam," said Mr. Jenkins.
"Aye," said my father, turning old Alice's head down the public road; and remarking, "We can get in at Mount Hope," he jogged off, so as to keep nearly abreast of the chase as it rushed roaring along the meanderings of the rock-bound stream.

The object of my horsemanship was to keep as near as I could to my father's side, his friend, Mr. Jenkins, riding
always with him, followed by his son William, nearly my age; so that this latter young gentleman and myself fell into a natural companionship. The other gentlemen rode to sult themselves, but recognized my father's leadership of the hunt, as a matter of course. My mount was a beautiful, thorough-bred, bay filly, coming five years old, which was my saddle-mare for many years. She was a delightful goer and jumper, and safe even for a lady. Old Alice was a mare of extraordinary power and speed, seveneighths bred; a daughter of Grigsby's Potomac, her dam a daughter of that good horse Hyder Ali. I still own some of the descendants of that great mare. She was killed by lightning, with a splendid foal at her side, when twenty years old-long after this memorable chase. The Jenkinses were well mounted on horses that had outlasted many and many a hard day's run, and the other gentlemen of the hunt were all well mounted.

As the cry came abreast of us, some three hundred yards to the left, we again gave our horses rein, and were going at full speed along the road, having the short lines on the pack; but their pace was tremendous.

Coming up on the hill above the ford of Beaver Dam, we paused again for the chase to develop; but only for a moment, when Reynard bounded clear into the middle of the road on the far side of the stream, and broke away down the road right through the village of Mount Hope, and leading the pack three hundred yards. We held our positions until the hounds had passed. They came with incredible speed. considering the ground, Vanity leading easily, and went down the road at a terrible pace.

As soon as the hounds had cleared the fence, my father rode forward, followed by the hunters, all closed up, and we were soon going again at speed. The race led along the road about a mile, when Reynard took to some rocky woodland on the right, and it seemed he might break away for Negro Mountain. Hesitating a moment as to our course, "Tally-ho!" from the venerable huntsman, Mr. John Macamblin, who had reinforced the pack with a
couple of blue-mottled hounds of the Crawford struin, and we knew that the Fox was coming buck to the rond. He would surely cross it near our position, and break away to Broad Run, over ground favorable to him, and returning by the Old Ridge route to Goose Creek, would now give us a tedions run of an hour or mere, with many losses by the hounds, and we should have to make the finish going up the creek-bottom again.

Horsemen could not follow closely over this course. Therefore, guided by my father, who knew every foot of the ground, we kept as well in hearing as we might, and saved our horses as we could, for the final conclusion going up the creek bottom. Over this part of the course, we however had full enjoyment of the bracing air of the glorious autumn day and the superb melody of the hounds; now near, now far, echoing and reëchoing among the rocky glens, and through the dim aisles of the weird old forest, for many a mile.

So at length we rode out into an open field on the summit of the Old Ridge, half a mile from the creek, at a place known as Powers' Hill, whence is a prospect hardly surpassed by any inland scene within my knowledge. Here we sat upon our horses, enjoying the magnificent prospect, listening to the distant pack, whose course my father knew as well as if the running had been in full view all the way.
"Where will we get in the race again, 'Squire?" asked Mr. Macamblin.
"Right here, sir," said my father.
"Yes," said Mr. Jenkins; "and we shall not be waiting ten minutes."
"Théy are crossing Moran’s Bottom now," said Mr. Swartz, one of our party, distinguished as one of the finest -iders in the State.
" Yes," said my father; " and the cry is very keen. I snow they are pressing him hard; we will see the position of things as they pass here. I think he will die near the starting-point; he will never go to earth, and he can't live it out before tisat pack to-day."
"Tally-ho!' from the keen-eyed Jenkins, and Reynard hove in view, coming over the fence at the far side of the field in which we were, and making almost direct for our position. Not a hundred yards behind came Vanity, followed quickly by Juno and several Crawford hounds, with Rogne and Frowner; the rest strung ont a little, but coming well along. It was obvious that the Fox knew that he must do his best, or die; his manner and aspect showed as much. He had now run, almost without a break or pause, fully twenty miles, and there were six miles before him before he could gain the friendly cover of Negro Mountain. Once there, he would be safe; but could he get there? My father said not, in his opinion, and so we all believed; for the next six miles was wholly favorable to the dogs. It however abounded with earths, and as Swartz put it:
"I'm afraid he'll den under some of those cliffs, and we can't get him out."
"I think not," said my father; "but he may."
On we sped for awhile, beyond the mouth of Beaver Dam, from whence Broad Rock was once more in view, half a mile to the left; but the chase was now up the creek-bottoms, clinging to the meanderings of the stream. Passing round in front of the pack, along the arc of the horseshoe curve, we had a straight mile stretch.
"I want to see them across this bottom," said my father, "and then I think I cin tell how it will be for a certainty."
"Tally-ho-ooo!" from several horsemen, and Reynard swung around the bend before us, a hundred yards off, followed now within sixty yards by the pack, well closed up; and as they broke from cover and caught sight, a grand chorus saluted our ears, which had in it the ummistakable do or die. There was now before us a view-chase of nearly a mile, and we followed hard upon the hounds--the sight, the fury of the cry, carrying us almost beyond ourselves with an excitement which enthused, with one common impulse, rider, horse, and hounds, and must have carried terror to the heart of poor Reynard.


It was a tremendous burst, and briefly over, when Reynard once more hid his brush in friendly cover, and swept into an alcove behind a cliff in the bend of the creek. Making a detour to the left, we encountered a stiff fence, at the border of the ravine, too dangerous to attem; $t$; so, swinging some yards farther to the left, we struck into a farm-road, and took the bars, the most considerable leap of the hunt.

Bounding toward the creek at once, we met the chase at the hearl of the cliff; but there was no time for exchange of words. Getting over an easy fence, each horseman in his own way, we reëntered the mill-dam field along the water's edge, riding with the pack at the heels of the Fox-Vanity nipping at his brush as he went over the fence, the others strung out a little; Juno a few feet in his rear, and Drummer running second. It was evident that this was the final rush; and seeing my father settle himself in the saddle, and turn the spur on Alice's flank, I rode for all I was worth for my place at his side, and in an instant I was at his stirrup.
"Hark!" he cried, as Vanity seized Reynard full in the back, and giving him a snatch, rolled over, and turned him backward. In an instant, poor Reynard was seized by Drummer, and in less than a twinkling of an eye, Juno had hold. My father, Mr. Jenkins, William, and I were in together at the death, and William, leaping from his horse, seized the Fox, and cutting away the hounds with his whip, held him up by the nape to the view of the admiring company-the largest and fiwest specimen of a Red Fox any of the party had ever seen.

My father awarded the brush to William Jenkins, and the great race was finished; every horseman and every hound being well closed up at the death. Mr. Macamblin said:
"I am an old hunter. I have seen many hundreds of runs, in Ireland, in England, and in America. I think we have had to-day, in some respects, the grandest run I ever saw. I shall never see such another, I am sure. I am a 36
partisan of the Crawford strain; they are natives of my native country; they are great Fox-hounds, but Vanity and Juno are the greatest couple I ever saw run."
"Yes," said Mr. Jenkins; "there is not another such couple living, in my opinion. Through this great race of twenty-five miles, Vanity was never once headed, and never made a serious fault; and Juno was second until close to the finish, when her foot was badly cut."
"Well, Ned," said my father, "I agree with you gentlemen. This black-and-tan strain is a great strain, and these sisters are its greatest representatives; yet undoubtedly the Crawford atrain has also produced great hounds. I think Drummer, Tanner, and Countess nearly equal to any three I ever had in my pack."
"Squire," said Mr. Macamblin, "we are indebted to you for a great day's sport, and we are happy that not a single circumstance has marred our pleasure in the smallest degree."
"Well," said my father, "I hope we may all live for many another successful meet. And, gentlemen, my house is nearest; I insist that you shall all dine with me. Come!" And with a blast of his horn, the well-trained pack came to heel, and we jogged home to dine, and discuss the events of the dar.

Years have rolled away to join the past. Lately I had occasion to revisit the place of my birth, and riding alone, my road led through the village of Mount Hope. Not one of those who saw the great chase go through their quiet hamlet is living there now. Of those who followed the hounds that day, I only am left. Reaching the Broad Rock, I reined up and paused a few moments, regarding the spot. I love to recall my father as he sat old Alice at that spot-a splenclid type of physical manhood, six feet and an inch, broad-chested, square-shouldered, erect, weighing about one hundred and eighty pounds; in the splendid skill of his horsemanship, the peer of Turner Ashby; in the dignity of his bearing, of the Old Virginia type, of
of
which Gen. Robert E. Lee was the modern exemplar. My eye followed my thoughts to the distant hill, where, towering vast against the cilear, blue sky, survivor of ten generations of my ancestors buried at its feet, a gnarled and mighty oak points from the place of my father's honored ashes to the rest of his noble soul. I rode slowly on.
" Tears, Idle tears; I know not what they mean. Tears from the depths of some divine despair, Rose in the heart and gathered to the eyes, In looking on the happy autumn fields And thinking of the days that are no more."


## ALLIGATOR-SHOOTING IN FLORIDA.

By Cyrus W. Butler.

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50ROM the day that Mother Eve was accused of the questionable taste of being tempted by a serpent, we have had for that order of Reptilia so little interest, aside from fear and aversion, that this dislike has not stopped with snakes, but has extended, in a modified degree, to the entire reptilian class. It is but natural, therefore, that of all classes of animal life, that of Reptilia should afford the least attraction to the sportsman; for, in addition to this aversion, you can neither shoot them on the wing nor angle for them with a split bamboo; and, as a rule, its species are small, their capture roid of pleasure, and they are worthless when caught.

But, thanks to the molecule whose differentiation first started in its development the order Crocodilia, we have in the United States two species, the Crocodile and Alligator, whose size and ferocity are sufficient to interest the sportsman and furnish employment for his best rifle. The sight of the huge, glittering body, as it lies basking in the sunshine, may well cause his heart to beat as hard and his breath to come as heavy as though a more beautiful and useful game animal lay before him.

The American Crocodile occurs only in South Florida, and has never been taken in any great numbers. In the winter of 1888 and 1889 , Dr. J. W. Velie, of the Chicago Academy of Sciences, secured twenty specimens on the southwest coast of the State, the largest of which was fifteen feet and six inches in length.

The most distinguishing characteristic of this Crocodile, as compared with the Alligator, is that the end of the jaws are wider than they are farther back, so that a rope can be
tied around them without slipping off. The npper jaw is narrower than the lower, and the canines of the latter extend through holes in the former, so that the ends of those teeth protrade above the upper jaw. However, as I know little of the Crocodile, I will say nothing more, but proceed with an intimate acquaintance, Alligator Mississippiensis, more commonly known as "'Gator."

As with all animal life, he begins as an egg, and like most reptiles, his external existence as such is in the form of a pretty, white, and hard-shelled egg, much harder than that of the domestic hen, about three inches in length, and onehalf as wide. The nest is composed of vegetation and earth, piled a foot or two high and from four to five feet in diameter, in the center of which are laid, sometimes, as many as seventy-five eggs, which are covered with earth and hatched by the heat of the sun; the mother meantime carefully guards them from depredators.

When hatched, the young are six or seven inches in length, and in spite of their reptilian characteristics, have a decidedly infantile appearance. In order to get a plentiful supply of tadpoles and small fish, and to escape their affectionate papas, who, it is said, love them, alas! only too well, the mother then takes them to some secluded nursery, perhaps a hole in a small creek, or a wet place in a swamp, where, if the water be low, she digs a hole, beneath the surface, into which she and her young may retire. What their period of growth or attainable age is, I do not know, but they sumetimes reach a length of fifteen feet and a probable weight of four hundred poinds.

With the appearance of the 'Gator, all are acquaintedhis immensely elongated jaws, armed with a hundred teeth; long, dark, and knotty reptilian head; brown, cat-pupiled eyes, that in the heat of anger burn with such dark ferocity, and say, only too plainly, "No quarter here;" no external ear, but an aperture covered with a valve-like flap, to keep the water ont; round neck; rather small and short legs; body swelling from just back of the fore legs to the center and then decreasing to the hinder legs; a heavily muscled
tail, as long as head and body combined. The whole body is covered with a tough skin, brownish-black above and white beneath, all creased with square-cornered checks beneath and on the tail and smaller irregular forms on the sides and legs. The entire upper surface is more or less covered with round plates of bone set on the skin, each plate having a median keel, that gives the animal's back his rough appearance. The keels on the outer row of tail-plates are much higher than the rest, thus giving the onter sides sharp, high edges, which converge until they meet, back of the center, to form the sharp upper edge of the tail, which is much flattened there.

The Alligator is found as far north as Memphis, Tennessee; is common in the Gulf States, but to-day is probably most abundant in Florida. Where it is cold enough to freeze, he hibernates during the cold spell; but in South Florida he may be found wide-awake and enjoying life throughout the year.

They feed on any animal life obtainable, from horseshoe crabs to dogs and pigs, and are commonly regarded as being fond of negro babies; but their most common diet is fish. Of thirty-six specimens-from six to eleven feet in length - whose stomachs I examined, twenty contained nothing but fishy-smelling water and oil, remnants of a few small minnows, and, in almost every case, one or two small sorts of an aquatic plant. Two had dined on a brace of wild ducks each, while the remaining fourteen were all killed at a time when the surface of the lake was strewn with dead fish; and each 'Gator had laid in a stock of provisions limited only by his storage capacity.

From the frequent occurrence of the aquatic roots in their stomachs, it appears that they are not entirely carnivorous. A "Cracker" informs me that he planted a crop of cucumbers near a pond, and that when the "cukes were big enongh to pull, the "Gators come up and cleaned out the hull crop."

It is evident that a square meal is an uncertain event, and doubtless weeks often elapse during which the Alligator has little or nothing to eat. In confinement, they are said
to have lived six months without food. When prey is caught of sufflient size to offer resistance, the Alligator sets his jaws with a vise-like grip; then, by using his tail, rolls rapidly over and over until the prey is drowned, when, if it be too large to swallow whole, a mouthful is seized, and the rolling process repeated, until it is bitten and twisted off.

- In their common walk, the central surface just clears the ground, and the end of the tail drags so as to leave a sharp cut in the mud between the foot-prints. But, when necessary, the Alligator can arch his back, straighten his legs so as to raise his body some distance from the ground, and shuffle off at a surprising gait. As a rule, he seldom goes far from water, and when he does, it is in traveling from one body of water to another. If the water dries up, he selects the lowest place in the basin, and digs a hole, usually five or six feet deep, running back under some protecting growth, whose roots keep the roof from falling in unon him. Here he lies and dreams the hours away, in a chronic state of mud-bath.

The swimming is done entirely by the tail, the legs being laid back against the body; the powerful, flat-ended tail sweeps from side to side, just as a fish uses its tail, excepting that a 'Gator's tail, being longer, has a more serpentine motion. As usually seen swimming, the upper half of the head is above water, and moving slowly along; but at times, when startled from the shore, he will plunge quickly in, and swim off underneath the surface for a short distance, at the rate of six or seven miles an hour.

As to his disposition, I am afraid that, aside from its most prominent features, it will remain to the human mind a sealed book; for however well we may understand him from our own stand-point, we are utterly at a loss to understand him from his, as outside of obedience to the two most prominent laws of life-the preservation of the individual and the perpetuation of the species-he seems to take so little interest in existence that you can not help wondering what it may all mean to him.

Where the death-dealing hand of man has not set the seal of fear upon the 'Gator, yon can approach, even in open water, to within a few yards of him without attracting any more attention than a wide-opened mouth and an aspirated hiss; but after a few days' shooting, their noses, ears, and eyes all detect your presence, and their fast-disappearing forms suggest an unsuspected aptness in receiving ohject-lessons. On the whole, he is a sluggish, very slıggish, animal, not even being an active hunter; but loafs around in hope that something may turn up-that probably a fish may unwittingly swim near enough to be snapped up by a quick motion of his long jaws. But lazy and sluggish as he is, and cold as is his blood, there are times when it must course swiftly through his veins; for on a little island of muck, in the center of a pond, a female is heaping up a pile of saw-grass and dirt for a nest, while upon opposite sides of the pond, and just upon the edge of the saw-grass, eying her with warm glances of admiration, and each other with the sullen glare of hatred, lie two old males, whose scarred and bleeding bodies testify that even a 'Gator's cold blood is thicker than water. The smaller one moves painfully, for his right fore foot is missingthe larger one got his jaws upon it, a few rapid turns, and the foot was gone, probably soon buried in the stomach of the victor. This loss of a foot in fighting is quite common, for I have taken three thins maimed and heard of others. Again, they may fight for no apparent reason, as a reliable witness tells me of a severe and, on the part of both, voluntary fight between a large 'Gator and a Shark of equal length, in which the former came off victor.

While the 'Gator has been known to make an unprovoked attack on a man, and while in isolated regions, when not acquainted with fire-arms, it would not be wise to venture into water near large ones or the nests of females, still, as a rule, they are only too glad to make good their escape.

To those who anticipate sport with the 'Gator, the question naturally arises as to what is the best fire-arm for the
purpose. The idea seems prevalent that it requires an Express charge to get a bullet into his head. It is a mistake. A thirty-two-caliber bullet, driven by a fuir charge of powder, would, if it hit squarely, enter any 'Gator's hedd, and, properly placed, would be as effective as a can-non-ball; while a charge of No. 6 shot, at thirty yards, would enter his side. Of course, I do not mean to say that a thirty-two-caliber would be a desirable size, but only to make it understood that a large, eight-bore Express charge is wholly unnecessary. For all-around 'Gator-hunting, I would prefer a thirty-eight or forty caliber repeatingriffe, giving the flattest possible trajectory consistent with accuracy. These sizes are large enough, and in many cases a repeater will be found preferable to a single-shot; while the flat trajectory will be found especially desirable in making long shots over water, where the distance is difflcult to estimate with a sufficient degree of accuracy to put the ball into the small portion of the 'Gator's head that is visible above the water-line.

As for myself, I used a thirty-eight-caliber Winchester, model of '73, on which I replaced the front sight with one made from a 'Gator's tooth, which reflected less light than the original metallic one, and filed the rear sight flat on top; then with a rough-edged case-knife I cut a fine groove in thre conter. Of all open sights, I like this best, as at a quick glance it gives the clearest idea of just how coarse or fine a sight you are drawing, and is especially advantageous in shooting in twilight. With this rifle so sighted, and reloading my own shells, I have killed from a moving boat, at from forty to one hundred yards, eight swimming 'Gators in as many consecutive shots, hitting them all in the ear; but of course this was an exceptional run of luck, that I could never hope to duplicate. In shooting any game, it is usually now or never. If the distance be great, it is necessary to estimate the same as the gun comes to the shoulder-and even with the most experienced, these estimates are often far from correct; and especially over water is this the case.

When it came to shooting two hundred yards or over, unless the 'Gator would kindly wait for a second or third shot, he usually escaped, and this escape was most always due to under or over shooting; consequently the desirability of a tlat trajectory. To be sure, three-fourths of the game, at least, killed in wooded countries is killed within one hundred yards; but the remaining one-fourth is of sufficient importance to justify special effort, first in securing the proper ritte, and second in diligent and careful target practice, until you can tell just where the ball is going to strike at a given distance. In wooded countries, you should carry the ritte sighted at saly one hundred yards; then at fifty yards aim a couple of inches under where you desire to hit; at two hundred yards, six inches above, etc. In a short time you will learn to estimate distances correctly, and to hold over or under just enough to bag the game, in the majority of cases.

On the west coast of Florida, between Tampa Bay and the Gulf of Mexico, lies the little sub-peninsula of Pinellas, which runs out from the west coast much the same as the State does from the south coast of the United States, thus making a little sub-Florida, with all of her climatic peculiarities in a slightly intensified degree. Like its mother peninsula from which it springs, Pinellas has its fair number of ponds, some creeks and small lakes, all of which support their share of animal life; but in this respect Lago Magoire outranks all the rest, for, from microscopic crustaceans to fish, its shallow waters are unusnally full of life. So rich a part should have its guests, and so it has; for scattered over the suface of its waters, and upon the banks of Lago Magoire, lie many 'Gators.

So much for our game and the arms to take him with; and now for a few hunts for him in Lago Magoire. It is often as desirable to know what not to do as to kiuw what to do; so let us begin with my first 'Gator.

Looking across the smooth waters of the lake toward its palmetto-lined shore, we saw its surface broken by many a long, dark head and an occasional rough back, all lux-
uriating in the morning sunshine just reaching them over the tops of the tall pines and cabbage palmettos. Confident of success, with so many in sight, we pulled for them in a boat; but, one by one, as we glided almost near enough, sunk slowly beneath the water, leaving but the vanishing ripple to mark the place where each went down. Finally, despairing of finding any asleep, blind, or absentminded, I landed, leaving W-and the ladies in the boat, Eshing. After creeping through a hummock of live oak, cabbage palmetto, and undergrowth, I came to a more open growth of pines and saw-palmetto, where I could get a view of the lake; and on looking down the shore, saw, just off a point of land, a half-dozen suspicious-looking objects. Making a detour back from the shore, I crept through the palmettos toward the point. On arriving at the shore, and cautiously looking over my cover, I saw the heads of six of the great saurians, all within one hundred yards of where I stood. Having always heard that the eye is the proper place in which to shoot a 'Gator, I picked out the largest, and aiming for his visual organ, fired, only to see him start off for deep water at a rapid rate. I kept on pumping balls from the Winchester until I had fired seven shots, when he halted, lashed the water with his tail, raised his head, shook it in a tragic way, and sunk.

Having to give him up, I soon found others; and by repeating my stalking, got within fifty yards of two, who discovered me at the same moment, and made such haste to leave as to forget to take their heads under water. At the first shot, the farther one sunk dead; at the second, the nearest one rolled over, raised one fore leg above the water, and waved it in a manner so suggestive of "Good-bye, Brother Watkins,'" that I thought he too was dead. No boat being near, and fearing that he would soon sink, I concluded to wade in and float him ashore. As I intended to prepare his skin for mounting, I did not want to tear up his skull with any more bullets; so, leaving my rifle ou the high ground, and cutting a green pine sapling, about three inches in diameter, to use in case of necessity, I waded con-
fidently toward his 'Gatorship, now lying toes up. When within a few yards of him, he suddenly began a series of revolutions that would have done credit to an acrobat, and as he turned the top of his head, displayed a hole as large as an orange, where the bullet had knocked out a bone.

In his struggles, he came within reach of my $\ln \operatorname{lnh}$, wiutn I dealt him a blow that I expected would finish him; but the green pine proved too springy to be effective, as it only called his attention to my presence, and, with a stroke of his tail, he shot coward me. Not having time to retreat, or even to raise my club, I quickly stuck the end of it into the hole in his sin?ll, and thus keeping him at a short distance, began bacsing toward shore.

Time and again he freed himself from the end of my club, and each time advanced to the attack, but only to again realize the point of my protest in the sharp end of the sapling firmly inserted in his sore spot.

Thus remonstrating, I finally reached shore, where I expected liir, to give up the attack; but no, his blood was up, and in spite of the blows that I rained upon him with the springy sapling, he followed me a couple of rods on land, when, by a quick grasp, he got my pole in his mouth, and by rolling rapidly over in the mud, twisted it from me. I soon regained it, however, and belabored him so severely that he turned and ran to the water. Having begun to look upon his skin as belonging to me, I did not like the prospect of losing it, and so grasping the end of his tail as he was entering the water, a struggle ensned that fanned me around pretty lively, and frequently landed me in the mud; but he finally became exhausted, and taking advantage of a passive moment, I dragged him back, and beat him until he was stunned; then, turning him over, used a knife on him in a way that I rhonght would be effectual. After regaining my breath, I measured him, and found him to be eight feet in length.

On returning to the boat, I saw W - fast asleep, with fishing-line in hand. In response to my excited calling, he jumped up, grasped the oars, and began making earnest
but awkward efforts to row, that resulted in no movement of the boat, but much merriment among the ladies. They laughed all the: louder as W-_'s awkward efforts grew more tragic, until, tired of the splashing that they were getting, they told him that it was customary to take up the anchor before rowing away.

After reaching the Alligator, we fouw: h: sain on his feet. He was again subjected to the r . $\mathrm{h} \cdot \mathrm{o}$, nocess, and tied to the landing, where I fnind him the next day, not dead, but still able to walk. I have recounted this adventure, not in order to show how to kill an Alligator, but to illustrate his wonderful vitality and his tenacity of life; also to teach Northern sportsmen what course to shon.

On reaching the place where I had killed the Alligator dead at the first shot, we fished him up, and found that I had hit him in the ear; and on dissecting his head, learned that the brain of a ten-foot Alligator is no larger than a man's thumb; that owing to its small size and location, it is not to be reached from the eye unless the ball ranges backward and downward after striking; that some of the topmost bones of the skull could be removed wistout exposing the brain, and that the proper place to amot? 'Gator, when broadside to you, is in the ear, wis cl? i:s ten-foot animal, is about three inches back of the cy.. Acting in accordance with the knowledge gained in dissect. ing that head, I have since shot over fifty 'Gators, from six to eleven feet in length, and seldom failed to kill them at the first shot. As a dead 'Gator is such an uncertain quantity, it is well to run the small blade of a pocketknife down between the occiput and the first cervical vertebra, thus sevring the spinal cord, which is the most uffectual way of killing any anime'. . ifter tresting them in this way, I have taken three ' $\mathbf{C}+\ldots, \ldots$, weighing $f i t$ least two hundred pounds each, into a skiff at one time.

In regard to the different methods of approach, any experienced hunter would he able to choose the best on seeing the lay of the lanc. Shocting from the shore is usually most successfut; but a friat should be handy, for a
'Gator usually sinks as soon as killed, if his lungs are not filled with air, and in case they are so filled, it is likely to escape as soon as the animal is dead.

When not too wild, they can be approached in a boat even in plain sight; but this depends upon how much they have been shot at. Like all reptiles, they learn quickly, especially when taught in snsh impressive ways.

On warm, sunshiny days, they are especially fond of basking on the bank; for even a 'Gator appreciates the hygienic value of a sun-bath. Taking advantage of a certain morning when the wind was blowing parallel with the shore, rigging a skiff with oar-lock in the stern, wrapping the oar with cloth so as to make it noiseless, and tying it to the boat so that it could be dropped without losing, I stood, rifle in my right hand and oar in my left, only steering when the wind was in my favor, but sculling when aecessary. Thus gliding noiselessly along the edge of the saw-grass, which in places was trampled down by Alligators into beds that grew more and more frequent as I progressed, I "kep' an eye skun," as the Cracker expresses it, for the long game. As I rounded a small point, 1 heard a splash, and caught sight of a hoge serrated tail, as the fast-traveling waves reminded me that the eyes, ears, and nose of even a'Gator are often too sensitive for us, and that their sluggish muscle is capable of rapid motion when necessary.

Another and anosher plunge; but it would not pay to wait for tiem to cone up, for it might not be for half an hour, and then they might be far out in the lake.

As I rounded another point, straining every nerve of sight and hearing, whack! came a mullet against the boat with such force as to give me a nervous start; but the same noise gave something else a start, for first a rustling in the grass, and then a long, dark head appeared at the edge, and, unfortunately for its owner, cast his first glance down the lake, and before he could turn his head, a ball had crashed through it, and lodged under the tough skin on the opposite side. The shot aroused three more saurians,
the nearest of which fell an easy prey, and turned toes up, one foot moving to and fro in a dreamy sort of way. I soon sculled alongside of him, threw a noose around his neck, took a half-hitch around his jaws to keep them shut, drew his head over the stern of the boat, and with a small knife severed his spinal cord. He was not over eight feet in length, so I easily dragged him :iooard.

Returning to the first 'Gator, I get the rope around his neck and began pulling him up, when he began rolling, thus winding the rope around his body until my hands were brought against his rough back, when I had to let go, and he went down, and, as the rising bubbles plainly told, was crawling along the bottom. Picking up my striking-pole, to which was attached a lily-iron and long line, I followed the path of bubbles, and when over my game endeavored to plunge it into him; but striking under such conditions is uncertain work, and it was a good half-hour before I made a fortunate throw that buried the iron in his back. Then away we went. I rested from my exertions, while taking a ride at his expense, until, tired out, he sulked at the bottom.

Being anxious to dispatch him, I punched him with the oar until he, now in fighting humor, came up in good $\approx=$, with an ugly glare in his eyes, and with open month made for the boat. I thrust the pine oar into his mouth, and picked up my rifle. With a snap and a twist, the oar Hew throngh the air, the handle striking against the boat; the 'Gator having broken off a mouthful. He again made for the boat, when, with the muzzle of the riffe within two feet of his head, another bullet met him, and caused his jaws to drop together limp and lifeless. He was eleven feet long, and too heavy to lift aboard; but tying a rope near each end of the boat, and passing the loose ends under the 'Gator, then taking an end in each hand, and standing on the gr awale so as to sink it to the water's level, by heavy hauling on the ropes I rolled him aboard, just as a $\log$ is rolled upon a wagon.

On the way to the landing I killed $\cdot$ a third 'Gator, that, from the way in which he allowed me to approach him,
must have wanted to commit suicide. The boat was now heavily loaded, and sitting astride of the largest, with a smaller one on either side, I moved slowly homeward. I did not notice the high-piled white clouds that tipped the distant pines until the threatening thunder shook the air, and the softest of Florida zephyrs, that caress your cheek as gently as the hand of a babe, grew into a breeze, ruffled the water, bent low the grass and rushes. Then it came stronger and stronger, causing the great pines and palmettos to sing their solemn song of complaint, until the heart of Mother Nature was full, her passion had reached its height, and tears followed. They fell until everything was drenched; and then, as quickly as it had come, the storm passed away, across the low land beyond the lake, and disappeared over the distant pines. The sun came out, and each glittering drop did its best to acknowledge and reflect back his smile.

The rain-drops had beaten the waves down, so that in a few minutes the curface of the lake was as smooth as a mirror. It was soon broken, however, behind me, by a rising head and an arched tail. Both raised weli ont of water, when from his mouth came the deep, sepulchral roar of an old bull 'Gator. Scarcely had its last vibrations died away, when, as far as eye could see them, the lake became dotted with highraised heads and arched tails; while from every throat came the deep roar that, swelling into a weird chorus, rolled across the lake, over the flat shore, and into the pines, as if following the rain.

As to the cause of this 'Gator concert, I leave others to gress. I can not explain it, but would suggest that all being subjected to the same conditions of weather likely to cause them to roar, the governing impulse of example of the leader was sufficient to start the others-just as a flock of chickens, standing idly by the barn, may all stretch out their necks, spread their wings, and run in play, simply because one of their number started them by his example.

Next, we concluded to try striking 'Gators by firelight, and rigging a jack in the bow of the boat, stored away a few armfuls of fat pine. As utarkness closed around us, we
lit the torch, and with Doctor A-at the oars, and myself standing in the bow, striking-pole in hand, with two hundred feet of line coiled carefully at my feet, we glided out into darkness; yet we were always surrounded by a circle of light, that, when the water was not too deer, lit it up to the bottom.

To our right, darted away an old red-fish, with a speed that seemed to be born of the knowledge that he was good to eat; while to the left, ran, in hurried confusion, a school of mullet. Sidewise, backward-any way to get awayscampered the crabs, every motion showing lively abeyance to fear, yet ever presenting their defensive claws in a defiant way, as if to say, "You had better not; I'll bite."

As we neared the opposite shore, the shadows of the tall trees added their strange charm to the dark water, and the harsh cry of the startled heron, as he rose from his bed, gave filing voice to the weird scene around us.
"Ouch! Great Cæsar!" These exclamations gave expression to the fact that a sudden gust of wind had swung the jack of burning pine against my head and shoulders; but there was no harm done beyond singed hair and a spattering of ?ot pitch, that refused to be removed without taking the epiciermis with it. Then turning my back to the light, I'saw, off to the left, a pair of 'Gator's eyes lighted up by the glare of our beacon. The Doctor now put the boat within twenty feet of the owner of the eyes, who blinked wonderingly at the strange apparition. I had a fair strike, but the lily-iron happened to strike a bony plate, glanced off, and the head of the reptile disappeared beneath the dark water.

Soon the white chin of another appeared within our circle of light, and as the pole left my hand, I grasped the line, now running ont as fast as a nine-foot 'Gator could travel. The boat was now under headway, the 'Gator doing his level best to get away, and swimming head and shoulders above water; our light swinging to and fro, and the water splashing against the boat-all served to give us a novel midnight ride. But our tow-horse soon became
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balky, and a revolver-bullet rolled him over; but as we attempted to take him in, he suddenly darted beneath the boat, and we could hear and feel his teeth splintering the keel. This not being on our programme, we hauled away on the line until his head appeared at the surface, when' the Doctor dealt him a heary blow with an ax.

We ther i hauled him into the boat, supposing him to be dead. He soon recovered from the blow, and seemed to conclude that he would paddle the canoe himself. At any rate, he did paddle it with his huge tail in a manner that threatened instant destruction to it and to us. We would gladly have got out and walked, had the walking been good, but it was not; and as for swimming, there were so many other 'Gators in sight that we shrunk from the thought of escaping in that way. The old saurian was reaching for me with his yawning jaws, and fanning the Doctor and the boat with his tail in such a terrific fashion that it became necessary for us to act promptly in selfdefense. I managed to get hold of the ax again, and this time split our passenger's head wide open.

Then we resumed our fishing, and soon had another, a small one, not over four feet long, which we took into the boat alive, but again had to do some active hopping to avoid his snaps. After dispatching him with a piece of "lightwood," his infantile appearance relieved us of the desire to kill any more, and we turned homeward, fully persuaded that, owing to its weird surroindings, spearing by firelight is one of the most interesting methods of hunting the Alligator.

Having now tried most of the common ways of approaching the 'Gators, still another remained to us, and that was hunting them with a dog. This is not based upon the dog's love of 'Gator-hanting, but upon the 'Gator's love of dog-hunting. Now, Doctor A - had a large, worthless dog, for which I lacked that kind regard that I usually feel for worthy members of his race; for did he not step quietly up behind me, one dark night, and by his sudden "bow-wow-wow," spoken in close proximity to my
coat-tail, cause me to spend the next five minutes in feeling around on my hands and knees for $n$ lost slipper?

The Doctor readily gave his consent to the use of Nep as an Alligator-bait, with the request that I would not bring him back. After the usual amount of compliments, such as "good dog," "pretty Nep," "fine old fellow," etc., had beer addressed to lis dogship, he kindly consented to being alternately dragged, led, and carried to the lake, where I tied him to a bush at the water's edge, and retiring from his sight, hid in the bushes where I could get a good view of the water.

Nep supposing that I had left him, set up a series of dismal howls, interjected with short, sharp notes, that for ear-splitting qualities could only be equaled by a prima donna. Soon a few heads, discernible in the distance, turned and begin to move slowly toward the dog; some in a business-like way, and others so slowly that they scarcely seemed to move at all. After reaching the shore, they swam back and forth, casting longing glances in the direction of the dog, but apparently in no hurry to venture upon shore for him.

After this performance had been kept up for an hour, I tied a heavy stone to Nep, anchored him in water up to his neck, and retired to the shore with ready rifle, but anxions to see as much of their method of attack as was consistent with the sufety of the dog. Nep sniffed the water suspiciously, and made frantic efforts to escape. Soon a dozen heads reappeared and moved cautiously toward the poor dog, who, with ears laid low, lips rigidly contracted, and wild eyes, was alternately uttering defiant growls and terrified yells, altogether presenting a fine study of enforced defiance.

One old 'Gator finally approached to within twenty feet of the dog, stopped, and slowly began to sink, preparatory to darting upon the now frantic Nep. As his attack was to be under water, this was as far as I dared let him go; and just as his head was disappearing, I put a bullet through it. could ies of tat for prima tance, ome in arcely iswam rection 3 upon hour, I to his nxions esistent er sus2 dozen Re poor ed, and ls and nforced hty feet aratory ack was him go; a bullet

I was tempted to see the attack through, but the pitiable cries of the poor dog, worthless though he was, would lave haunted me if I had not relieved F ' m from the terrible position in which I had purposely placed lim. When I waded in and released him from his perilous plight, he started for home, and only touched the ground a few times en route.


# THE ETHICS OF FIELD SPORTS. 

By Join Dean Caton and W. B. Leffinowell.

令LOVE to leave the noise and rush of city life, where man is ever striving with his fellow-man, and set my face toward the green wildwood, where Nature reigns supreme. Not alone I go, but with one whose tastes are congenial with my own. Aye, not with one only, but with two or three, I love to make a journey to some old, familiar camp-ground, or to some new and attractive one, in the deepest forest we can find, there to pitch our tent beside a fountain gushing from the living rock as if some Moses-in former times had touched it with his wand. The music of its waters, as they leap from rock to rock on their way to the greater stream below, has often soothed to sleep when a hard day's chase has necessitated repose.

In the morning, at the break of day, we have climbed the bluff above to catch the music of the birds, whose melody told of happiness and love. Seated on an old mossclad $\log$, I love to watch the nimble squirrels as they leap from bough to bough, or chase each other up and down the old pine-trees, or gather acorns from the oaks hard by. While thus absorbed in contemplation of these cheery little strangers, I have been startled by the great antlered buck, as, in bounding leaps, he rushed madly through the brakes, startled by the report of my friend's ritte, or in pursuit of the timid doe. Oh, how delightful are such scenes! Their very remembrance is a joy renewed.

But it is not alone the charms of solitude that lure us from the haunts of men to the wild life of the woods; such scenes are but episodes in the hunter's life. He seeks the wilderness or the mountain in pursuit of game. When
upon the chase, he forgets hunger and fatigue. With laborious, yet cautious steps, he follows the signs that tell him there is game ahead; and finally, when in response to the echo of his rifle he sees the great quarry plunge forward, fall upon his knees, and then stretch himself upon the ground, theri it is that an exultant thrill flashes through every tiber of his frame, so intense as not to be compared with any other joy. Then it is that he measures the proportions of his capture, and carefully seeks for some new feature of the animal to a?d to his store of knowledge. The hunter, above all others, can study the habits of the animals he pursues and captures; and so, if he will, may gather a fund of knowledge which will be of untold value to the scientist, who mist study only in his laboratory, his library, or in lis parks. The hunter, who seeks and takes the game in its native fastnesses, may thus, I say, give him valuable assistance.

To most sportsme.:, companionship is indispensable to the full enjoyment of a life in camp. For myself, I have ever made this the first consideration when contemplating a hunting excursion. One disagreeable companion will poison the pleasure of a trip. One who is wer seeking some advantage over his associates, and ever boasting of his superior skill and greater captures, must soon lose favor in the camp. He it is who will shirk some little duty which at times is liable to fall upon any member of the party. If he discovers a favorable pool for fish, he will sneak off by himself, in the hope of capturing a big string. and of boastfully triumphing over those who may have been less fortunate. If he happen to make a good shot in the course of the day, he will come rushing into camp with a loud whoop, fairly swaggering over his success, and insisting that nohody ever made such a shot before, or ever will again. He will boast of it for the rest of his life, without noticing the smile of contempt which his auditors can not repress.

The true sportsman enjoys and commends the sticcess of his companions as much as his own achievements. Selfish-
ness is the bane of camp life. The selfish man is ever seeking his own pleasure and gratification regardless of others. He appropriates without shame the best of everything within his reach. He shirks without scruple his share of the duties which devolve upon each, without appreciating in what a contemptible light his conduct is viewed by other members of the party. He forfeits the respect of his associates, and soon contempt takes the place of the mutual respect so necessary to a pleasant onting.

Egotism is scarcely less to be regretted than selfishness; indeed, it is closely allied to it. The egotist is ever boasting of his own achievements and belittling those of others. The success of another affords him no pleasure, but rather mortification. His ambition is to be considered superior to others, and, to secure this end, he will not hesitate to belittle their acts, if not by direct words, then by covert insinuations.

Geniality is indispensable to a happy life in camp, and this is best promoted when each one seeks to gratify the sensibilities of the othors, by commending their achievements rather than by boasting of his own. Sportsmen should, above all others, cultivate a cordial, fraternal feeling, in which the highest honor, integrity, and liberality should prevail.

I was once at Cedar Key, Florida, and borrowing some fishing-tackle, went down to an old, dilapidated wharf to try my hand for sea-trout, which I was told were taken in those waters. There I found an elderly man fishing, to rhom I introduced tnyself. I told him I was fond of fishing, but was a straager to those waters and to the sea-tront, which I understood prevailed there. Thet was introduction enough. He kindly offered to tell me what he knew about them; and, as he was short of bait, I gladly supplied him with some of mine. He explained the mode of angling for sea-trout, and then proposed that we go "cahoots," to which, of course, I gladly assented. I imitated his casts as closely as I could, but somehow the fish knew the difference, for every few minutes he landed a fine specimen, after a lively run; but very few touched my bait. When we
finished, as beautiful a string of fish as one could wish to look at lay upon the wharf, the sight of which I admired moie than I possibly could the taste. The charm was soon broken by the old cord-wainer, who proceeded to divide our spoils into two equai parts. This I protested shonld not be; but he said it was all right, for if luck had iavored him the most, the difference was but very sniall, and as we were partners, I was entitled to my half. I conld not consent, however, to thus deprive him of his game, and scttled the matter by picking up four out of the pile of perhaps fifteen or twenty, and telling him that was more than I could use. We shook hands and parted, with a warmth of feeling which, under other circumstances, it might have taken a long time to engender.

I refer to this incident to illustrate the feeling and friendship which should always prevaii among sportsmen, whether hunting or fishing. He was a man after my own heart, and I only regret that opportunity never permitted me $t$, mee him again. He had a great heart, and between us there at once grew up a fraternal feeling; a cord of sympathy was drawn out between us which made us brothers, and would have prompted us to make great sacrifices for each other, if need had been. Would that all sportsmen could thus feel and act toward each other.

Good-feeling is indispensable to the enjoyment of the sportsman's life. Cordiality alone can make it enjoyable. Selfishness and egotism beget dislike; harmony begets cordiality; discord engenders dislike, which not unfrequently degenerates to hatred.

Allowance may be made for the enthusiasm of the neophyte, and even approval of it; for who will ever forget the exnltation which he himself felt when he saw his first Deer fall to his rifle? Had he not felt exultant then, it would have bespoken a lack of spirit, which one needs to become a sportsman; nor will he ever cease to feel a high degree of gratification at the moment of a successful capture. Bnt to exult in this to the disparagement and discomfort of one's companions is what I wish to discourage.

A mere love of slaughter does not bespeak a sportsman; that feeling might be better gratified in the abattoir than in the woods. No matter how abundant the game, none but a brute would ever kill it for the mere pleasure of killing, and leave it to rot on the ground. The feeling of utility must be associated with its capture. If it can not be utilized, a pang of regret must take the place of gratification, in the breast of a true sportsman, when he sees his game laid prone before him; and how glad would he be were it alive, and bounding away through the woods or over the prairie!

The true sportsman's camp is a school for the young beginner, where he may learn many things besides the mode of pursuing and capturing lis game. It he be fortunate in selecting his associates in his early outings, he will learn many things, besides the mode of hunting, which will contribute largely to the pleasure of his life in after years. He will learn how largely acts of kindness and courtesy toward his $\mathrm{com}_{1}$ nions contribute to the happiness of all; to commend the skill of others rather than to hoast of his own; to strike or pitch a tent; how to dress his game; to cook a meal, when occasion shall require: and a thousand other things which need not be mentioned here. He will learn that a sportsman may be a gentleman, and indeed should be, if he would make himself agreeable to his companions, and contribute his share to the enjoymeni of the excursion.

The true sportsman does not hunt solely for game, but for the pleasure it affords him, for health, and to rest himself from the toil of business. In this he rarely disappointed. Look about yon and see what a large proportion of those who have, each year, torn themselves from business, and spent a few weeks in the hunter's camp, or on the banks of streams, enjoy robust health, even in alvanced age. Their systems, when young, become well knit together, their constitutions greatly strengthened, and so they are enabled to perform more labor, and with less fatigue, than those who lack the energy or the inclination to leave their common avocations and seek much-needed rest.

I speak not now of those who hunt for game only, for, as a general rule, they have no business, which could. fatigue their minds, at least, if they have minds to be fatigued. Ie they would devote the same effort to some other honest pursuit, their gains would be vastly greater, taking the season through. That class of men have always been called shiftless, and have lacked that degree of respectability for which all honest men should strive.

I regret that there are some who aspire to the name of sportsmen, who, on occasion, fall beneath that rank. I refer now to those who do not hesitate to shuot game or take fish out of season. In a wild and uninhabited or sparsely settled country, where the stream ${ }^{2}$ are swarming with fish, which are never taken because there is no one there to take them, or in the far-distant wilds, where an abundance of game is found, which is rarely hunted, game laws would be out of place; and so it would be quite proper at any time of the year to take as much meat, or as many fish, as one's necessities might require-but even then, to capture more than could be utilized would be to indulge a brutish and unmanly instinct. But in countries where civilization has, to a large extent, driven off the wild animals or game birds, all right-thinking men must appreciate the necessity for laws to protect them from extermination; and these laws have just as binding a force upon every citizen as that law which says "Thou shalt not steal." At least, such is its legal obligation, and so, indeed, should it be binding morally. No game law can ever be framed which will meet the approval of all; and if one man says that he thinks that the close season commences too early, and therefore he will not observes it, another may, with equal propriety, claim that there should be no law which would prevent him from shooting game animals when he pleases-his father, fifty years ago, shot all he wanted, and why should he not enjoy the same right?

He forgets that conditions are changed, and he must admit that it would be very unwise to exterminate all our game birds and animals; and yet, unless he and his like
are restrained, utter extermination must soon follow in those countries where game is beginning to grow scarce. The wild animals in any country belong to the State, and it is only by sufferance that the State allows anyone to kill them; hence the right of the commonwealth to protect the wild animals within its borders is as unquestioned as is its right to protect its treasure in its vaults.

On this important subject, civilization may learn something valuable from savage life. When the great prairies were first visited by the white man, they fairly swarmed with great herds of Bison, and so they continued till they were exterminated by the white man's rifle. As late as 1840, I saw large collections of their bones on the Illinois prairies, still in a good state of preservation; and two miles up the south branch of the Chicace River, at a place now within the heart of the City of Chicago, for more thin half a mile the whole surface of the ground was covered with Buffalo-wallows, so that it was difficult to drive a wagon, except at a very slow rate, over the surface. Other large game was equally abundant throughout this great valley at an early day, and so it had undoubtedly been for untold ages. During all this time, large tribes of Indians inhabited every part of it, whose principal subsistence was the game they killed and the fish they caught; but they wasted none, they only killed to supply their wants, and the result was that the game was never depleted, but continued as abundant year after year, and century after century, as it had ever been. While this could not continue in a country densely settled by civilized man, there are large districts of country where the conditions are such as to be well adapted to the well-being of every species of wild animal known to the country, if the white man, who seeks them, would only kill enough to supply his wants. The smaller game, such as grouse and water-fowl, are still with us, and would be in great abundance forever, were they but reasonably protected, and no more killed than enough to supply the legitimate needs of those who hunt them, and at the proper seasons. Let us,

I say, learn a lesson from the Indians who preceded us, and not extend our slauglter beyond reasonable limitc. If we will not spare the game from choice, then society must interpose, and compel us to do what we should do voluntarily. Imagine a country entirely destitute of wild animals, where all the native fauna have become extinct, and to most men it would scem like a desert, many of its choicest charms would be gone, and it would become the: most fitting abode for the miser, whose happiness consists in counting his gold.

When the white man drove the Bison beyond the Missouri River, it gathered in countless herds on the great plains east of the Rocky Mountains, and filled the country from Texas to the Saskatchewan. But twenty years ago that whole country was covered with the Bison, in numbers almost beyond computation, and there was the grandest lunting-ground ever known in any part of the world. So great were their numbers that. it was thought they never could be exterminated; and yet, a single score of years has sufficed to blot them from the face of the earth, with but very few exceptions. Had Congress done its duty, and stretched out its arm to protect this, the grandest game animal in the world, we should now have a preserve which would be the boast of every true American; but it is too late now-that great opportunity is forever gone. A few may be preserved in the Yellowstone Park, but only enough for specimens; the area is too limited for more. Other large gane may be there preserved, but only to the same extent. Had the Government acted upon General Sheridan's recommendation, made some years ago, to greatly enlarge that park by the addition of a mountain district adjoining it, which can never be useful for any other purpose, then indeed we might in time have had a collection of wikd animals peculiar to our country, approximating, at least, their condition in a will state.

Had each white man who went to hunt the Buffalo been as reasonable in his tastes as the ignorant red man; had he killed to supply his reasonable wants, and no more-law or
leap from crag to crag, rushing through the dells, over hill and dale, in the thickets, or in the tall prairie-grass; or in milder sports, with faithful Setter and armed with light and easy-hanging gun, to seek the woodcock among the alders and brakes, or the confiding quail on the golden stubblewhen I find a man who does not love these pastimes, it seems to me that Nature has been derelict, and has neglected to engraft into his being the highest attributes of manhood.

Not love Nature ?-the flowing streams, the placid lake, the waving prairie, the majestic forest, the grand, towering mountain, the stublime, peaceful valley! When a man can say, truly, that the cares of business have weaned him from the love of these things, then the longing for wealth, its power and influence, has torn from him the enjoyment of some of the greatest blessings of our life. We often wish some dear friend or some honored guest, as he bids us goodbye after having favored us with his companionship for a time, health, wealth, and prosperity; but the greatest blessing we could bestow on him, had we the power, would be perfect health. Yet it is within the province of nearly every man to possess it, if he will. It is not to be found in the shop, the office, the store, or leneath the roof of buildings made by man; it can be realized in its entirety only in the open fields, in the forests, on the streams, when the earth is bathed in sunshine, or when the Goddess of Night casts her mantle over tired Nature, and kisses to rest the departed day, breathing into her sleeping form the sweet incense of renewed life, as she bathes the verdure with her tears of dew which gladden our existence.

A seltish person we despise; but he who loves the freshness of the fields is not, nor ever will be, selfish. There is a charm which seems to dwell in the balsam of the firs, in the purity of the fields, in the odor of the flowers, which descends from the blue vault of heaven by day and lingers through the starry night, forever ennobling and enriching the heart of him who loves the fields. You say of him, he loves dogs or horses. Show me the man who does, and I
will see in my presence one who is kind, generous, and brave; for one can not love animals and delight in their companionship without learning from them lessons of unselfishness, and without becoming himself the soul of generosity. Still, we must admit, reluctantly, that there are exceptions to this as well as to all other rules, and we wonld not conceal the fact that there are so-called sportsmen who are selfish. These exceptions simply prove the rule we hive stated.

As at times that which seems most perfect in appearance is sullied with hidden defects, so it is with some sportsmen. It often takes years, in the ordinary course of business or social life, to find out a man's true nature; but if you will but camp with him, hunt with him, or tramp with him, on some nomadic excursion for a few weeks, his real character will become as open and plain to read and to understand as in open book when the day is at its brightest.

Were I to invite you to my house, you would be an honored guest. All the sourees within my power, so far as my means might permit, would be brought forward in order to make you feel that you were welcome, and that my aim and desire were merely the gratification of your pleasures. The hospitality which one friend so gladly extends to another, you would expect, and I would accord you. Suppose, however, I broaden the invitation, and, instead of inviting you to my house, solicit you to enjoy, as my guest, the pleasures of my fields. Should there be a distinction in my manner of treatment of you, as between my house and my fields? Most assuredly not. Yet I have been received with the greatest cordiality at a man's house, who left me under many obligations to him as I bade him goodnight, but who has chilled me, and canceled all the kindly feeling I had for him, by his selfishmess on the following day. Taking me to fields where game was plentiful, he has shot throughont the day, taking first choice of ground and of shots on all occasions, apparently without the least compunction of conscience, regardless of all etiquette or common decency.

If you were my guest, my desire would be to make your visit u pleasant one; it would make no difference whether at home or afield. Were I to seat you at my table, then help myself before offering you the choicest before us, you would rightly consider me a boor. Yet some men, who profess to be sportsmen, and who would show no such illbreeding at their table, will, in their shooting, rob their guest of lis shots regardless of the birds' tlight. 'Then, at the close of the day's sport, ufter having acted the part of the swine in picking out the choicest ground for themselves, and shooting birds that did not belong to them under the rules of the field, and that they knew would have been bagged by their guest, they will boast to some country bumpkin of how they killed "twiced as many as the other feller, who is considered a mighty good shot."

I know of no one so despicable to hunt with as such a man; and yet, linked to him in the closest alliance is the one who fires at every bird, and constantly claims that he kills each one that falls. There is nothing more disgusting than this; and when a gentleman is unwittingly found in the company of such a man, the day is spoiled for him. He wonders what he has done that a punishment so hard to endure should have been inflicted on him.

The fields may be broad, the space unbounded wherein to hunt, and yet there is neither breadth nor depth enough to any field to justify a gentleman sportsman in shooting in company with such a man.

When a man claims the killing of a bird at which both he and his companion have fired, the claimant not only shows his selfishness, his lack of gentlemanly qualities, but shows his lack of confidence in his own skill. The crackshot doesn't need to claim his bird, for when the trigger is pulled, it seems to him that le intuitively sees the charge of shot reach its intended mark, notes its effect, and knows whether or not he has bagged the bird; therefore, the true sportsman will not claim the bird under such circumstances, and will say nothing; or, if with a younger and more inexperienced companion, will insist that his comrude made the
successful shot, und that his own aim was untrue. It is such trivial acts of self-denial and generosity that endears to the hearts of inexperienced shots their more skillful and experienced brothers.

When a sportsman shows the courtesies in the field, which he should do unsolicited, and with pride and pleasure, he is entitled to no reward for merit, but simply carries out the lessons of unselfishness which his association with Nature and with gentlemen has taught him.

When you invite a friend to be your guest on a lunting or fishing trip, you honor yourself with his presence. Your path is plainly before you, and leads in only one direction. It is plainly your duty to make the day one of the happiest possible for him. How best to do this, the circumstances of the case and your own gentlemanly instincts should teach you. You should insist on his accepting the first shot; and if he should be so unfortunate as to miss, don't add to his chagrin by trying to bag the bird before he has fired his second barrel, but let him shoot again. Better let the bird go free than violate the courtesies of the craft.

As you enter the field with him, tell him he is to shoot first; then, placing him at your left-because most men can shoot better at left-quartering birds-tell him you will take turns with him on straight-away birds, but he is to fire at those going to the left, while you will take those going to the right. Should it hippen that most of the birds fly to the right, exchange places, or insist that he take every alternate shot going to the right. Luman life is like a piece of machinery-they both need the best of oil to make them work smoothly and suecessfully; and there is nothing which attains its end with a man so effectually as gentle, unohtrusive, thonghtful preferences which are delicately thrust upon him. They may be small, but they show that a man's heart is right; and by showing your guest such attentions and courtesies, even for a day, you make him your friend for life.

The old saying, that "Two is emmany, and three is a crowd," is true here; for, in upland shooting, but two
should hunt together. Where there are more than two shooting over the same dog, or pair of dogs, it eanses confusion to the luinters, excites the dogs, and smacks too strongly of game extermination.

It would be impossible to live up to the rules of field etiquatte were we to indulge in club-hunts. They onght not to be called elub-hunts, but, ruther, extermination hunts: for this is the effect, although not primarily the object of them. I am opposed to the congregating of individuals ter the purpose of choosing sides, then hunting and declaring the winners on a score of points, on gane of any kind. No matter how honest a man's intentions are, if le allows himself to join these destructive forces, he lowers himself to their level, and in his anxiety that his side shall win, may stoop to secure game by unsportsmanlike methods.

Let him see a covey of quails on the ground, and he is extremely liable to forget for the moment his love of legitimate sport, his desire to give each bird a chance for its life, and to fire at the covey. He picks up the result of his potshot, looks guiltily around, then secretly congratulates himself on the number of "points" gained. When a man allows the element of profit to enter into the day's lunt, avarice, greed, and the desire for a ligg bag cloud the mind, dull the conscience and the beauties of Nature, and the proper love for field sports are for the time forgotten-the hunter is converted into a mercenary creature who deserves the contempt of honorable sportsmen. The same jrecepts and principles here declared ns to the shooting of feathered game, apply with equal force to the hunting of Big Game or the taking of fish.

Our game, both large and small, is fast disappearing, and our attention should at all times be direeted to its preservation. The true sportsman will limit himself to a decent-sized bag, whether the law of the State wherein he shoots requires this or not; and when he has killed sufficient for himself and friends, will cease to shoot, even thongh there be whole coveys of birds, or whole herds of Elk or Deer, still in sight.

I have nelther the space nor desire to enter into an elaborate diseourse, giving alvice to young men us to their duties afleld; but a gentleman is the same in the field as in the drawing-room, and when a man is found who is selfish in the field, depend upon it he is so elsewhere, and in busi-ness-life will prove decidedly unpleasant to deal with.

Many of our greatest minds have fomud stendfast and undying friendship among children of the forest; untuught they were, and deprived of ordinary elucational ndvantages -but the solitude of the wilderness, and the purity of the untninted and unpolluted fields and streams, imbued them with honesty, generosity, and freedom from deceit. Tho sportsman, then, will find his greatest happiness in the open air, and his life will be prolonger and bettered for it; and as he wanders through some shady dell, and feels and knows he is alone, he notes the golden bais of sunlight strenming throngh the clnstering leaves, seats himself beside some gurgling brook, and as the birds sing sweetly to him, soliloquizes: "Nature mever did betray the heart that loved her. 'Tis her privilege through all the years of this, our life, to lead from joy to joy; for she can so inform the mind that is within us, so impress with quietness and beauty, and so feed with lofty thoughts, that neither evil tongues, rash judgments, nor the sneers of selfish men, nor greetings where no kindness is, nor all the dreary intercourse of daily life, shall e'er prevail against us, or disturb our cheerful faith that all which we behold is full of blessings."
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## LatER LIETB OAN EE HAD ON APPUGATION.

## Rand, MeNelly 敢 Ea., Publinhura,

323 Broadway, NEW YORK.





[^0]:    * The guns used by the Cree Indlans, In the hunt that I have described, were muzzle-loading shotguns, 16 bore, and had the :.rrels sawn off until only fifteen inehes in length.

[^1]:    * Mr. Ogllve, Provincial Land Surveyor, of Ottawa, who receutly spent upward of a year surveying and taking observarlons for the Canadian Government, informed me that whlie in the Hudson's Bay Territory, when In want of fresh meat for his men, he has shot many of the Barren-ground spectes, the skins of some of which, killed In the early part of autumn, were perforated by those destructive insects so as not only to render them completely useless, but also that the animals so affected were miserably thin and totally unfit for food. I have never noticei, in any Deer of the Virginia speceles, the presence of warbles, as the result of the attack of parasitic larve.

[^2]:    - From the circumstances named, I ain of the opinion that the butcher referred to here is one Jamison. I have often hearl of him before, from guldes who have hunted with him, and have taken a great deal of satisfaction in exposing and denouncing his inhuman conduct in the columis of the Ainerican Field.-Evitor.

[^3]:    *I can not indorse this statement of Beatty"s. The bucks do paw up the ground in the rutting-season, but not for the purpone of revealing the tracks of the does. The buck trails the doe by scent, not by sight.-Eprior.

[^4]:    - I friend who recently spent mone months at liudson's Bay sends mo this sketch, and modewtly requesta that his name be withheld. - Eviror.

[^5]:    The total number of robes annuaily traded by ourselves and others will not be found to differ much from the following: American Fur Company, 70,000; Hudson's Bay Company, 10,000 ; all other companies, probably, 10,000 ; making a total of $\mathbf{9 0 , 0 0 0}$ robes as an average aunual return for the last elght or ten years.

    In the Northwest, the Hudson's Bay Company purchase from the Indians but a very small number, their only market being Canada, to which the cost of transportation nearly equals the produce of the furs, and it is only within a very recent perlod that they have received Buffalo-robes in trade; and out of the great number of Buffalons annually killed throughout the extensive region fuhabited by the Comanches and other lindred tribes, no robes whatever are furnished for trade. During only four months of the year (from November until March) are the skins good for dressing; those obtained in the remaining eight months are valueless to traders, and the hides of bulis are never taken off

[^6]:    *In a letter to the editor, dated March 29, 1890, Mr. Williaun P. Lett says: "I find in the ' Naturalist and Geologist,' published by the late Elkanah Billiugs, the paleontologist of the Oeologleal Survey of Canada, the following: 'The Glutton (Gulo Luseus, Linn.) Is the Carcajou of Le Hontan and the French Canadians; Qulckhatch (Ursulo affiniv Americana) of Catesby (Carolina); Quickhatch of tha Eoglish residents at Hudson1s Ron vulckhatch or Wolverive of Ellis; Wolverine of Peunaut: Wolverine, Qul-qui-hatet) Careajou of GraLham (Manuscripts); Ka-blee-ari-oo of the Eskimos of Mellville P'eunsula; Ka-e-week of the Eskimos of Boothia Felix; Na-ghat-eh of the Chippewas; O-meethat-sees 0 -kee-coo-haw-gew (whence; Bir John Richardsou observes, the term Qulckhatch of the European Laborers In the service of the Hudson's Bay Company is evldently derived) of the Crees or Algonquins; Rosomak of the Russians; Jarf Filfress of the Fauna Suecica; Timml of the Kamchaticans; Haeppl of the Koratzki; Gluton of the French; Guto of Olaus Magnus; Gulo Vielfr res of Genet; Hyena and C'rsus Hudsonts of Brisson; Mustela Gulo and Urous Luscus of Linneeus; Ursus Gulo of Pallas and Gmelin; Taxus Gulo of Tledemann; Gulo Arcticun of Desmarcat; Gulo Vulgaria of Grimth's Cuvier; Gulo Luscus of Sabine.' I cau not find any authentic account of tre' animal having been killed or observed in the Ottawa Valley of late years; but one was killed, about forty years ago, while swimming across the Gatineau River, whleh stream enters the Ottawa River about one mile below thin elty. I dare nay there are some up there yet."

[^7]:    * What these prices were, we are uuable to say; but, If we may judge from an article in the February, 1890 , Cosmopolitan Magazine, by J. Macdonald Oxley, the profts probably exceeded the couservative three per cent. of our Government. Note this: "There has been a wonderful chauge In vaiues since the good old days in the early part of thls century. When Fort Dunvegan was estabilshed, on the Peace River, near the Rockles, the regular price' of a trade-musket was Rocky Mountain sables piled up on each slde until they were level with Its muzzle when hell upright. Now, these sabies were worth In England about three pounds aplece, whlle the cost of the musket did not exceed one pouud."

    While this practlce may have been more satisfactory to the Indians than that of the eariy Hollanders, who are sald to have used "the strong right hand" as a pound-welght when weighing peltry, the resuit was practically the same. Mr. Oxley further says: "These muskets came to be wofully long, in time." If we suppose thein to have been fifty Inches long, and each hide to have occupled an inch of space, we have a gross profit of \$1,495 on each musket!

