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ROD AND GUN IN CANADA



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OF CANADIAN SPORT
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SUNSET ON THE THOMPSON RIVER
This beautiful scene shows a characteristic bit of British Columbia scenery—and the trout run heavy

ROD AND GUN IN CANADA

VOL. IV.

MONTREAL, JULY, 1902

No. 2

Sport in Labrador.

BY DR. WILFRED GRENFELL.

The pleasures of life in any part of the world are very largely dependent on the person to be pleased. So, Mr. Editor, you must discount from that basis my statement that "life down here is as enjoyable as anywhere else in the world," and must put it down to "idiosyncrasy" if I fail to persuade your readers to agree with me. No life of idleness can ever be free from ennui, and suicide always seems to me the inevitable drift of the mere pleasure-seeker. Given, however, work enough to constitute a *raison d'être* for life in these regions, I am free to maintain that down here, viewed from whatever standpoint—spiritual, intellectual or physical—life needs no points from anywhere else, while a tired worker from the maddening crowd can find isolation enough from the strain and rush due to modern discoveries and inventions, without either vegetating into the proverbial turnip or being absolutely out of touch with the doings of the great world outside. What waste of brain matter five editions a day conduce to. It is marvellous what little news of the world the fortnightly summary, which alone reaches us down here, appears to bring, and how little of importance one finds one has really missed when one returns even to regions where hurrying along in underground tubes one sees at all hours miserable fellow-creatures of all ages ruining their eyesight over ill-printed "speshuls." One can get books that are worth having as well here as anywhere, and enjoy the

additional pleasure of being able to share whatever is pleasurable and profitable in them with others unable in any other way to attain it. It must be confessed that in many places intellectual development is put to as little practical purpose as is the physical development, though both are often gained in our big cities by such countless hours and even years of energy and toil. Inquiring in a certain city as to what uses the best athletes put their physical development, and what happened to them when "settled" in city life, the writer was informed, "the majority appear very rapidly to 'revert to type,' while many run to cumbersome adiposity." Neither happens with us here. One's only sorrows are how little one is able to impart to others. For one is called on to know everything from doctoring to watchmaking, from practical astronomy to curing boot leather from a recently-captured seal; while gymnastic or football training of our youth rewards one every day whether we hunt or travel, whether we sail the sea and paddle along river and lake in summer, or drive dogs, and komatik, and ply "ski" or snowshoe over the iron bound sea and land in winter. Alas, the poverty and often dire necessity of our neighbors, and I may add, friends, frequently grieves anyone possessed of a soul that cares for aught besides its own welfare. But it at least affords us opportunities of doing our charity without proxy, and feeling easy in mind that our second coat, when

given away, will not be diverted through the nearest pawn shop to the saloon next door. It makes a moderate income an asset of real value, and a source of true thankfulness for the pleasure it affords of enabling one to help deserving lame dogs over stiles. The care of and work at our little hospitals and ships, our scattered co-operative stores, our small co-operative lumber mill efforts, our small "clubs" and lending libraries and similar efforts, afford us, certainly, our most satisfactory pleasures. They leave us, however, time for developing, at least to some degree, what sports the country permits, and it is a word or two as to these that I am venturing to send you.

It must be understood that our shooting is solely for the pot, and record bags have no place in our ambitions. Yet this very fact makes us all the more anxious to shoot straight. For who can afford to miss when it means a dinner less or a pair of much needed boots swimming away on a seal's back. Our tastes, fortunately for us, are extremely Catholic. We eat, as our omnivorous anatomy permits us, almost everything. I have had on successive days for dinner steak from Polar bear, black bear and seal flipper. While one of the hardships of a travelling medico's life is that he is often sat down to face a boiled seagull or a dish of puffin soup. There is a particularly offensive bird on this coast known as the "hagdown" locally, but to science as the Great Shearwater. Gastronomically he most resembles the Fulmar Petrel, which has to be scented to be fully appreciated. The plea that one's medical adviser implores one to abstain from such, has saved me more than one tight corner with this all too easily caught bird. We are armed with almost every weird instrument for shooting—one would not be at all surprised to find a party with a chassepot, a culverin, or a "Brown Bess." One of our commonest accidents is the damage resulting from an exploding breech, while the length of the barrel appears only to be limited by the capacity of its owner to raise it to his shoulder.

The load of powder and shot is measured by the number of finger breadths it raises the ramrod, and may be anything from "five to ten fingers."

Yet it is wonderful what excellent practice the men make both with ball and shot. I have known no less than fifty eider ducks killed by a couple of men at one discharge, and have seen twenty-five to thirty king eiders pay tribute in the same way. A short time ago here a man shot three caribou with one bullet. His own statement being that he "waited till the three were in line." They were of course not far from him. Two caribou in one shot is not at all uncommon. It is our custom at Christmas time to hold sports on the ice, and a wooden deer target hauled to and fro between flags on a komatik, or sleigh, is always one of the events. It is really remarkable how often with only these old muzzle loaders that deer is slaughtered at one hundred yards.

One morning, early in last October, with two men I repaired to some flats at the mouth of one of the Labrador smaller rivers, my station was on a bank near the mouth, my companions, each with a six foot gun, being on opposite sides about two hundred yards further up. We thus formed a kind of triangle. Black duck, Canada geese, merganser, wigeon and teal passed up as the tide came in, and again followed it out. Though it was a calm day, and the tide did not sufficiently stir up the birds from below, we had at night a very excellent bag, viz., nine geese and twenty-five ducks of sorts. As all our birds were that day single birds we had plenty of chances of seeing what these long guns can do. Several single birds at full speed and high up I saw turn from one gunner that day, to fall dead as they swerved to the man opposite. We were handicapped by having no dog to retrieve, and so lost not a few birds.

Among our folk are some exceedingly good at tolling either birds or animals. Lying on a bank on our way home that evening a flock of geese passed over, I should say not less than half a mile away. Yet they wheeled round to the tolling sufficiently to enable one to be singled out. Only his wing was tipped, and his long slanting, almost majestic, fall was indeed a sight a sportsman loves. It has always seemed odd to me that while birds rely for safety so much on their eyesight, deer and foxes seem scarcely to put any reliance on their sight. I have

known our caribou to trot right up to a man standing still on a marsh, across which their path led, and to refuse to turn till they almost ran over him, though he waved his arms to scare them to a sufficient distance for a broadside shot. Only the other day a man here sighted a red fox crossing a frozen bay. He promptly knelt down behind an ice pinnacle, and remained motionless with his cocked gun raised, calling like a fighting crow and then in orthodox fashion like a mouse; the fox, which was of course to windward, ran straight up to him. It was carrying a lesser auk in its mouth. It jumped on the pinnacle of ice and was actually so near that when he fired a leg was clean blown off. The same man assured me that once hidden behind a bank and lying flat down, he tolled a fox till it actually pounced over the bank right on to him. I believe it to be true, but I confess it seems like a "trouting" story.

The shooting we "follow" at this season of the year is sport indeed, and goes by the local name of "swatching." The "sport" consists not in the ferocity of the prey, not in the numbers of the slain, but in the agility, pluck and hardihood it calls for. The arctic "slob" ice flows in one vast field to the southward, hindered or accelerated by the trend of the wind, and varies in the pace it travels roughly from half to four or five miles an hour. Broken into large pans by the heavy swell from the spring gales, it leaves lakes or ponds between the pieces, or "growlers" as we call them. Armed with a gun, rope, seal gaff, knife and a little food the hunter leaves the coast in the morning, expecting either to kill seals on the pans or shoot them as they "bob" up in the ponds. He either takes a "chum," and a small boat or "flat" to ice edge with him, or leaves a lookout on the headland to watch him with a glass. It is safest perhaps to have the man, or "dog" as he is sometimes called. This useful person also carries a "gaff"—a long stick with a boathook end. If one falls in between the heavy moving pans it is almost impossible to get out alone, so one is gaffed in a most undignified fashion and "landed" as rapidly as possible. For these young ice mountains, and they are nothing less, have an

inconvenient habit of over-running one, and not improbably involving a rather nasty risk of nipping a limb in any case. The game varies from a baby "white coat" harp seal, to a full grown bullhood seal (*Phoca barbata*). The latter is enormous both in size and weight, and is valuable to us for his fat and his carcass for dog food. His skin is not prized as highly for our boots as that of the old harp, or the square flipper. Part of the excitement, which I presume is the "sport" part of the hunt, arises from the fact that one seldom gets back to the place one started from, while if the wind "turns off," the ice may quickly clear out and leave you with a bare chance of fetching the protecting headland three or four miles to the southward; but if one finds any "soft slob" between the cliffs and the ice edge, the "flat" may likely enough prove of small use. That we should value a hunt as a source of dog food will surprise no one who remembers our locomotive power is derived from dogs and not horses, and we cannot feed them on hay or turnips, even had we these to offer them. They soon grow poor on vegetarian diet of any kind, while the quantity of flesh food a fair sized team will eat in the six to eight months of winter is prodigious. It has been my lot to enjoy "lugeing" in Switzerland and tobogganing on the built up runs in Canada, and also to travel both on "ski" and "racquets," but I must confess to a very strong preference for dog driving over any of these sports. Our work involves in winter visiting round a district 300 miles on the round, and then the people for miles to the southward have no chance of any medical aid whatever. This is from the North Newfoundland Hospital at St. Anthony. The country is of all sorts, hills, rivers, marshes, lakes; long arms of the sea intersecting the coast line, and thick woods in many parts, add enormously to the difficulty of making progress. The whole, of course, freezes over before Christmas, and so we have a perfect field for the exercising of our skill and ingenuity upon. Our own dogs this winter number twenty, half are Eskimo dogs we brought here from North Labrador. These are all large, have pointed ears, long straight hair and tails

curled completely over in a circle. My largest dog weighed 88 pounds, my second 78, third 74, and so on. Thus a team of a dozen such dogs has a very considerable motive power. Their endurance is phenomenal. They can travel all day and practically fight all night. They will sleep out in the coldest weather, and will keep in good condition on one moderate meal a day. But we find them slower, and more dangerous to anything in the cattle line, than the lop-eared mongrels of the coast. They ate into my host's diet house one night this winter and devoured "teetotally," as they say here, a large ewe in lamb. The larger part fell to four dogs, these could hardly

stand up after it; they left only a handful of wool, not a bone or hoof. A large stock of whale meat procured in the fall is the best food we can obtain for them. I must not enlarge on this sport now, Mr. Editor, as the length of your patience is no doubt exhausted, and one is tempted to run on into anecdotes. I can only say fix me up with the dogs and komatik, kettle, axe, sleeping bag, rifle, and "ski," fill the "nonny" bag with good pork buns that won't freeze too hard to devour at a pinch unroasted, give me a compass and fifty miles of country on a fine day in February, and I wouldn't change the day's work for a week in a palace anywhere.

Angling Near Victoria.

BY A PRACTICAL ANGLER.

At present salmon may be fished for during the whole year, but March 1st will be found early enough. The only fly I use is the "Jock Scott"; size of hook depends upon the state of the river, but from No. 3-0 to No. 3 will be found to answer well. During March and April, if the river is not too high, steelhead salmon take a fly readily. In May they may also be caught; while in the Cowichan River a few cohoes run up a few miles, also an occasional spring salmon ("Quinnat"). Generally a large run of spring salmon takes the Cowichan about the 1st of July. These are the gamest fish we have and run from 10 lbs. to 70 lbs. and in rivers farther north have been caught up to 80 lbs. or 90 lbs. If the river is not too low, the spring salmon will readily take a fly, but it must be borne in mind that the water is very clear, a long line therefore, being absolutely necessary, also single gut. The spring salmon will generally take best at the head of a pool, frequently in very strong water. The coho or steelhead take best at the foot of the pool. Where large rocks are lying in the centre of a pool, the fish will invariably be found behind them, no matter how strong the water may be.

For salmon fishing, a dark, and if possible, a stormy day is always best. On such a day, with heavy hail squalls frequently passing, and a strong and bitter north wind blowing, I killed with a fly sixteen salmon in one afternoon, but this was some years ago.

The best part of the Cowichan River for salmon during March is between Duncan's and the tidal water. After the middle of April, the district about Sahtlam is best, and as the season gets later the upper part of the river is best. During August and September, salmon fishing is worthless, but as the river rises in October, the coho salmon fishing is very good, both in the Cowichan and in its neighbor, the Koksilah.

For trout fishing in the rivers, the months of September, October and November are decidedly the best, though good bags may after be made in tidal water and at any time. Large numbers of trout run into the mouths of the rivers with the first of the flood tide, and one may hook at every cast for half an hour and sometimes an hour. The "March Brown" is the best all-round fly for trout in the rivers, No. 7 or No. 8 hook, or if the day be very fine, No. 10 or No. 12. In the lakes it is very little use fishing for trout before April. Person-

ally I never begin before 1st May. Then small dark flies are best in most lakes, and *fine tackle* is essential if a good bag is to be made. Fine tackle is best at all times both for salmon and trout fishing, and I have hooked and landed in three hours a 26 lb. spring salmon, with a 14 feet trout rod, fine line, the finest gut I could obtain and with a No. 6 fly. In bright days, if one has the water to oneself, it is better not to disturb the fish until the sun has left the water. The time may be passed in trout fishing, but care should be taken not to go near the salmon pools. In the lower part of rivers, where constant fishing takes place, one must take one's chance, but in an average season of three months, I have known fifty-two salmon to be caught, of the varieties I have named, by one rod, fishing one day a week. I enclose patterns of what I consider the best flies for this district, which I think will be found to answer well in all the rivers and lakes of Vancouver Island.* In June and July there is a run of grilse of the "Quinnat" variety of salmon which affords excellent sport. These fish run from three or four to eight pounds, and on a fourteen feet trout line with fine tackle, give as good sport as a salmon on an eighteen feet rod. I enclose a fly I had dressed specially for these fish. There are several lakes and streams within easy reach of Victoria, one of the nearest and best being Prospect Lake, about nine miles off, with a good road. Boats can be hired at the lake. The trout in this lake are very good, and I have caught them up to four pounds. There are a good many of them, but as the lake is a great deal fished, the fish are shy and require careful fishing. Other smaller lakes are equally near. Next comes Sooke Lake, about seven miles long, full of trout. This lake is about twenty miles from Victoria, with a good road all the way. The trout in Sooke Lake do not run as large as those in Prospect, but 100 are often taken by one rod in a day. Next comes Shawnigan Lake, eight miles long. There are a lot of trout in this lake, but they are uncertain and somewhat shy. It is twenty-six miles from Victoria, and can be reached by train every morning from

Victoria. There are boats for hire and two good hotels.

Forty miles by rail lands the angler on his best ground, for here we are on the Cowichan River. There are two lakes close to the station, and boats can be hired on either lake by applying to the hotel-keeper at the Quamichan Hotel. Convoys can also be hired at the village of Duncan's. About thirty miles drive from the station is Cowichan Lake, one of the largest on the island. This lake abounds with fine trout, and a short time ago an officer of one of H.M. ships caught in five days 300 pounds of trout. There is a steam launch on the lake and several boats for hire. A stage goes from Duncan's three times a week, and there is a comfortable hotel. Going farther away we come to the Chemainus River, which, owing to heavy netting, is not worthy of the angler's attention. In fact if the angler is not satisfied with the sport obtainable in the neighborhood of Duncan's he had better return to Victoria and take the E. & N. Railway Co.'s steamer to Campbell River, some 150 miles from Victoria. Here, if he is well fitted with salmon tackle, he can have what I believe to be the finest sport in the world. A friend of mine, fishing for ten days in July, 1901, caught 172 salmon, averaging 43 lbs. each. The angler who is not satisfied with this had better depart to a better world, for his quest in this one will be hopeless.

Other, and more detailed, information can be obtained by inquiry at Victoria, from the Dominion Fishery Officer.

Before concluding it may be well to warn visitors that no salmon, fry, parr or smolt, or any grilse of a less weight than three pounds, may be taken, but must be liberated alive, at the risk of the person catching it.

For the benefit of those who are unable to distinguish the difference between a trout and a parr, I may say that the tail of the parr is very much forked, not square like that of a trout and there are bars down its side, resembling finger marks. As small trout are hardly ever seen in the Cowichan river, I would suggest that all fish under 8 inches in length be put back at once. The penalty for being found in possession of these fish is \$100 or six months' imprisonment.

* [Not received.—Ed.]

For those who do not pretend to be expert anglers there is an abundance of sport to be obtained from May till October in all the bays and estuaries round the coast, trolling with a large artificial minnow or spoon. From half a dozen to twenty salmon are often caught in a day in this manner. A strong rod and

not less than 200 yards of line on the reel are necessary, if big fish are running.

Specimens of big salmon and trout caught on Vancouver Island can be seen in the museum in Victoria, and the Curator, Mr. Fannin, will give visitors any information they may desire.

Timber Estimation.

BY A. KNECHTEL, N.Y.S.F.F. AND G.C.

To find the volume of forest by felling sample trees, the trees are measured as described in a preceding number of ROD AND GUN. The basal areas of the cross sections, breast high, are calculated from the diameters. Then, by adding these basal areas the total basal area is obtained, and by dividing the total area of any species by the number of trees of that species the basal area of the average sample tree of the species is obtained :

- Let V = volume of the stand.
- " v = volume of the average sample tree.
- " A = total basal area.
- " a = basal area of sample tree.
- " n_1 = number of trees with cross area a_1
- " n_2 = " " " " " " a_2
- " n_3 = " " " " " " a_3
- " n = total number of trees.

$$\text{Then } a = \frac{a_1 n_1 + a_2 n_2 + a_3 n_3 + \dots}{n_1 + n_2 + n_3 + \dots} = \frac{A}{n}$$

From this basal area of the average sample tree is then calculated the corresponding diameter, and from the height measurements is ascertained the average height corresponding to this diameter.

A thrifty tree of the species having this diameter and height is selected in the forest. It is felled and its volume measured. In order to obtain a volume independent of the individual irregularities, several of such specimens are felled and measured. The average cubic contents of these represents the volume of the mean sample tree. This volume when multiplied by the number of trees gives the volume of the stand,

$$V = v \times n$$

Since it has been shown that

$$a = \frac{A}{n}; \text{ then } n = \frac{A}{a}$$

Substituting this value for n in the formula above, and,

$$V = v \frac{A}{a}$$

The table below shows a convenient form for keeping the record.

MEAN SAMPLE TREE METHOD.

Species.	The Calipered Trees.			The Stand.		The Sample Tree.		No. of Sample Trees
	Diameter in Inches.	Number of Trees.	Sum of Cross Areas in Sq. Feet.	Number of Trees.	Gross Area in Sq. Feet.	Cross Area in Sq. Ft.	Diameter in Inches.	
						Measured at Breast Height.		
	8	22	7.68					
	9	77	34.02					
	10	97	52.90					
	11	162	106.92					
	12	40	31.42					
	13	100	92.15					
	14	115	122.94					
	15	88	107.99					
	16	160	223.41	1560	2358.58	1.51	16.7	6
	17	182	286.89					
	18	45	79.52					
	19	67	131.92					
	20	88	191.99					
	21	110	264.58					
	22	86	227.02					
	23	22	63.47					
	24	14	43.98					
	25	85	289.75					
White Pine.		1560	2358.58					

2,358.58 sq. ft. \div 1,560 = 1.51 sq. ft. = cross area of sample tree.

The diameter corresponding to a cross-area of 1.56 sq. ft. is 16.9 inches.

Diameters are calculated from cross areas and cross areas from diameters with the help of a table of areas of circles. Such a table, with much other useful

information can be found in the bulletin referred to in the previous paper.

From height measurements it is found that white pine trees 16.7 inches in diameter have an average height of about 100 feet.

Six sound, straight trees, then, about 16.7 inches in diameter and about 100 feet in height are selected in the forest, felled, measured and the volumes tabulated as shown below. There will be a difference in the form of the trees though their diameters and heights may be the same, and hence their volumes will differ. The total volume of the sample trees divided by their number will give the average volume, and this multiplied by the number of trees of the stand will give the volume of the stand.

Sample Trees.	Cubic Feet.	B. M.
No. 1.....	72.2	251
" 2.....	75.8	257
" 3.....	68.6	237
" 4.....	70.9	245
" 5.....	74.1	256
" 6.....	72.0	248
Volume of the six trees	433.6	1494
Average volume.....	72.3	272
Volume of 1560 trees...	112788	424320

When the basal area a of the sample tree is exactly $\frac{A}{n}$, the simple formula

$V = v + n$ is always used for reckoning the volume. But if the basal area is not $\frac{A}{n}$ it is evident that multiplying the volume of the sample tree by the number of trees multiplies also the error. The formula $V = v + \frac{A}{a}$ may then be used.

This very simple and convenient method was introduced into Germany by Huber, in the year 1824, and was recommended later by Carl Heeper. Still it is not sufficiently accurate. By other methods discussed in this paper much better results can be obtained with but very little more work.

The method depends upon the principle that the sample tree presents not only the mean cross area, but also the mean height and form factor of the stand. That these conditions be satisfied the following equalities must exist:

$$AHF = n_1 a_1 h_1 f_1 + n_2 a_2 h_2 f_2 + n_3 a_3 h_3 f_3 +$$

$$\text{But since } A = n_1 a_1 + n_2 a_2 + n_3 a_3 + \\ \text{Then } HF = h_1 f_1 + h_2 f_2 + h_3 f_3 +$$

This is seldom true for a whole stand, but only for sizes that lie close together; and therefore the measurement of a stand by means of one arithmetical mean sample tree cannot give accurate results.

Sharbot Lake.

This famous lake is situated on the line of the Canadian Pacific Railway, being 166 miles west of Montreal, 169 miles from Toronto and 80 miles from Ottawa. It is about 50 miles north of the city of Kingston, being reached from that place by the Kingston & Pembroke Railway, which here forms a junction with the Canadian Pacific Railway. For years past it has been known as a famous fishing resort, and long before the completion of the Montreal and Toronto division of the C.P.R., it was occasionally visited by American sportsmen, who were sojourning on the St. Lawrence.

Being thus easily accessible it is not surprising that, as it becomes better known, it is yearly becoming more popular. For picturesque scenery and fine clear water Sharbot Lake will compare favorably with any of the lakes in this part of Ontario.

It is about eight miles in length, and from three to four in greatest width, crossed at the narrows by the two railways above mentioned. A commodious station known as Sharbot Lake Junction has been erected at the village, a place of 300 inhabitants, picturesquely situated on the neck of land which almost divides the lake into two parts. A few summer

residences have been erected on the numerous islands which dot its surface, but for the most part the lake is still in its primitive condition. Situated by recent measurements some five hundred feet above Lake Ontario, the air is clear and dry here, and bracing even in the hottest weather. There is not a healthier place in all Ontario, and those who complain of the damp air of the shores of Lake Ontario will find here an invigorating and refreshing change.

Rocky and well wooded shores alternate, and the clear cold water is most exhilarating for those who need a thorough change. Marshy and swampy lands are absent, so the flies that abound in so many otherwise pleasant resorts are absent too, excepting during the latter part of May and early June.

From the middle of June onward is the best time for fishing, and no better lake can be found for the sport. Though so easily accessible it is by no means overfished, and fine strings of black bass, salmon trout and pike are captured every season.

Black bass as high as $4\frac{1}{2}$ and even 5 pounds are not unusual, and lake or "salmon trout" of from 10 to 15 pounds are common, though an occasional one of 18 pounds and even of 22 pounds has

been caught. The lake in places is very deep, and it is in such spots that the trout are fished for in summer.

A visit to this lake would well repay the family seeking quiet and change of scene during the summer months, and afford recreation at the same time.

The village has a good hotel, situated close to the station and lake, where reasonable accommodation can be obtained; besides there are several private houses that take boarders, and a furnished house can occasionally be rented for the season. Boats are readily obtainable and can be hired by the day or week, with or without guides who are acquainted with the best fishing resorts on the lake. In the neighborhood are other bodies of water that teem with fish such as Bob's Lake, Clear Lake and many others, while within a day's drive are Broule Lake, and Mackay Lake, noted for their speckled trout and beautiful scenery, all well worth a visit.

In the fall of the year very good hunting is still obtainable in this vicinity, the partridge being numerous, and many ducks, as the black duck, wood duck, teal and others are met with later:—Hotel, "The Union"—H. Roberts, proprietor. Guides and fishermen:—G. Jones, L. Burnham, M. Braceland.

Floral Photography.

BY HUBERT M'BEAN JOHNSTON.

Can it be possible that there is a more interesting and fascinating branch of the photographic art than that which deals with the study of old Mother Nature? Surely not, unless perchance, we look to one of the details of the great out-of-doors and discuss the preservation (within the boundary of a dry-plate) of the earth's gems, the flowers. Here, indeed, is there room for conscientious work. In their native environments, the wild daisies of the field attract us; brought to civilization in the garden and beneath the glass of the greenhouse, they hold us by the same charm. And how great is the diversity of form they possess, with all the graces possible in both shape and habit; what an infinite

variety of color there is to pick from, in tones ranging from the deepest purples to the most snowy whites, and embracing every intermediate shade and tint under the sun. Was ever an opportunity presented anywhere that gave equal facilities for the studying of lighting, textures and color values?

Yet a photograph showing mere outline and shading alone is not all one can secure. There is something more. Every flower, like every person, has an individuality of its own and breathes a personality separate and distinct from all its fellows. Where this subtle quality lurks would be difficult to say. It may be in the poise or it may be in the delicate gradation of its tints, or yet



AN UNWILLING VISITOR

Hoisting in a Polar Bear, shot by Dr. Grentell from the hospital steamer one day last September



POOR SEALERS WITH A "TOW"

The two large seals are 1 year Harps (*Phoca Greenlandica*); the smallest a "bedlanner," i.e., a full grown bay seal



HUNTING THE "CARIBOU"

New Year's Day sports on the ice of the Labrador coast



AT THE FIRING LINE

Sealers shooting at the "caribou" with their long muzzle-loaders

again, it may be simply in the coy way in which its petals roll back ; but whatever it is, or wherever it is to be found, it is this feeling that must be portrayed by the lens if anything but a stilted, wooden result is looked for. Capable handling, begat by a wholesome love for the work in hand, will alone avail to bring out the character of each individual specimen ; will alone show the bold assertiveness of the one, the homely graces of another, or the frank simplicity of a third ; each flower will then get just that touch of realism necessary to make it a reproduction of the original and not merely a likeness on paper. Nor does this depend upon the rarity of the specimens employed, for equally good results may be secured from the commonest roadside blossoms and the highest priced American Beauties. In fact, if one is most familiar with the field flowers they will, in all probability, afford the best material for picture making. But to get all out of a flower that there is in it, one must have a feeling of kinship, must be in love with his subjects, for to treat them as mere inanimate products of the earth—as material only—entails a loss of those subtle beauties reserved for the operator who is thrilled by their every sway. True enough, the flowers are less taxing and more facile than human beings to handle, yet there is a wide range of knowledge that may be advantageously brought to bear.

But in floral photography there is something else that ought to be thought of—*i.e.* working systematically. In this connection, a most interesting method is to photograph the flowers according to the season in which they bloom in your district. Bring the specimen home, and after making the exposure make careful notes of date and color and any other particulars connected with the plant, and then afterward identify it by means of some book on botany ; if you prefer it, you may begin with the botany book, one of those treatises that give the most common flowers that bloom each month under the heading of that month, and then go in search of that particular flower. This done, in a few years one will have a fairly complete collection of prints of the blossoms of the district, which may be mounted up in a book

with blank leaves between for notes, being arranged either according to their natural order or with reference to the time of year at which they bloom. Again, one plant may be photographed at different periods of its growth, and make interesting studies, as, for instance, the burdock, which varies greatly in appearance with successive seasons. Or if one be appalled by the apparent magnitude of the task and the great number of different subjects afforded by one section of country, a most excellent scheme is to confine one's self to one particular class of plant—the ferns, for instance, that grow in the immediate neighborhood. Any one district may produce more than a score of varieties, and this will be the easiest work for a beginner, the upper and under sides of the fronds being photographed of course, and then the minor part, such as the pinnae, separately. Flowering grasses, reeds and rushes constitute another section of the work. But whatever branch is studied, the photographer can hardly fail to largely increase his botanical knowledge and add interest to all his wayside rambles in future, as well as having a series of pictures of educational value.

The ideally perfect plan of work would be to photograph the flowers just as they are found in their wild state, but, unfortunately, Dame Nature places many difficulties in the way of the successful accomplishment of this. There is always the most impossible task of securing a suitable background, and then, should this be mastered, we have still to look to that constant enemy—the wind. One may never notice it until trying to photograph the growing flower, but it is a fact that only on rare occasions are our specimens still for ten seconds together. Moreover, a snap-shot exposure is out of the question, for the picture ought to be made as near to the natural size of the original as possible, and this necessitates so long a camera extension that the stop marked f-16 works in reality at an aperture of f-32, and requires about four times the exposure that would be needed if the photograph could be made from a considerable distance. If a color screen is used, the exposure is still further prolonged. Hence the most easy way is to collect specimens for home photograph-

ing. Few workers will care or be able to go beyond the five by seven size (it is hardly advisable to try anything smaller), and this will not allow of many plants being copied without reduction. In such cases it may be well to photograph the whole stem with its lower leaves and cluster of bloom on a reduced scale, the exact scale being carefully noted, after which the different parts may be photographed the full natural size. The root, the radical or root leaves, the upper leaves, tracts, etc., should be done less. Then the flower may be dissected and sepals, petals, etc., photographed individually. In working with flowers similar to the rose, for instance, one may picture the bud as well as the full blown flower. Of course this is assuming that one is working from a purely botanical standpoint.

It must be borne in mind, however, that flowers are, to employ a homely simile, very like soap-suds—evanescent, and unless care is taken of them after they are picked, one is likely to find he has on hand a bunch of wilted stems that are far from suitable for picture making. Instead of it being proper to pull the flower and at once take it before the lens, as most people appear to believe is the correct way, it is said to be a positive disadvantage. McFarland, an expert on such matters, says, "the ideal plan is to cut, not pull or break off the flowers early in the morning, before the sun has touched them, and to put them at once in water a few degrees warmer than the dark, cool cellar, or other location, in which they should be placed for an hour or so." This, he says, will allow the stems to fill up with water and puts them in most excellent condition for handling and photographing, even to the extent of reviving them sometimes when they are almost gone. Splitting the stalks an inch or two up, especially in the case of chrysanthemums, is also very beneficial. It is also said that dissolving sal-ammoniac or chlorhydrate of ammonia with the water in which the stems are put, in the proportion of about 75 grains to the quart of water, will keep flowers fresh for a fortnight.

It is advantageous to use orthochromatic plates in flower photography,

though, save for deep oranges and blue shades, a ray filterer is unnecessary, and inasmuch as it will produce false color values, it is better done without. Yet, while the majority of workers use the orthochromatic plates, they are by no means an absolute necessity, and many excellent flower photographs have been made without.

The question of illumination is rather an important matter to be considered. Perhaps one of the best lights to be had, is that secured when the exposure is made with the flowers well back in a corner between two windows. The light is then under perfect control from both sides and just sufficient may be admitted to secure roundness without flattening the effect. If however, only one window is to be had, it is absolutely imperative that a reflector of some sort be at hand, else the other side of the subject will be lost in shadow and the flower will lose any appearance of relief that it might otherwise have, a state of affairs to be found very frequently where dark backgrounds are employed. Bear in mind that it is far easier to shut off extra light than to struggle along with only half enough, and, moreover, be careful that all the light does not strike on the outside of the flower so that the centre is left without any, for this will only result in some parts being under and other parts being over exposed. If you find it impossible to get enough light on the stems and under portions of the flower, without admitting so much light from the other side as to flatten it, take a mirror and, by flashing strong illumination (not sunlight) on the darker portions, beautifully clear detail, without any suspicion of hardness, may be had.

For flower studies, a most excellent background is a sheet of cardboard the full 22 x 28 size, and by having them in different colors, almost any effect that is desired may be secured. For a full dark surface, the kind designated "Carbon Black" is *par excellence*, while for daintiness, nothing can surpass a clean, pure white, and between these two extremes, one may pick out almost every tint or color imaginable. The pure white, however, necessitates some delicacy of manipulation if one would avoid hardness of outline or is looking for

softness, and until one is more or less familiar with the work in hand, it is advisable not to attempt its use. A sheet of the style known as "Rembrandt" is also a useful adjunct to a background outfit, more especially so should the pictures be made with any purpose in mind of using them afterward for the making of half-tone illustrations. In any event, what ever is used, see that it is of a dull finish on the surface. There is enough to bear in mind in flower photography without being distracted by a shiny ground. After selecting the different colored cardboards, number them on the back and then put them side by side, up on the wall, and make a photograph of them in order that you may have some idea of their relative values in monochrome. Mark the number that is on the back of each ground on the print, and it will be easily found when wanted. Remember, too, it is often possible to vary the precise value of a ground by placing one side a trifle farther away from the flower than the other, so that the angle at which the light strikes it is altered.

Once the subject of grounds is mastered, the next question to be considered in the light of properties is the matter of a receptacle for the flowers. Now, remember that it is not the picturing of ceramics that we have in view, so make an effort to have nothing that is not severely plain and simple. Plain, clear glass vases are the best, particularly those of few curves. Never, under any consideration, use cut glass, for the brilliant faces will invariably be the principal point of interest, to the detriment of the more important parts. Moreover, one will require to have variety in the types of vases chosen. A tall, narrow receptacle for a single specimen, with broader ones for bunches, will be needed, or sometimes, when there is more than one stalk, the subject is best displayed in a low, flat dish. The main point to remember is that the outline must be simple and free from any design or pattern.

One thing remains to do before making an exposure. We must focus. Apparently this is a very simple matter. But wait and see—there is something to learn here, too. You will find that if

there are several flowers in the dish, they will occupy more or less space from front to back, so that to obtain a clear focus on them all is absolutely out of the question unless a different arrangement is adopted. While you can get those at one point all right, those at another are distressingly blurred and fuzzy. The flowers must be arranged all on one plane in some sort of fan-shaped style, and by exercising a little skill and placing some higher and others lower, it is quite possible to do this and make it look as natural (in the picture) as the first composition. Then, if that does not get as sharp a picture as is desired, it is the easiest thing in the world to improve by stopping down a little more. In the focussing, note that the background is placed just far enough back to be out of focus and still to catch just the faintest suspicion of a shadow of the subject. Of course this is impossible where dark grounds are employed, though with anything else it is very effective. An extremely common method of getting just enough of this shadow and at the same time photographing the flowers without showing any support for them, such as a vase, etc., is to place the blossoms on a sheet of glass a few inches above the background, which is laid on the floor. Then by supporting the instrument above it and pointing downward, almost anything wanted may be obtained.

Despite the attractiveness of flower photography in monochrome, it goes without saying, that the fascinations of this particular branch of work would be very much greater were it possible to work in color. Unfortunately, however, this is as yet a dream, unless we count the half-tone processes used to make three-color reproductions, and we must, perforce, confine ourselves to putting forth our utmost endeavor to make our representation of texture, gradation and light and shade all that it is possible for them to be. But to do this well, even though we lose the delicacy, richness and translucency of flower coloring, is no simple matter, and the worker who is able to make a success of his floral studies has undoubted proof to offer to his critics that he has put in some earnest study.

The Lesser Maples.

BY R. H. CAMPBELL.

There are two maples of common occurrence in Eastern Canada that seldom reach the proportions of trees. These are the Mountain Maple, *Acer spicatum*, and the Striped Maple, *Acer Pennsylvanicum*.

The mountain maple is found growing in moist woods from Nova Scotia to the west of Lake Winnipegosis and north to James Bay. It is usually only a shrub, from which it is sometimes called shrub maple, but often reaches a height of from 25 to 30 feet. The leaves approach most nearly in appearance to those of the red maple, but are usually divided into three lobes, the two additional lobes which sometimes are present not being prominent. They are of soft texture and are downy beneath, and the teeth on the edges are rather coarse. They assume brilliant colors in autumn, a deep red being the most common, and lend their share to the beauty of our Canadian woods. The twigs are brown instead of red, as in the red maple, and the flowers, which appear in June, are small and of a greenish-yellow color and clustered in racemes, or long, loose, erect bunches. The small wings of the seeds diverge widely and they, too, partake of the rich coloring which makes the leaves so gorgeous.

The striped maple, sometimes called flowering maple, is also known as dogwood and moosewood, though these names properly belong to other shrubs. This tree grows in high, sandy woods, in opposition to the habit of the mountain maple. It is found from Nova Scotia west to Lake Superior. This is a very pretty tree, reaching a height sometimes of forty feet, with its graceful branches spreading upwards and drooping at the top. The bark is light green, striped with dark lines, which gives it a beautiful appearance, and at the same time forms a specially distinguishing feature. The leaves are large, reaching six inches in length, and the three lobes are all toward the top of the leaf, giving it a distinctly different shape from those of the other maples. The edges are finely serrate. The greenish flowers are in drooping clusters, appearing in May or June, and are followed by the large, divergent, pale green wings. The name moose wood was derived from the fact that the moose feed upon the shoots of this tree. It is stated that in the early days the settlers used to turn out their cattle to browse upon these shoots before the grass appeared in the spring.

Nova Scotian Forests.

Amongst reports on the Forests of Canada submitted to the British Houses of Parliament in the year 1884 is one by W. A. Hendry, of Halifax, on the Forests of Nova Scotia, in which the following passage occurs:

"It is matter of record that the forests of Nova Scotia had not been visited by any great fires until 1784, just 100 years ago. The few Indians then in the Province had the forest divided among their families.

"The country was then nearly all covered by a soft wood forest. The most thin and rocky portions had a fair

mixture of white pine, with spruce and fir. The deeper soils of the soft wood land were chiefly occupied by hemlock, with a few large spruce and black birch.

"The aborigines, as well as the early French settlers, were careful never to make fires in the woods in the dry season of summer. In 1783, however, a great number of refugees and discharged soldiers came into the country, and many new settlements were formed. The following year no rain fell in June, the latter part of May and first ten days of July. Fires were kindled in the clearings by the new settlers and it is reported

that within a fortnight two-thirds of the province were burnt over.

"Except what is cultivated, or under water, every part of the peninsula of Nova Scotia would now be covered with trees were it not for the destruction by fires, which scourge the country more or less every season.

"Forests create and gradually improve the soil and climate of a country. The axe makes sad havoc, but may be regulated; fires are terrible. It is to be hoped, however, that an earnest effort to do so on the part of those in authority may prevent a repetition of the destruction from that source.

"The writer had occasion, upwards of 42 years ago, to travel over a large section of wilderness country lying east of Halifax, and in so doing he traversed many miles of open barrens. The burnt stumps, trunks and roots of spruce and white pine trees, many of large dimensions, were at that time scattered all over the barrens, and their remains may still be seen. Although the surface has been burnt over many times within the past 45 years, still the forest goes on reproducing itself and being burnt down, and will continue to do so until active means are resorted to for having the forest fires put out as soon as observed."

Though this statement was made eighteen years ago, practically no advance has been made, as shown clearly from the reports obtained last year in connection with the enquiry into the forest fires.

One of the leading lumber firms of Cumberland county makes the following remarks in connection with a fire that occurred there last year :

"The exact loss is hard to estimate. We can carefully cull, for instance, such timber as will make English deals this year; then in ten or fifteen years we expect to be able to go back and get as much more, and so on forever. Much of this spruce covered land, although of little use for the production of farm crops, will pay well as a lumber farm, for the wood will grow regularly without expensive cultivation. When such a forest is burned, a generation may come and go before it regains its original value, for not only has the wood been killed but the vegetable mold

accumulating for ages has also been destroyed.

"We look upon the lumbering industry as second to no other in the Province, not only on account of its value for the export trade but for the supply of home factories and industries, which are constantly increasing, while the wood supply is constantly diminishing. Such considerations appear to justify the creation of the most stringent laws for the protection of our forests, especially when it is so constantly illustrated that once a fire originates, circumstances over which we have little control determine the extent of its ravages.

"It is hard to estimate the loss from a fire. For it is more than the single loss of one or two thousand acres to the proprietor. It is a direct loss to the whole country, more than to the individual owner, for it robs the country of a portion of an industry which otherwise would have supported many lumbermen in the woods, shipping industries at our ports, and artizans in our factories and throughout the country. If we could only keep the fires out of the forests, on account of the knowledge we are beginning to acquire as to how they can best be cultivated, our wood supply for local purposes could be made to last for ages, if not forever."

This puts the whole case in a few words. The fires are the greatest difficulty. This is the consensus of opinion by forest owners and others. The Fire Act is adequate if it were enforced, but there is no proper machinery provided for its enforcement. There is no system of fire rangers provided by the Government, and only in the case of a few energetic lumbermen have active and effective steps been taken to prevent destruction by this means. But this is wholly unequal to the requirements of the situation. The measures taken by a few forest owners may be effective to a limited extent, but unfortunately fires will not confine themselves to the points from which they start, and unless there is a system that will reach the fires when and wherever they start—and such a system the Government only can organize—the results will never be satisfactory. The holders of timber lands appear, from the statements made by a number of

them, to be quite ready to co-operate with the Government in establishing a fire ranging service, and taking such other steps as may be necessary to make the prevention of fires a possibility. Year after year the destruction of the forests by fire goes on; year after year lumbermen and farmers suffer serious loss, or only avoid it by the most strenuous and painful efforts, and still nothing is done to arouse public opinion or prevent the danger.

It is, perhaps unfortunately, not always the case that as swift retribution follows the careless use of fire as it did in one case in Queen's county last year. One man, who owned fifty acres of meadow, had his hay all made and in his barn. He went to clear more meadow by burning, with the result of burning down his barn with its contents, his camp and all—burning him completely out. This fire ran into neighboring timber and did considerable damage.

There is one great fallacy of which everybody who speaks of forest fires appears to be more or less guilty. Fires which run over lands previously burnt over, but which thus prevent the new growth from establishing itself and reaching productive size, are classed as of no account or as doing damage which is not worth estimating. A forest is, however, as valuable in its future possibilities as in its present products, and there will be no possibility of reclaiming the barren lands with forest, and making them productive, as long as fires are permitted to occur freely over them. The opinion of the majority, which is based on perfectly sound principles, and is probably the only practicable method

under present conditions, is that if fires were kept out, the reforesting of the barren lands might be left to take care of itself.

The Warden of Pictou county suggests, however, that the Government should be asked to bonus pine culture, as he considers that the most useful wood and of such quick growth as to be profitable. As an instance of the quick growth he cites a log twelve feet long, sawn by himself, which grew in his own recollection and from which he cut 300 superficial feet of inch boards. He goes on further to say:

“Much of the land that has been cultivated and reduced by cropping should be allowed to grow spruce also. The southern slopes of the hillsides in Pictou county, where the streams run north, are not worth cultivating. The wood on the banks of the streams should be preserved, as it would assist to prevent the sudden rise of streams, so that when the bottom lands are cultivated they will be more productive. The Government, when granting lands, should put a proviso in all grants forbidding the clearing of all banks of streams and portions of lands where rivers take their rise, for the rapid rising of streams by sudden thaws caused much damage to bridges, intervale lands and other property.”

The forest owners are anxious to make their lands permanently and steadily revenue producing, and more careful methods of cutting with this end in view are being adopted. The cutting of comparatively young trees for paling, to be exported to the United States, is having a bad effect on the woods where it is practised, particularly in the county of Digby.



In the Riding Mountains

BY GEO. BATHO.

"Yoho! Away we go." sang out our driver, and, amid a chorus of many dog voices and the hastily interjected farewells of a small group of loungers, our buckboard, with its funny-looking load of freight, rolled out of the liberty barn and rounded the corner with a smart flourish. We were soon out of sight of the straggling little prairie village, and were heading up a faint new trail which led away to the north-westward. Roads in Manitoba do not require much making, and even in those "early days" we were able to make good time as we drove onward toward the long, low line of blue which rose above the awny brown of the autumn prairies, and threw its rugged outlines against the brighter azure of the eternal vault.

We had long been planning for a hunting expedition in the Riding Mountains, had Jim, and Sam, and I. And now we were on our way toward a week's incursion into the "happy huntings grounds" of our dreams.

It would be idle detail to tell of the adventures of our trip in going, although, after we reached the broken region which marked the rise of the mountain slope, we had a number of rather interesting experiences. Suffice it that after making our way some twenty miles beyond the timber line we found ourselves, late in the afternoon, ready to pitch tent in a little opening at the base of a long, heavily-wooded slope, which ran away back toward the north, and shut in one of the most picturesque valleys that ever cradled the infancy of a mountain river. The sides of the valley were clothed for the greater part by a heavy growth of poplar, but through the wall of bare trunks there gleamed, here and there, the chalky forms of that most graceful of trees, the white birch, while, huddled together in the broken angles of the hillside, the sombre spruce stretched their long, deep, mysterious shadows across the landscape. It was an ideal camping ground, and when that evening

we three sat cross-legged before the fire, and watched the fading glory of a perfect Manitoba sunset, the rugged simplicity and exquisite grandeur of the place seemed to throw its spirit over us, and we smoked silently on until the stars came out and darkness crept down over the hills. Then we tumbled in and dreamt, like one of old, of "all manner of four-footed beasts of the earth, and wild beasts, and creeping things, and fowls of the air."

The next day we spent in more fully establishing ourselves in camp and in making a few little trips into the woods and along the river, "just to get acquainted with the lay of the land," as we told ourselves. In one spot close to the river I found a number of fresh moose tracks, and I promised myself that I should dine on moose steak before I left the woods. The second day set in colder and with a stiff wind, bringing up a few flurries of snow from the north-west. We sallied forth determined to feel our way farther into the forest, and hoping to bring back something big. It was determined that we follow up parallel to the river valley toward the north-west, trying to keep, if possible, within hearing distance of each other's rifles. Sam was to keep nearest to the river, Jim to take a course farther back, and I to keep on the outside.

The Riding Mountains (which, by the way, are about one hundred miles long by sixty miles wide) are in places very heavily wooded, especially on the northern slopes, while in some of the level parts are open stretches of beautiful meadow, the region abounding in lovely chains of little lakes, interlocked by streams and small rivers. It is an ideal hunting ground, there being not only a great deal of wild fowl and other small game, but the dense parts being filled with big game as well.

As may be supposed, the day did not pass slowly, for many a flock of teal and mallard in the lakelands, and many a

scurrying coyote or bobbing cottontail in the woods, invited me to try the powers of my Winchester.

About three o'clock, as I was beginning to feel fagged and careless, I came up over a sharp, heavily-wooded hill, and there, down in a little creek valley before me, I saw four grown moose and three calves. I had come up right against the wind, and they had not scented me. I shall never forget the intense excitement which seized me, nor the extravagant proportions to which the moose appeared to grow as I gazed upon them. To be able to secure one of those monsters would be something to talk about all the rest of my life. They were still a good quarter of a mile away, and I hardly dared trust myself to take so long a shot. An unevenness in the ground a little to the right, however, offered a chance to creep up to within about two hundred yards, so I made a very careful detour and gradually crept forward. How I feared that one of my comrades should blunder along or that some sound should alarm them! How I watched lest I should step on a dead limb! Closer and yet closer I got, until at last, I was afraid to go farther. There were a few scattered trees between the moose and where I crouched, but I carefully raised my rifle to take aim. A fine bull stood broadside, and I levelled at him. It was a magnificent shot, but my nerves shook so that I could hardly hold my rifle. My heart seemed to beat my side with blows like a hammer, and as the wind and snow blew into my face, the tears gathered in my eyes. But my old rifle spoke out, and the bull gave a great leap—and fell. I had hit him! But he was on his feet again in a trice, and though he dragged a front leg, he followed the others as they rushed up the creek valley and swung into the woods. Instead of trying to secure a second shot, I obeyed a mad, blind impulse and dashed after them.

The light flurry of snow made it easy to follow the tracks, and as I saw splashes of red here and there, I hoped that I should soon come up with the fallen moose. But he kept out of my sight, although I could at times hear him breaking the dead wood ahead of me. I was impatient with myself that I

had not killed him, and was determined to do my very best to overtake him, thinking he would give out before long.

After a couple of hours of very exhausting chase, however, I found that the thickening snow was blotting out the freshness of the tracks, and finally decided to turn back.

I soon found that it was impossible for me to follow my own tracks back, so I decided to strike out in the direction in which I supposed the camp to be. I had a vague idea that the moose had led me back to the north-east, but had been so excited that I had kept no account of my bearings, and being a novice in all sorts of woodcraft I soon found myself utterly at a loss as to the proper direction in which to proceed. I wandered about until dark in the hope of striking the river, but it seemed that no matter which way I turned I succeeded only in getting into heavier timber. I was very hungry and tired when at last I decided to build a fire and make the best of it for the night.

My fire was half made when a flickering light through the trees attracted my attention. Could it be the blaze of some other hunting party, or was it only some will-o'-the-wisp? I watched for a moment and decided that it must be the light of some other party, and then set out in its direction.

In a few minutes I stood in the doorway of a little low-roofed hut, and inside was a stalwart half-breed and his wife. I was welcomed in broken French, and right gladly I accepted.

"You fer hunt de moose?" my host enquired after he had watched me eat a supper, the extent of which would have caused great concern to any of my friends at home. The story of my afternoon's experience, as I told it, seemed to amuse him.

"De win' she blow also dat way moose travel heem?" he asked at last. And then I suddenly remembered that in my utter loss of reason I had been following those moose all afternoon with the wind, and my host's good nature became contagious and I joined in the laugh.

"De moose heem mak' it de joke on you;" and off we went into another round of laughter.



THE WINTER PATROL.

N. W. Mounted Police leaving Fort Chipewyan for Edmonton with dog trains

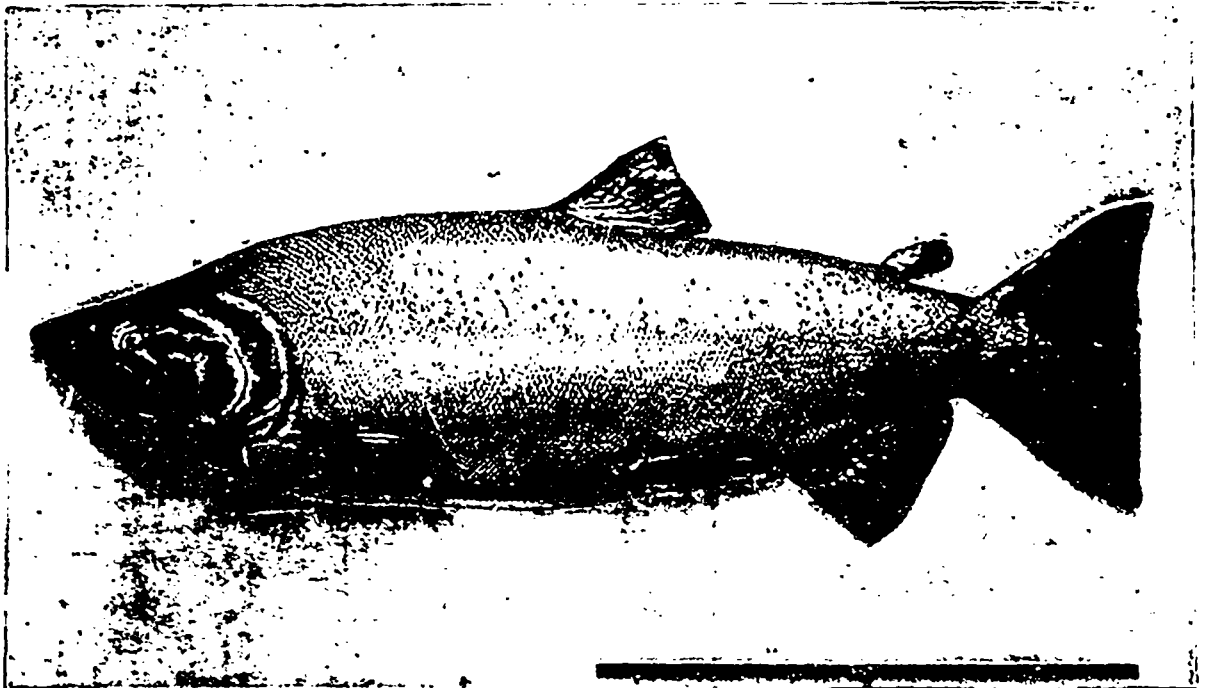


IN THE FAR NORTH

Main house of the Hudson's Bay Company at Fort Chipewyan



BRITISH COLUMBIA SALMON



TYEE OR "SPRING" SALMON

Of the half dozen salmon species found in British Columbia, the "tyee" is the heaviest and noblest.
A truly royal fish.

The next morning, after giving me much information as to the lie of the surrounding country, and some valuable and very much needed advice as to hunting, the half-breed set me out toward camp.

"Go two-t'ree mile, 'cross beeg hill to little creek beyond, and turn sout' wan mile also; dat tam you come on beeg reever. Ver' glad you kam dis way, me;" and with a politeness which would do credit to many who make much greater claims to civilization my good friend started me back toward camp.

When I got to the spot where I had seen the moose tracks the first day, I sat down for a few minutes in the edge of a little thicket to watch the movements of a large hawk which was circling over the valley and apparently getting ready to swoop down upon some poor victim below. Suddenly I was attracted by the appearance from behind a couple of ragged tamaraks of a great pair of horns and a dark brown head, and then a splendid bull moose pushed aside the underwood and came forward close to the water's edge on the other side, a considerable distance down the little river. Owing to the overhanging boughs of some trees half way down the bank, I dared not shoot at him from my cramped position, so I determined to remain hidden and see what he would do. He gazed about for a moment and finally approached as though to cross the river.

It was an absolutely open shot to the near bank, so I crouched lower and waited. But all at once the moose turned abruptly about, as though he scented danger, and disappeared where first he had come into sight. This move was a great disappointment, indeed, as even my little glimpse of this bull had been quite enough evidence that I had

before me an extraordinarily fine specimen of the species. But the movements of moose are not always easy to reckon with, and to my extreme surprise the brute boldly walked into view a few yards closer, and plunging into the water swam to my side of the river. For one moment he paused on the bank to look up and down before entering the timber. It was a good three hundred yards, but I had got over my "buck fever," and my nerves were as steady as steel. The bull went only a few yards, for my bullet passed just behind the shoulder.

At the sound of my rifle my two friends came rushing down the river bank, and helped me rejoice over my first moose. He was a magnificent monster indeed.

When I got to the tent I found a couple of nice fox skins, as well as other small game which the other boys had brought in. Before we broke up camp we had three more moose and two jumpers (black tail), and it was only by dint of considerable ingenuity, and the services of my half-breed friend and his wagon that we were able to take away with us the load which our rifles had secured.

There is still lots of game in the Riding Mountains, and in the Duck and Porcupine Mountains to the north, but although I have three or four times repeated my visit to the old camping ground, and my same old wife has spoken death to a round dozen of the brethren of that first monarch of the woodlands, and although I have also secured three splendid bear robes, still the glory and the pride of all the rest dies out, as I lay aside my pen and lean back to look once more upon that magnificent, shaggy head which forms the most conspicuous figure amongst the miscellany which adorns my study wall.



Sporting Dogs—The Retriever.

BY D. TAYLOR.

The English retriever, either flat or curly-coated, is a breed of dog seldom seen to perfection in this country, and more's the pity. His uses are manifold. From his tractability, intelligence, and the comparative ease by which he is taught to fetch and carry, he is unexcelled by any other breed of dog as a useful companion for man. He is quick to learn, ready to obey, and will go back on his master's trail for miles in search of anything that may have been dropped, and bring it back in triumph. The breed is not of very ancient origin, and is probably a mixed cross of the English or Irish water spaniel, the collie and Newfoundland. At the present day, however, the retriever can be bred true to type, and there are many fine specimens of both varieties in the Old Country, where they are used very extensively in some parts for retrieving heavy game both on land and water, and we don't know of any other dog that would be more serviceable to the sportsmen of Canada, if properly broken. The dog has, unfortunately, the reputation of being somewhat uncertain in temper, but, as far as our experience goes, this is a libel on his character. True, with strangers he is rather suspicious and has the habit of investigating closely a casual visitor, a proceeding which, to a nervous man, is occasionally somewhat embarrassing; but once the caller is recognized by a member of the family the dog's suspicions are at rest, and for all time afterward he has the entire confidence (unless any underhand tricks are attempted) of this faithful guardian of the household.

The general conformation of the dog is very pleasing to the eye. His coat, when in proper condition, is glossy and dense, without any trace of coarseness. He should be strongly built; forelegs straight and well set under, with plenty of bone, as this is essential to the work he has to perform; a slim legged dog is to be avoided. The head of the retriever is a very important feature in the breed, and

a thick-headed, round skulled animal may generally be regarded as vicious, or at the best of uneven temper. The skull should be wide and flat at the top with just the suspicion of a furrow down the middle and the eyes black and piercing, yet with an almost indefinably mild expression denoting confidence and good temper. The coat may be either a solid black or liver, but the former color in our estimation is to be preferred, anything of the latter we have had an intimate acquaintance with having, for some unaccountable reason, just a shade of treachery in their character.

At one period of our life we knew a flat-coated retriever called "Bright," who was a marvel of intelligence and docility. The name was a most appropriate one, for brightness shone out of his expressive eyes, and his handsome face was lit up with the light of intelligence and understanding. His natural talents were developed to an extraordinary pitch by careful and intelligent training, the variety and extent of his accomplishments being the wonder and admiration of all who had the pleasure of his acquaintance. He was also amiable in disposition and unless set upon by another dog would have no part in a fight; yet he could hold his end up with anything in the neighborhood, seldom coming off second best, and it was probably owing to this fact that he was usually let severely alone. His courage, however, was unquestionable, for he once tackled a young and vicious bull, holding the animal's nose with grim tenacity and finally bringing him to mother earth. One of Bright's most brilliant feats was to retrieve a silver quarter dollar thrown by his master into a field of standing grain, and this he did with unvarying success repeatedly. His keenness of scent was marvellous. Going out for a walk one day along a lonely country road, his master dropped his purse into the ditch, fully a mile and a half from home. Reaching there he said to the

dog: "Bright, I have lost something; find it." The obedient dog started out with his nose to the ground, and in less than a quarter of an hour was seen in the distance tearing back for all he was worth with the purse in his mouth. If his mistress desired to convey a message to her husband any reasonable distance from home, which, by the way, was in a sparsely settled country district, all she had to do was to write a note, tie it to his neck and send him on his quest. The intelligent animal never failed in finding his master. Bright was also taught many pretty tricks, and would jump through paper hoops and over obstacles at the word of command. One of the most amusing was to see him sit with a tempting morsel of meat on his nose at the words "On trust," waiting with patience and only a longing twinkling in his eyes to hear the words "Paid for," when he would toss it in the air, catching it as it fell. On this being done he would wag his tail vigorously and give utterance to short, joyous barks, as if asking for the experiment to be repeated. But "whom the gods love die young," and this was the fate of Bright. When about three years old he was poisoned, whether accidentally or not was never discovered, but it is hard to believe, being such a general favorite, that any one would commit such a cruel deed. His remains were buried amid the sympathy of many friends, and his bones now rest in peace under the spreading branches of a maple tree near the banks of the St. John River in New Brunswick.

There are a great many authentic stories told of the sagacity frequently displayed by the retriever in saving life from drowning, and of his faithfulness to his master, but it is seldom, we hope, that the exercise of these gifts leads to his own undoing, as was the case in an incident which occurred recently in British Columbia, the truth of which is vouched for. A miner owned a dog of this breed, and was also fond of fish and of fishing, but ill-success in catching the

wary trout seemed to be his portion. One day, annoyed at his ill-luck, he took a stick of dynamite and a fuse, and he and his dog started for the lake. Taking the piece of dynamite, the miner attached a fuse by wrapping it carefully in a piece of cotton, meaning to explode the dynamite in the lake, which, he knew, would kill a large number of fish and could be gathered in as they rose to the surface. He lighted the fuse and threw the stick into the lake. Then happened something he had not counted on. The dog saw his master throw the dynamite into the water and, following up his training, plunged in after it. The miner shouted, threw stones and sticks and everything he could lay his hands on, but all to no purpose. The dog got the dynamite stick before the cotton had saturated sufficiently to sink it, and before the fuse had burned out. Then he started for the shore. By this time the unlucky miner knew that he could not save the dog, and that he must run if he were to escape himself. He set out at a tremendous gait, but the faithful retriever was soon after him, and he saw there was no hope for himself if the dog caught up with him before the fuse burned out, so he put on more speed. The dog continued to gain, and the miner felt certain that in another minute both would be blown to atoms. All the wickedness that he had been responsible for during his lifetime came upon him in a flash and brought a realization of what death meant at that moment, and he prayed as he never had before. Then came a dreadful explosion, and for a moment the miner did not know whether he was dead or alive. He felt of himself and came to the conclusion that he had escaped. The hole in the ground was only a short distance away from him, and he returned to it.

The poor dog had been faithful unto death—a death which seems peculiarly hard when one reflects that he was merely doing what he had been taught to do, while his master was doing what the laws distinctly forbid.

Newfoundland Fishing.

BY "JOCK O'SCOTTS."

The traveller should go by the way of North Sydney and the steamer "Bruce" to Port-aux-Basques, Newfoundland. Everywhere Customs' officials pass baggage and fishing tackle free of duty. No fishing permit is required. He will leave Port-aux-Basques at 7 a.m., and find himself in a wonderful country, riding in a train that has model sleeping and dining cars. No better breakfast can be obtained on any dining car than the angler can get in the diner on the Reid Newfoundland Company's system. The trains run nearly five hundred miles through almost unbroken wilderness. In about an hour the angler will be looking at a river that lies on the left of the train—a river, the very sight of which will make him eager to cast a line there. It is the Codroy, full of pools that in turn are full of salmon and grilse.

He can stop at Tompkins', where there is fair accommodation for anglers. Guides can be had for \$1.50 per day. Board is about the same price, where fees and extras are included. And as he sees the salmon jumping he will be astonished at the broadness of their backs, and wonder how his rod and reel, that seemed so large to him, will bear the strain of an hour's fight with one of those uneducated rovers in the Codroy.

That is merely the entrance to that paradise of sportsmen. He can stop at Robinson's or Fischell's station, and, by a walk over the moss of a few miles with a guide, he can get to Fischell's Falls, where he will find many salmon. It is unusual not to see at least one large fish trying to leap that fall. It is too high, all fall back. As many as five heavy salmon were seen leaping there simultaneously at my last visit, and often they would jump sidewise, striking on the rocks with a whack that could be heard in the camp.

The angler needs a salmon rod, 100 yards of line tested to a thirty pound pull, a strong reel, and only two flies—

the Silver Doctor and Jock o'Scotts—a half dozen of each for a week of fighting the fish will be a good enough quantity. The fish rise well to the fly known as the Fairy, but the other two kinds are better.

Running down Harry's Brook, you will, in late June or early July, get the finest salmon fishing. Fish of twenty pounds are common. Grilse are numerous. On the 19th of August, one American sportsman, without a guide, took eight salmon in Harry's Brook that weighed 123 pounds. In two hours the day before he took nine grilse on a trout rod, and they weighed about four pounds each; and in addition, about a dozen trout. Almost anywhere a boat taken on the train from Bay St. George can be loaded by a guide and shoved right into water beside the track. There are a hundred ideal camping places. The entire stream can be run in a day; and when the stage of water in the river is right that day should close with the angler happy as he looks at the salmon, trout and grilse. The sportsman will see that Harry's Brook is unique, full of finest salmon, to be taken in abundance by all anglers from June 20th to July 20th, and grilse in plenty. Yet it has a railroad along its entire length, close to the bank nearly all the way.

At its upper end Pinch Gut Brook flows, a beautiful stream, and there, after a fight of three hours, one sportsman secured a salmon weighing twenty-three pounds and a fraction. Two miles east from the head of Harry's Brook, and two hundred feet from the railroad, stands the Log Cabin, on Spruce Brook, St. George's Pond—an ideal lodge in a sporting wilderness, twenty-five miles from any house, and providing sportsmen with a wonderful resort.

Again the whirl of the railroad car wheels. Twenty miles east from the Cabin, on the left, is a small stream, where there is good fishing. Five miles

further, and we reach the village of Bay of Islands, at whose upper end the Humber River flows into the Humber Arm of Bay of Islands. The Humber is the largest river on the island. Even at the Grand Falls, fifty miles up, the salmon fishing is superb. The Upper Humber affords even finer salmon fishing than Harry's Book, and all free. Guides and boats and abundant stores of foods can be obtained in the shops at Bay of Islands. No better outing can be had than a month of camp life on the Humber.

At Bay of Islands a sailboat can be chartered, and in two days she will take a party outside and into the mouth of Serpentine River to Serpentine Lake. There the salmon fishing in two streams is virgin. Hills two thousand feet high, with snow patches on them in August. The Serpentine gives the best joys of a Newfoundland outing, as the scenery is gigantic.

Then for nearly two hundred miles eastward on the railway there are numerous streams, a short distance from the track, that have never wet a line. If the sportsman wants a cheap outing,

with finest fishing, he will stop at Terra Nova Station, live at the little hotel there, and use the boat, all of which can be obtained for \$5.00 a week. The angler can have the choice of a dozen pools and the whole of the lakes to the west, and it will be a poor day when he cannot tire of fishing in an hour. Fifty grilse and ten salmon will be a good week's work, if he is selfish enough to catch them.

The Salmonier River, about a hundred miles outside of St. John's, yields capital sport all of July. You can get twenty or thirty grilse of three to five pounds weight in a week. So, too, the Exploits River, will furnish salmon of from five to fifteen pounds in weight. Those two rivers last named must be fished from a camp. Provisions and guides can be obtained easily. At Hawke's Bay, near the Point Riche on the Western Coast, there is a good salmon river called the Torrent, in which the salmon run from twelve to thirty pounds.

The salmon angling at the head of Grand Lake is superb, fish of twenty pounds being common.

Close Seasons for Game.

BY W. R. JONES.

Our American cousins consider the Philadelphia lawyer the shrewdest of his kind, but I will venture to assert that the very smartest gentleman of the legal fraternity hailing from the city of Brotherly Love, would find his intelligence taxed to the uttermost were he to endeavor to keep track of all the changes in the Canadian game laws. It has long been a recognized pastime with our legislators to amuse themselves during any leisure hours at the fag end of the session by tinkering the game laws, so that, no matter how well meaning he may be, the sportsman often finds it impossible to keep within the law, simply because he does not know of the latest changes.

Let us suppose, for instance, that a hunter of big game has been absent for

the better part of the year in central Labrador; is it at all likely that on his return he will find the game laws as he left them? Certainly not. Perhaps as he descends the upper waters of such rivers as the Saguenay, St. Maurice, Gatineau, etc., he finds a nice fat bull moose wallowing in the water; now when he plunged into the bush the law said, let us suppose, September 1st was the beginning of the open season, but during his absence the inevitable tinkering has been going on as merrily as usual, and the law now reads, October 1st. Meanwhile our suppositious friend being tired of fat pork, takes a shot at the moose, thereby loading his party down with fresh meat, and at the same time rendering himself liable to a heavy fine, or the loss of personal liberty. If

only Canadian legislators could be made to understand the extreme importance of having the game laws fixed and unalterable, game protection would become very much more efficient. We should follow the example set us by the Old Country, where the 12th of August and the 1st of September have been the opening days for grouse and partridge shooting during the lives of two or three generations of men; then there would

be no more excuse for a man not knowing the game law than there is for the idiot who shoots a fellow being with a gun he thought unloaded.

Notwithstanding the herculean difficulties of the task, and the improbability of the result being quite satisfactory, I have endeavored to make out a table showing the close seasons for big and winged game throughout the Dominion of Canada. It is as follows:

BIG GAME.

	Deer.	Elk.	Moose and Caribou.	Antelope.	Squirrel.	Rabbit.
Brit. Col.....	Dec. 15—Sept. 1.	Jan. 1—Sept. 1.	Jan. 1—Sept. 1.	.....	.....	Jan. 1—Sept. 1..
N. W. T. (10).	Dec. 15—Nov. 1.	Dec. 15—Nov. 1.	Dec. 15—Nov. 1.	Dec. 15—Nov. 1.	.....	.....
Manitoba.....	Dec. 1—Sept. 15.	Dec. 1—Sept. 15.	Dec. 1—Sept. 15.	Dec. 1—Sept. 15.	.....	.....
Ontario.....	Nov. 16—Nov. 1.	At all times.....	Nov. 15—Oct. 16(x)	.....	Dec. 16—Sept. 15	Dec. 16—Sept. 15
Quebec.....	Jan. 1—Sept. 1	.....	Jan. 1—Sept. 1 (1)	.....	.....	Feb. 1—Nov. 1(3)
N. Brunswick	Jan. 1—Sept. 14 (1)	.....	Jan. 1—Sept. 14 (1)	.....	.....	.....
Nova Scotia	To 1904.....	To 1904.....	Jan. 1—Sept. 15 (1)	.....	.....	Feb. 1—Oct. 1 (2)
Newfoundl'd.	.....	To Jan. 1, 1912..	To Jan. 1, 1912 (20)	.....	.....	Mar. 1—Sept. 16

BIRDS.

	Quail.	Grouse.	Prairie Chicken.	Wild Turkey.	Duck.	Goose and Swan.
Brit. Col.....	At all times.....	Jan. 1—Aug. 31.	Jan. 1—Aug. 31.	.....	Mar. 1—Aug. 31.	.....
N. W. T. ....	.....	Dec. 15—Sept. 15	Dec. 15—Sept. 15	.....	May 5—Aug. 23.	.....
Manitoba.....	Jan. 1—Aug. 1.	Nov. 15—Sept. 14	Nov. 15—Sept. 14	.....	Jan. 1—Sept. 1	.....
Ontario.....	Dec. 1—Oct. 31..	Dec. 16—Sept. 14	To Sept. 15, 1905	To Nov. 1, 1905	Dec. 16—Aug. 31	May 1—Sept. 14
Quebec.....	.....	Dec. 15—Aug. 31 (1)	.....	.....	Mar. 1—Sept. 14 (2)	.....
N. Brunswick	.....	Dec. 1—Sept. 14 (1)	.....	.....	Dec. 1—Sept. 1.	Dec. 2—Sep. 1 (16)
Nova Scotia..	.....	Sept. 30—Dec. 1 (2)	.....	.....	Mar. 1—Aug. 31 (2)	.....
Newfoundl'd.	.....	Jan. 12—Sept. 15.	.....	.....	Jan. 12—Sept. 15	.....

	Dove.	Introduced Pheasant.	Plover.	Snipe.	Woodcock.	Rail.
Brit. Col.	At all times.....	Mar. 1—Aug. 31.	.....	.....	.....
N. W. T. (10).	May 5—Aug. 23..	.....	.....
Manitoba.....	At all times.....	.....	Jan. 1—Aug. 1 (2)	Jan. 1—Aug. 1...	Jan. 1—Aug. 1	.....
Ontario.....	To Sept. 15, 1905	Dec. 16—Sept. 1.	Dec. 16—Sept. 14	Dec. 16—Sept. 14	Dec. 16—Sept. 14
Quebec.....	Feb. 1—Aug. 31.	Feb. 1—Aug. 31.	Feb. 1—Aug. 31.	.....
N. Brunswick	At all times.....	.....	Dec. 1—Sept. 1.	Dec. 1—Sept. 1.	.....
Nova Scotia..	At all times.....	.....	Mar. 1—Aug. 31.	Mar. 1—Aug. 31.	.....
Newfoundl'd.	Jan. 12—Aug. 19.	Jan. 12—Aug. 19.	.....	.....

(10) Except unorganized territories, in which the seasons are as follows: Deer, elk, caribou, mountain sheep, mountain goat, April 1—July 15 and Oct. 1—Dec. 1; musk ox, March 20—Oct. 15; grouse, prairie chicken, Jan. 1—Sept. 1; duck, goose, swan, and also except in Assiniboia south of Tp. 23, and east of Range 24, where they are protected until 1906, Jan. 15—Sept. 1.

(x) North of C. P. R. main line from Mattawa to Port Arthur; south of main line, Nov. 16—Oct. 31.

(1) Counties of Ottawa and Pontiac excepted, wherein close season is Dec. 1—Sept. 30.

(2) East and north of Saguenay River, March 15—Oct. 1.

(20) Moose only: Caribou, Feb. 1—July 30, and Oct. 1—30.

(2) Certain species

(16) Goose only.

Ptarmigan are protected in Quebec, Feb. 1—Nov. 1; in Nova Scotia, at all times, and in Newfoundland from Jan. 12—Sept. 16.

Curlew are protected in Quebec, Feb. 1—Sept. 16, and in Newfoundland from Jan. 12—Sept. 16.

Taxidermy.

A very useful pamphlet has been issued by the Smithsonian Institute on preparing study specimens of small mammals. It was written by Mr. Gerrit S. Miller, Jr., Assistant Curator, Division of Mammals. It is so necessary for explorers and sportsmen who travel in our northern wilderness to know how to preserve the rare specimens they are almost certain to have in their power to secure, that we deem it advisable to reproduce Mr. Miller's instructions. (1)

For preparing study specimens of mammals ranging in size from that of the smallest mice and shrews to that of a woodchuck, hare, or large skunk, the following instruments and materials are necessary :

Scalpel or pocket knife with blade.

Fine pointed forceps.

Scissors.

File.

Metric rule.

Dividers.

Cotton, tow, and excelsior for stuffing.

Galvanized iron wire of several sizes, from about No. 15 to No. 23, for feet and tails.

Combined cutter and plier for manipulating wire.

Dry white arsenic, or a mixture of one-half arsenic and one-half powdered alum.

Corn meal, fine sawdust, sand, or clean, dry earth, to be used as an absorbent.

Strong paper for labels.

Medium soft pencil, or waterproof ink.

Needles and thread.

Pins.

Alcohol, formalin, or strong cane rum.

A pair of long forceps or "stuffers," and a fat scraper will often prove convenient for use on larger skins.

Specimens of small mammals are to be preserved (a) as skins ; (b) as skeletons ; and (c) entire in alcohol or formalin. (2)

SKINS.

Mammals should be skinned as soon as possible after death. They spoil much more quickly than birds.

In hot climates the viscera should be removed from small mammals immediately, and the abdominal cavity filled with cotton, tow or leaves.¹

This precaution is especially important with rats, mice, shrews and rabbits, or with any specimens that must be kept over night before skinning.²

1. Prepare two labels, one for the skin, the other for the skull. On the skin label record : (a) Number ; (b) sex² ; (c) locality ; (d) date ; (e) name of collector ; (f) total length (tip of nose to tip of tail bones, animal stretched straight) ; (g) tail (turn tail at right angle with back, and measure with dividers from angle to tip) ; (h) hind foot from heel to most distant claw tip.

All measurements to be made exclusive of hair. They should be recorded in millimeters.

On the skull label record : (a) Same number as that on skin ; (b) collector's name or initials. Both labels should be made of strong paper, and the writing on the skull label should be in pencil (heavily marked) or waterproof ink.

2. Lay the animal on its back. Make an incision in median line of belly, running from shortly behind breastbone to base of tail. Work the skin loose at one side until a hind leg is exposed. Push the leg from the outside and pull it from the inside, at the same time stripping back skin until loosened as far as heel. Then, if the animal is smaller than a red squirrel, cut off the leg (with scissors), flesh, bone, and all, a little above heel, taking care not to injure the skin. In larger animals the flesh should be cut through to the bone at heel and stripped upward to knee, where the bone is to be disjointed. The same course may be followed with smaller specimens, but it takes more time, without materially

¹ Mr. E. W. Nelson has furnished the special recommendations for work in tropical climates.

² It is probable that specimens may be temporarily preserved by keeping them exposed to the fumes of strong formalin in some tight receptacle. This method should be tested.

improving the result, except when the specimens are intended for mounting. In animals the size of a skunk, or larger, the process of skinning should be continued to the toes, and the flesh removed from the foot, the bones of which are to be left in place. Repeat the process with the other leg.

3. After the hind legs are finished, skin around base of tail and across rump. Then seize the tail bone lightly with forceps or a split stick held close against the skin with the left hand, and with the right hand draw the bone out of the skin. The finger nails of the left hand will often prove more convenient than forceps for stripping the tail. This process may be troublesome at first, but it presents no real difficulty except in the case of some large, long-tailed animals.

4. Hold the animal by the hind quarters grasped in the right hand, and with the fingers of the left hand drawing with an equal pressure on all sides simultaneously, slip the skin back until the front legs appear. With larger specimens it may be more convenient to hold the skin in the left hand and let the body dangle over the edge of the table, while with the right hand the skin is loosened around the circle of contact. By cutting carefully close to the skin much fat that would otherwise adhere to the skin may be left on the body.

However the animal is held, it must be remembered that all tension must be applied at the line of contact between the body and the loosened skin; otherwise serious stretching will result, and a stretch is far more serious than a cut.

5. On reaching the front legs draw them out from the skin and treat exactly as has already been done with the hind legs.

6. Slip the skin off until it bends at the bases of the ears. Cut through these carefully (with knife) so as to injure neither skin nor bone. (It may be found that the ears can be more readily loosened with forceps or finger nails). A short distance in front of the ears the eyes will be encountered. Work the skin as far forward as possible with the fingers of the left hand, and cut close to bone with knife held in right hand. The membranes will thus be divided without injuring the eyelids. Considerable practice will probably be necessary before this can be done rapidly and safely. Cut away the skin from the skull until the lips are reached. These are to be carefully separated from the jaws and gums until the skin finally hangs attached by the nose only. Cut through the cartilage of the nose, taking care not to injure the delicate nasal bones of the skin of the muzzle, and the operation of removing the skin is completed.

(To be continued)

Game of British Columbia.

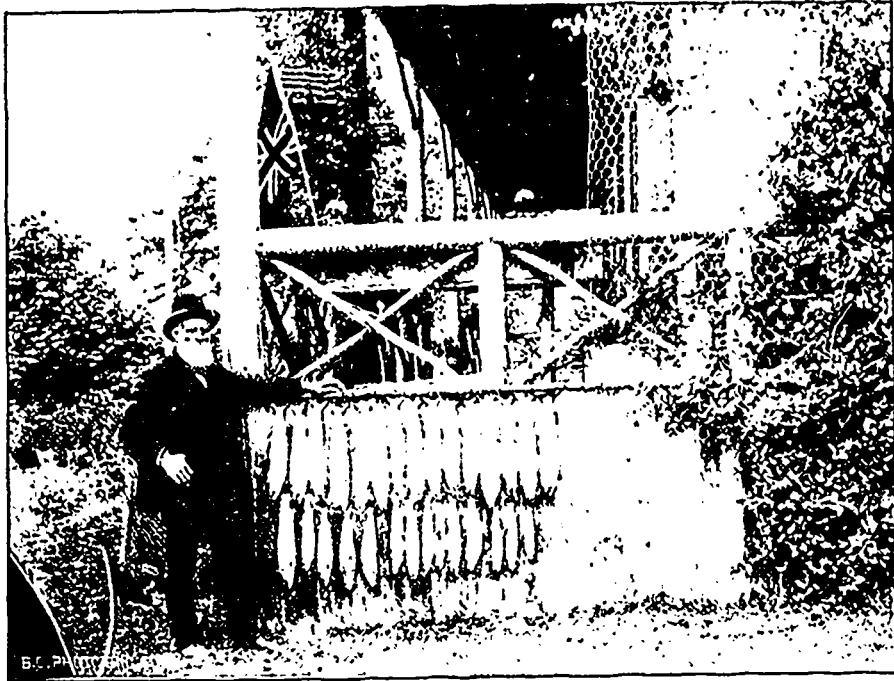
BY CLIVE PHILLIPS-WOLLEY.*

The game of a province is one of its assets. If the province be a province of the British Empire, one which is anxious to attract to it men of the British race, then its game is one of its most valuable assets, for ever since those early days when our ancestors painted themselves blue with woad, covered themselves in cold weather with wolf skins and enjoyed a European reputation for their sporting dogs, the British have been a race of hunters. This position needs no elaborate defence, unless you are arguing with local legislators. The people see it and history proves it. A big half of England's

explorers were principally sportsmen, and are so to-day; a big half of the men who came to settle here have their imaginations fired by the stories of deer hunting and bear shooting which may balance the monotony of farm chores, and a very large number of those who eventually invest their very essential English sovereigns in this country came here in the first instance to hunt our game.

It has been the same story in Africa and in India. Britain's colonial empire

* Republished by courtesy of the Victoria Times.



COWICHAN LAKE TROUT

These fish were caught within a few miles of Victoria, the Provincial capital



A BIG TROUT

This fine fish was one of a dozen similar trout taken by a Vancouver Island angler



THE WHITE GOAT'S HOME

A scene in Western Alberta where the ground is a good deal disturbed



THE OJIBWAY CANOE

A 5-fathom birch-bark with its crew on Lake Missanabic, Ont.

owes a vast debt to her wild game and to the sporting instinct.

In this country especially the hunters came first. The fur traders preceded the miners, and even on the coast the sea otter had almost as much to do with the early voyages of our discoverers as the mythical sea passage of which so much was said.

Africa, of course, in everything, from game to gold mining, is a dangerous rival to compete with, but even Africa in its early days could hardly dwarf the North American continent in its production of great game.

I grant at once the vast herds of antelope of all sorts, the moving masses of elephants, the beauty of the sable antelope and the grand danger of the lion, but I set against them the sea of buffalo which used to sweep across the prairies of the Northwest, the myriads of caribou which still go to form "la loule" in our far north, the matchless beauty of our elk (wapiti) and the grim strength of the grizzly.

In both countries the depletion of game has been very considerable, but neither is by any means exhausted. On the contrary, neither has yet yielded up its last animal new to science.

It was only in the May of this year that the London Times recorded the advent of a new mammal from the forests of the Congo, a beast as big as a bull, and standing half way between that beast and a giraffe, with a creamy coat, a crimson forehead and purple gaiters—from the knee down—altogether a brilliant beast to have so long escaped notice; and in the same year the scientific authorities of America have chronicled the discovery of two new sheep at our own door, the *ovis stonei* from Cassiar, B.C., and Fannin's sheep from Alaska.

Neither is this the end of it, to my mind. Here, at any rate, are still oft-repeated stories of an ibex which is said by the Indians to frequent the higher mountains of the northern mainland. A reference was made to this in the report of Lieut. Simmons, U.S.N., who is confident that these stories have a basis in fact. He is also the authority for the blue bear of Mount St. Elias.

On Queen Charlotte's Island there is said to be a variety of caribou still

unrepresented in European museums, named already after the late Dr. Dawson, who wrote to me shortly before his death begging me to make my next shooting expedition in that direction, and bring him back a specimen, and over and above these beasts there are legends about the fauna of the Kamschatkan coast which make the mouths of sportsmen water. I mention these facts because, whilst some of the beasts referred to are not British Columbian, all inhabit districts for which Victoria, B.C., would be the natural starting-point.

To come back to British Columbia proper and to our comparison with Africa. In every point but one Africa must be admitted to be our peer as a sporting country. In one important aspect we have the field to ourselves. In Africa the sportsman has to run the risks of fever, dysentery, and every other known disease arising from malaria and bad water, snakes, leeches, and other abominations, whereas in British Columbia there is no danger of either disease or snake bite. The rattlesnake exists in one or two places on the Mainland; he is reasonably plentiful even in some parts of Osoyoos and on the Bonaparte River, but he always gives you fair warning before he hits you, and I have never in twelve years' residence known a man bitten or even heard of one who had been fatally injured.

Of the beasts that have vanished before the incoming of man, the list is still very small.

The sea otter, which used to be very plentiful about Chemainus on Vancouver Island, has been driven back for the most part to the Aleutian islands, and though there are plenty of whales still to be seen round our coasts, the great grey whale, which used to afford most of the employment for the 300 ships which in 1852 plied their business in the North Pacific, has ceased to exist in sufficient quantities to make whaling a very remunerative business.

On the Mainland of British Columbia, except in one small and far away corner of East Kootenay, the elk of our local sportsmen, or more properly wapiti (*cervus Canadensis*), has disappeared, though we may still find the bleached antlers of this grand beast on the townsite

of Vancouver, about Westminster, on many of the small islands of the gulf, and generally from end to end of British Columbia. On Vancouver Island alone in British Columbia the wapiti still holds his own in considerable numbers, and a recent discussion in the Field established, I think, the fact that any competent hunter who will take the trouble can still obtain a couple of fine heads in the season, which is all that the law allows. There are wapiti still in the Alberni and Comox districts; a friend of mine has killed several in recent years near the head of Cowichan Lake; naval officers have killed specimens recently in the Comox district, but the principal haunts of this deer to-day amongst us are on the northern and western sides of this Island. These haunts will not be more accurately particularised here. They are all too well known already.

On the American side, just opposite to Victoria, in the Olympian range, the wapiti is said to be extremely plentiful, and I myself have known of more than one successful expedition in that district, which is not only close to us, but is very little known. I have always been of opinion that a man who would go back some distance beyond the dense forest of the coast line would be likely to find his way into a new and fine big game country, and that without much trouble.

The heads of our Vancouver Island wapiti are not as wide in span as those of Montana and Wyoming, nor as large in any particular as the largest eastern heads, but they are not far behind them. A specimen now hanging in the Badminton Club is probably as large as any Island head now on view in the country. I have never seen a larger.

The mule deer (*cervus macrotis*) is next in size to the wapiti, and as if to balance matters, abounds all over the Mainland, but does not occur on the Island. You can find him wherever there are not too many prospectors, and if you cannot obtain a fairly good specimen of this handsome stag, you had better give up big game shooting, for he gives the hunter every chance, ranging in the early part of the shooting season high up on the edge of the sheep lands

in the open or in scattered timber. The big bucks are generally the highest up. There is a phenomenal head at Vernon now, I think, which is almost worth a visit to anyone really keen about sport. It numbers 59 points in place of the ordinary ten, and though it is figured in Volume 1, Badminton Big Game, no picture does justice to its strange beauty.

The white tail (*C. Virginianus*) is comparatively rare in British Columbia, although I came upon a place once in the Kettle River district where this deer was fairly abundant, and I know that he occurs in the Okanagan, Osoyoos, and other districts of British Columbia. He is a pretty beast, with a handsome head, but he has every bad habit which a game beast can have, sticking close to dense cover in river bottoms and such places, giving the hunter nothing but an insulting glimpse of his hinder parts as he pops over a log like a jack rabbit. He is plentiful all the way along the river between Steele and Jennings.

The black tail (*C. Columbianus*) is the mowitch or deer par excellence of Vancouver Island, a small fellow, weighing from 100 lbs. to 175 lbs., and carrying a head of ten points at the best. He is as plentiful as anyone who farms wants him to be, but his many misdemeanors in meadow and orchard are freely forgiven him, because he is the musketry instructor of Vancouver Island, and as such a very honest servant of the King. He teaches our boys to shoot, he supplies the larder of many an impecunious rancher, he is as pretty as paint, as common as beauty in nature, and is probably at work amongst our peas as I write. You might not get a specimen on Beacon Hill without offending the city fathers. I don't know where else you could hunt for one in vain.

My lord the moose and his neighbor, the caribou, belong especially to our northern limits, although the caribou is pretty plentifully distributed about the Mainland of British Columbia in the Kootenays, towards the head of Kettle River and elsewhere, and an extraordinary recurrence of moose took place last year in the neighborhood of Ducks.

(To be continued)

Our Medicine Bag.

Notwithstanding the cruel destruction of game which has been going on in the Okanagan, Mr. R. Leckie-Ewing, of Okanagan Landing, writes to the London Field that there is yet any amount of shooting to be got in the valley. He says, in part:—

“As I write I can see out of the window of my shack a band of over 2,000 (duck) quietly swimming about in the middle of this arm of the lake. They are about 800 yards out, and to approach within gunshot is quite hopeless. It is only when the pack breaks up, and a few of their numbers leave the main body and start feeding near shore, that any shooting can be had. Of course, earlier in the season, and before the birds had packed, we had better shooting, as then the shores of the more unfrequented parts of the lake always held lots of duck, and, with our retrievers, we were able to make very fair bags, averaging from fifteen to twenty brace a day. I doubt if any lake in any country contains such a variety as Okanagan. To enumerate their countless species is quite beyond me, but amongst the more common varieties can be found mallard, teal (green and blue-barred), buffleheads, redheads, black duck, pintails, canvasbacks, wood duck (very scarce), goosander, sawbills and golden-eyes. Cross-breeds are also very plentiful. There is a curious tradition about the last-named bird—the golden-eye or whistler—so called on account of the loud whistling which this bird makes with his wings when flying. Along with other diving ducks, these take a tremendous lot of killing. Unless one has had the experience, it would be impossible to believe the perfect hail of pellets which they can withstand, and, unless hit in the head or neck, they are never killed outright. I have often and often dropped these birds at short range, and left them apparently lifeless on the top of the water, floating belly up, but, before the retrievers could reach them, up they get and fly away as if nothing had happened. More

often, however, they dive, and, when they do this, it is hopeless to think of ever seeing them again. But, apart altogether from the sport to be had in this district, to the photographer, the lover of beautiful scenery, and, above all, to those in search of a perfect climate, commend them to the Okanagan Valley. A visit once paid (and this is quite an easy matter) would result, I feel sure, in many others, as no country I know of offers more inducements, nor could be more absolutely satisfying, than this one. The fishing, too, is very fine.

Regarding an alleged deterioration in Nepigon fishing, printed in a western United States newspaper, Mr. William McKirdy, Fishery Overseer, writes:

“I wish to state that there are no mills of any kind on the river, nor are there any logs or pulpwood in any portion of the stream where trout is fished, nor can there be seen one dead fish from one end of the river to the other; in fact the river has never been in better shape than at the present time. The whole story is too absurd for anything, and were it not that people who do not know the facts might give it credence it would be unworthy of notice. The whole article is a deliberate falsification.”

The show committee of Montreal Canine Association are in a position to declare a gain of something like \$275 as the result of the bench show held at the Arena in May. This is very satisfactory when it is borne in mind that, owing to the large number of entries, a considerable sum had to be expended for new benching, fifty per cent. of which was paid for from the receipts, leaving the balance to be charged to capital account. The executive of the Association met the same evening on which the statement was presented and heard a proposal read from the Police Committee of the city, in reference to the gathering in of stray and unlicensed dogs. The Association was

asked to co-operate by appointing a canine expert, who will determine the value of all unclaimed dogs collected, and decide as to whether they should be destroyed or sold. Mr. Alex Smith was the unanimous choice of the committee for the position. This appointment is a wise as well as a popular one, for there is no man in Montreal who knows half as much about a dog as "Auchcairnie," and we have no doubt he will justify his selection. All condemned dogs will be humanely destroyed under the supervision of an officer of the Society for the Prevention of Cruelty to Animals, which is also co-operating in this first genuine effort to rid the city of a constantly increasing nuisance and danger to public health.

A bit of black court plaster is a good thing to carry in the camera case. It is just the thing for mending a cracked front board, a leaky bellows, or even a broken plate-holder in cases of emergency. Also it is apt to come in mighty handy after showing a quick tempered man the picture of himself you have taken.

This is the season of the year when you ought to take the old felt off the back of your printing frame and glue new on in its place. The old backs will in time get so thin that a desirable amount of contact is not to be had between negative and paper, particularly so at the hinge. One will frequently find a negative printing sharp all over and leaving a streak of fuzziness up and down the middle, owing to the felt being worn. By the way, don't use flannel to back your frame if you can get felt. So little is required that the question of expense is not worth considering.

During the warm weather dogs are more or less liable to eczema, therefore great care should be taken with their diet, their skin closely examined frequently or at the first appearance of scratching, and something to alleviate the irritation applied at once. At the same time, on general principles, it is a good and safe course to administer a blood-cooling and mild purgative occasionally. Above everything else, at the first

appearance of an eruption on the skin apply freely some such preparation as Jeyes' Fluid, diluted with water in the proportion of five to one, to the parts affected, which will allay the irritation and in all probability prevent its spread. Should the first symptoms be neglected there is no end of trouble in store for the owner and a great amount of misery and unnecessary pain caused to the dog. Should red mange ensue, as it frequently does, a mixture of oil of tar, black sulphur, and a small quantity of either turpentine or Jeyes' Fluid, made into a salve and rubbed well in is said to be a safe and speedy cure.

By hanging a lace curtain between the sitter and the camera, of course, quite out of focus, the light will be very much softened and the threads of the curtain will produce an effect very similar to that of chalk drawing.

The Dogs' Protection League (Eng.) have in view the foundation of a nursing home for dogs, where women can be trained by lectures and practical experience in the nursing of canine patients, and are now engaged in collecting funds for that purpose. There is no doubt that many dog owners would regard the innovation of women dog nurses with much satisfaction, and it is believed that a large field would be opened to women fond of animals who may desire to find a new profession for their energies. Many prominent ladies have given their support to the movement, and it is expected the institution will be in working order ere long.

Judging by what we hear from British Columbia it is high time the present slaughter of game in the Okanagan district were put a stop to. Mr. Alexander Crawford writes from Okanagan Mission as follows:

"Will you please print the following letter, which is about the game of this country as it used to be, and as it is today: When I came to this country about nine years ago, in the spring the caribou used to come off the mountains to the lower flats in bands of from ten to forty, and it was nothing to see in May

from fifty to a hundred caribou in a single day ; but when the game hogs got to where they roam they soon slaughtered them, or scared them off, for now you may hunt for months and not see one. Now for the deer : They used to be nearly as thick as sheep, it was nothing to see fifty in a band. They have been slaughtered wholesale ; a friend of mine told me that he had seen the ice of Okanagan Lake, near the shore, nearly covered with dead animals, and now you will travel all day and may not see one. The 'game hogs' now are taking advantage of our poor brutes, and kill not only the bucks, but the does as they come down low to fawn.

"I hope that your real sportsmen will realize the rapid decrease of our game, and, that if this kind of work is kept up, there will soon not be a deer left. Not only are deer getting scarce, but grouse are too, and I think that this work ought to be stopped right away. There ought to be a game warden here to see that no game is killed out of season.

"I hope that something will be done in this place, and that the deer will be protected for five years, and not be allowed to be killed in that time. I would like to see the deer as they used to be."

The Coronation Show held under the Ladies' Kennel Association of England had 2,700 entries, made by 360 exhibitors, a most astonishing number for a show held and organized solely by ladies. Altogether over 900 dogs were up for competition at the Botanical Gardens, London, which is a very good criterion of the strength of ladies kennels. Besides the dogs there were 360 coops of poultry and 300 pens of cats, so that the interests of different classes of pet stock lovers was taken into consideration.

Some amusing results may be had by stretching a film before printing. Make a portrait of a good natured friend, and then soak the plate after development in a solution of very weak hydrofluoric acid, which will remove the film. Now by applying the detached film to a larger plate upon which a thin coating of gelatine or albumen has been applied, and, instead of smoothing it straight and

even, as one would usually do, stretch it this way or that as seems to give the oddest expression. Very startling results may sometimes be obtained, and all with just enough likeness to be funny.

The Savage Arms Company, of Utica, N. Y., have just acquired the right to manufacture and sell the magazine and magnetic tack hammers, the invention of Mr. Arthur W. Savage, the inventor of the famous Savage repeating rifle.

The magnetic hammer is the best of the kind on the market, being very strong and practical. The magazine tack hammer is particularly intended to save the thumbs and fingers of the weaker sex, who, from time immemorial, suffer from the lack of skill in aiming the uncertain hammer. While the hoped for time may come when man will do all the labor, at present circumstances appear to make it necessary or convenient for the "better half" to decorate



the home and tack the carpet, so by right of suffering thumb-nails the tack hammer is her rightful property.

The new hammer is very simple to use. All that is necessary is to pull the trigger with the forefingers, then release it, which places a tack from the magazine on to the face of the magnet, which forms the striking face of the hammer, where it is held until it is driven by one or more blows. It readily enables any one to tack up decorative material on the sides of a room or the ceiling, and in any position which is generally considered difficult when using the ordinary tack hammer. The magazine hammer only requires one hand to operate, thus leaving the other hand free for holding the material to be tacked.

The placing of the tacks in the magazine of the hammer is done either one at a time, or with one movement of the loader which goes with each hammer. Everything is simple and in plain sight, and if once used the device is considered indispensable.

In an article published elsewhere in this magazine dealing with the fishing on Vancouver Island, reference is made to certain flies which the author recommends. At the time of setting up this article we had not received the flies mentioned. As we go to press, however, a description of them has reached us. The writer says: The standard flies for salmon are the Jock o' Scotts and Silver Doctor, varying in size from 3-0 to 6, and for trout the March Brown, from 7 to 14, according to circumstances. All these patterns are kept in stock, or manufactured, by the local dealers, and specimens may be seen at 34 Victoria street, Victoria.

We are in receipt of one of the handsomest catalogues it has been our good fortune to run across, it having been issued by the J. Stevens Arm & Tool Co., of Chicopee Falls, Mass. In addition to an exhaustive description of the arms made by the company, this pamphlet contains a vast amount of information useful to riflemen. Those of our readers who use the grooved barrel, should certainly write to the Stevens Company for a copy of this little book.

There are plenty of blue grouse in the heavy forests of the coast region in British Columbia, and there is little danger of their ever being thinned out, but it is just as well to make the Indian keep the law, and there is some satisfaction in reading that two Sooke Indians, who were recently caught red-handed with fifty-six blue grouse in their canoe, were fined \$75 each, or thirty days imprisonment. They do things very thoroughly out in the west, and if some of our magistrates here in Quebec would give up handling poachers with gloves and use bare knuckles, as this western justice has done, it would be well with our game.

One of the features of the forthcoming guide book which is being published for gratuitous circulation by the Montreal Business Men's League is an article on fishing and hunting in the Province of Quebec by Dr. W. H. Drummond. The author of "The Habitant" is an ardent fisherman, and indeed fond of all out-

door sport, and his knowledge of the Province specially qualifies him for writing upon the subject. The guide, which will be out of the printer's hands in the course of a couple of weeks, will be sixty-five pages and will be illustrated in half-tones. It is the intention of the League, which is under the auspices of the Montreal Board of Trade, to publish from time to time pamphlets and guides of Canada, the same being circulated free to different portions of the United States and Europe. One of the main objects of the League, which numbers among its members some 350 of Montreal's best known business men, is to stir up interest in Canada and Canadian affairs, and the ardent sportsmen are by no means least among the number.

An Act was passed at the session of the Quebec Legislature authorizing the appointment of a Commission to enquire into matters affecting timber and colonization. The clauses defining the duties of the Commission, in so far as they relate to forestry, are as follows:—

"To make a critical study of the laws and regulations respecting public lands, woods and forests, colonization societies, works and roads, and the protection of settlers, as well as the carrying out of such laws and regulations ;

To enquire into the number and causes of the difficulties between settlers and holders of timber licenses, and to advise upon methods of their prevention and removal ;

To find out what are the sections of the country most suitable for colonization ;

To study the new proposals or systems which may be submitted to it, and, whilst taking into account the financial resources of the province, to recommend those which tend to amend the laws and regulations so as to foster colonization and the development of forest industries."

This is a very important step and one upon which the Government of Quebec deserve congratulations. Such a commission, composed of strong and impartial men, should be able to collate information of the greatest value, and to assist the Government in determining the proper lines upon which the future development of the resources of the province should be directed.

The recent importation of Balmoral Piccolo and Balmoral Hope by Mr. J. Cromwell Cox, of Ottawa, has added greatly to the wealth of collie sires in Canada. In the first named we have an almost ideal specimen of what a stud dog should be, as the very best blood flows in his veins from both the sire and dam side. He is a large, powerfully-built dog, with grand action, long and shapely head, and is a beautifully-marked golden sable and white. Piccolo was an extensive winner in the Old Country, over forty prizes and specials being awarded him under different specialist judges. His kennel mate, Balmoral Hope, is quite a young dog, a little over a year old. He has a very stylish appearance, being also large in size, with a beautifully-chiselled head, heavy coat and frill and profuse brush. Hope was bred by T. Stretch, of Ormskirk, Lancashire, Eng., and his blood is of the most aristocratic.

Bush fires have already begun their season's work. Serious fires occurred near Whitney, in Ontario, during the month of May and threatened much damage to the settlers and to the forests. Some timber was destroyed, and it was only the advent of rain that prevented more damage, as the fires were unmanageable even by the most strenuous efforts of settlers and lumbermen.

A fire which occasioned considerable loss also occurred on the Coulonge River in Quebec. The forest fire season has opened out early, but it is to be hoped that it will not be as destructive as last year. We again urge on all readers of ROD AND GUN the necessity for the greatest care in the handling of fire in our coniferous forests.

In some very interesting articles recently published, 200 yards in twelve seconds is set as a sort of standard mark in whippet racing, *i.e.*, a dog is spoken of as better than a twelve second dog or worse. One of the fastest dogs ever placed on the race track was one named Not for Joe. His weight was 56 lbs. and he ran 200 yards in 11½ seconds. Shepherd dogs, and those used in ranging and hunting attain a speed of from ten to fifteen yards per second;

setters and pointers are said to hunt at the rate of eighteen to nineteen miles per hour. A foxhound has been known to beat a thoroughbred horse, covering four miles in six and one-half minutes, and greyhounds, which are said to be the swiftest of all four-footed creatures, are able to cover, at full gallop, a space of from eighteen to twenty-three yards per second. A dog has been known to jump forty-two feet from take off to landing.

Travellers in the bush often hear the word "snye" given to a narrow passage way between islands or other obstructions. The derivation of this term seems to be as follows:—The early French settlers spoke of a "chanle" or channel; this became corrupted into "ch'nil" by their descendants, and from this to "snye" was an easy transition.

Our congratulations are offered to the Tourists' Association of Victoria, B.C., for its energetic action with regard to the fisheries of Vancouver Island. A suggestion that they made to the Ottawa government in respect to restocking the streams and lakes, has, we hear, been favorably received, and the department will now undertake not only to continue the planting of sockeye, black bass, steelhead, and coho salmon, but have promised to begin the hatching of rainbow and dolly varden trout. The only criticisms we have to pass, relate to the dolly varden and black bass; we cannot understand why fishermen who have such grand species as the steelhead, the quinnat and the rainbow, should want either black bass or dolly varden, particularly the former. Some of our eastern fishermen will get a better idea of the fishing of British Columbia when they realize that the minimum, legal size, in future is to be eight inches.

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Communications on all topics pertaining to fishing, shooting, canoeing, the kennel and amateur photography, will be welcomed and published, if suitable. All communications must be accompanied by the name of the writer, not necessarily for publication, however.

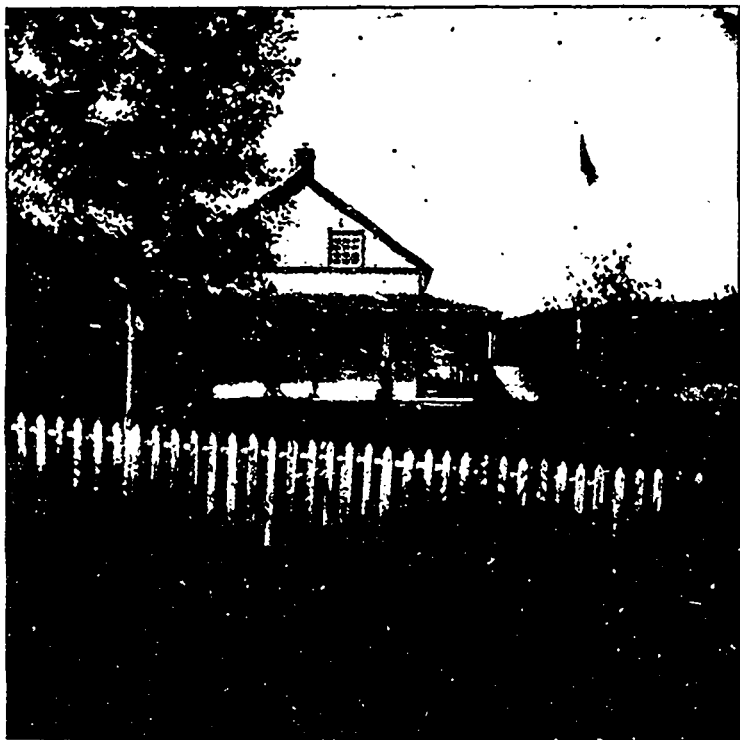
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H. B. Company's Nepigon Post



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Have you wet a fly in the Nepigon? If not, listen to what General McNulta, U.S.A., says: "Having tested, by practical experience, some one or more of the head waters of every principal stream on both the Atlantic and Pacific slopes, from the most northerly settled limits along the Canadian Pacific line, to the most southerly point in Mexico, where trout are found, together with a test of most of the principal streams in Scotland and Ireland, I am still of the opinion that the Nepigon, from the standpoint of the high-typed sports-man, is the finest trout stream in the world."

The Nepigon has long been termed "the king of trout streams," and as civilization advances, and the older trout streams are practically fished out, we find the Nepigon still holding its own, and producing fish which would make any angler envious of the fortunate one who had selected it for his outing. Five-pounders are common, and there is a record of one weighing eight pounds two ounces, caught by Eugene Stevenson, of Paterson, N. J., in August, '95; numbers of doubles are caught, the largest by E. P. Williams, of Cleveland, O., on August 28th, '95, with a six-ounce rod, one weighing 6½ pounds, the other 4¾ pounds, in the aggregate 11½ pounds. Many other records worthy of a first place, cannot, of course, be published here.

Lake Nepigon, the fountain-head, the producer of the brook trout for which this stream is justly famous, is also the home of the whitefish and lake trout, some of the latter having been caught with the rod weighing from 30 to 40 pounds. The lake is beautiful, being studded with numerous islands offering pleasant camping places, and many tourists who visit the Nepigon spend some time on the lake, which can be safely traversed in the large bark canoes used on the river. The climate here is particularly enjoyable: the delicious coolness of the air has wonderful recuperative powers, and refreshing sleep under warm blankets is the lot of all.

Nepigon station is on the main line of the CANADIAN PACIFIC RAILWAY, 65 miles east of Port Arthur and 929 miles west of Montreal.

Anglers may obtain all necessary information by applying to any officer or agent of the

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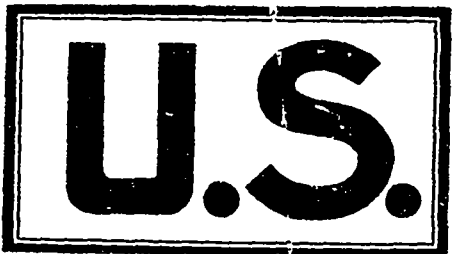


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