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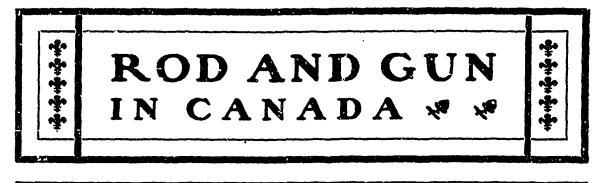
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Mr. H. W. Du Bois's party breaking camp.



MONTREAL AND TORONTO, MAY, 1903

No. 12

New Brunswick Moose.

BY GEORGE E. ARMSTRONG.

(Concluded from the April issue.)

As soon as Mr. Bird would make a fresh start to crawl, the moose would begin to get auxious. After looking several times and seeing nothing, it walked up to the beaver house and climbed up on top, and thus it could see Mr. Bird lying in the grass and mud. The bull made up its mind there was trouble in the air, so slowly left the beaver house and started for the shore. When it got out on the meadow, and was half way to the woods, Mr. Bird let go one of his 30-30's. It made not a bit of difference in Mr. Moose's step; so crack went Mr. Bird's rifle again, and still he walks on as if nothing were the matter. I was beginning to get uneasy, and jumped out of the woods and told him he must be missing him. He jumped up and fired two more shots, and still the moose was going steadily, and was now nearly to the woods. I told him to take care and get him next time. so he took a careful aim and pulled the trigger, but no report came. The rifle was empty! He had only put four cartridges in the gun, slipping the rest in his coat pocket, and his coat was now on the other side of the lake, over a quarter of a mile away. "Well," he said, "if I have not hit that moose I will never fire a rifle at another; he is welcome to live." I told him to watch the way the moose went, and I would run back and get the cartridges. So away I went ploughing through the mud, but after getting over to where I thought we had left our coats.

I could not find them. Finally, after loosing fully ten minutes, I found them.

When I got back to Mr. Bird he said he had heard the moose making a terrible noise in the woods a few minutes before, but that all was quiet then. Mr. Bird loaded up again, and we walked over to where he had last heard the moose. On reaching the spot we found lots of blood, and saw where the moose had started down the edge of the meadow on a runway. A few yards beyond lay the forest king, stretched out in death. It was a We measured the spread large moose. of antlers, they were fifty-eight inches; thirteen inch webs; with thirteen points on each web. We went back and measured the distance Mr. Bird fired at, and it was one hundred and twenty-five yards. On examining the moose we found two holes through its neck, about six inches apart.

While standing there looking over our prize, Mr. Bird said to me: "What is that I see moving down at the foot of the lake. I looked down, and to my surprise I could see the antlers of a large moose above the alder bushes at the foot of the lake, about half a mile away. It was coming to the lake, and it was only a minute until it stepped out into the water. and looked around awhile and then took a drink, and started up the shore of the lake towards us. The sun was now about half an hour high, and was shining very brightly. It was one of our beautiful October mornings, and to see the sun glistening on the bull's antlers as it drew nearer was a sight that one seldom sees, and one that I shall never forget. It came up to about thirty-five yards of us, when it stopped. It could see the mose that Mr. Bird had just shot lying there, and could also see us. It walked up to within twenty-five yards, and stopped and looked straight at us for about five minutes. I am positive it was a much larger moose than the one that Mr. Bird had just shot. It soon made up its mind that it had no business with us, so turned and walked into the woods, and went up by us only a few yards back in the woods trying to get scent of us.

It was ten o'clock when we got the head off and up to our camp. After we ate our lunch we started back over the trail for Camp Wapske. I carried the head across, aid perhaps I was not glad when I got sight of camp, as both my shoulders were blistered. Any one who ever carried a moosehead with that spread of antlers over a trail that was only spotted out knows something of the kind of job it is.

On our arrival at Camp Wapske we found that Mr. Bird's friend, L. F. Fales, had shot a fine caribou, and had seen several moose, but got no shot. He was much pleased to hear of what we had seen, and said he was going back to get the big moose that visited us. Ι advised him and his guide to go over as soon as possible, which they concluded to do. Mr. Fales, Ed. Mallory, guide, and Dave as cook, returned to Beaver Lake, taking with them supplies enough to last a couple of days. Mr. Bird and I were going to stop at Camp Wapske and hunt caribou. On the 10th Mr. Fales returned to Camp Wapske with his moose. He had shot it on the morning of the ninth. It was a good moose, but not the big one that visited us. The team also had arrived at Camp Wapske on the night of the tenth, it being the appointed time for him to come after us. We got him to lay over a day for us while we went back and got some of the meat to bring out with us. On the morning of the 12th we all started for home, Mr. Bird and Mr. Fales being in the woods but ten days, and each securing a fine moose and caribou head.

The Blue Print.

BY HUBERT MCBEAN JOHNSTON.

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Why is it that photographers the world over are indifferent to the blue print? This seems to me to be a very puzzling question, and one that I must confess, I am quite unable to answer. It surely cannot be because it is not specially adapted to any particular kind of work, for, as a matter of fact, there are classes of photography where the blue tint of the blue print ought to stand out promin-Somehow the blue print is one of ent. the things in photography which the average amateur accepts without question and makes no effort to learn more about. He finds it there when he begins first to take pictures, and because it is such a simple process, he very quickly takes it up and rushes it to death. Then, as he advances in the art pictorial, he goes after 'other more difficult processes and the poor—but honest—blue print, is forgotten.

The prejudice against the blue print because of its color, is interesting. In everyday life, we are apt to enthuse about anything blue, from the color of the water to the deep, rich blue of a woman's eyes. The collector will rave over the rare depths of color in a Delft plate of years ago, and the plain everyday woman will sigh over the soft, tremulous tints of a bit of turquoise. But let either of them take up the artscience of photography and see how quickly their color fancies turn to sombre browns and greys, whose monotony is relieved only by blotches of red or black. Is there any good reason for it? No! There is none. Every color under the sun has its own peculiar beauties that the Lord gave it when he created it, and by no means is blue lacking.

Apart from its color possibilities, the blue print like every other print of a superior type, has numerous other attributes that make it worthy of consideration. It possesses a capacity for rendering detail in abundance, has a wide range of tone, gives a visible image during printing, prints dull in finish, and last but by no means least, is easy of manipulation and ridiculously cheap. In view of the last mentioned point, it might be mentioned that one of the most common uses to which the blue print is put, is the indexing of negatives by pasting a blue print of the plate on the outside of the envelope in which it has been stored.

Of course the photographer who really intends to make any practical use of his blue print work, will not purchase the stock that is sold in the photographic supply houses, but will make his own. It seems to me that the best formula I have ever used is that of Herschells, which is as follows: A : Ammoniocitrate of iron, 20 parts; water, 100 parts. B : Potassium ferricyanide ("Red Prussiate"), 16 parts: water, 100 parts. Equal quantities of A and B are mixed together just before using and filtered to form a sensitizer.

As far as the question of paper is concerned, the range for choice is very wide. The weight that is used, must to a very large extent, depend upon the size of the print, though in many cases, a small print on a very heavy paper, adds tone to the picture and saves mounting it if it is not desired. It will be advisable for the tyro to use the ordinary, fairly stout, "cream-laid" note, or any hard-sized bond paper. The chief requisites for paper for iron printing are that it should be free from wood-pulp or other impurities that usually go with cheap papers; that the surface should be fairly hard and not too heavily grained, and that it be of sufficient body and toughness to withstand the washing it has to

be subjected to. Of course, paper specially for the purpose may be bought at supply houses. Once you have the paper, you have to size it, although it is true, many papers are sufficiently sized in their making to give fairly good prints. As a rule, however, unless the paper is sized, the image does not stay on the surface and the print looks rather flat Then too, sizing is necessary and dead. to supply the organic matter essential to the reduction of iron salts by light. Now, for sizing, arrowroot is most commonly used. A good mixture may be prepared as follows:

Take one half ounce of arrowroot flour and mix it to a stiff paste with a few spoonfuls of water. Be careful to rub down all the lumps, etc. Then add warm water to make 22 ounces, and gently boil solution until it is clear.

To size, the paper may be immersed in this solution for a minute or two or should the sheet happen to be a thick one, it may be fastened to a board by its four corners and gently sponged down. Use a liberal quantity and sponge each sheet first one way and then the other, and after that has been done, take a clean sponge and go over it to make sure that the surface is even all over and that there are no streaks left. Next, let the paper dry thoroughly, and on no account attempt to sensitize it until thoroughly dry.

For the next operation, that of sensitizing, we will require a few camel's hair brushes about three inches wide, bound in rubber, or in place of these, a few absolutely clean sponges or a supply of absorbent cotton. Perhaps the last mentioned is, after all, the best. There are a great many sensitizing formulas on the market, but if you intend to make your own, the most satisfactory one I can recommend is the one commonly known as Herschel's, to which I have referred and given a few lines back. The chief requisite in coating the paper, is to do it evenly and quickly and then to dry it as rapidly as possible in order that the sensitizing mixture may be kept as much on the surface of the paper as possible. The sensitizing, which must be done by a weak, artificial light, is proceeded with as follows: Put the sensitizer in an open bowl. Fasten the sheet of sized paper to a board, sized side up, and then incline the board slight-Dip your mop in the solution, ly. taking care not to get it too full, and then, starting at the top, rub it down across the sheet of paper, seeing that the edges of each stroke just join the edges of the last. The mop must not have so much solution on it as to run in streaks down the paper, and the whole sheet ought to be coated in rapid, even, methodical strokes. When you have finished it in one direction, with a mop slightly drier, run across the other way and insure a full, even coating. This you will be able to do after a little practice. As soon as the sheet has been properly sensitized, place the board to which it is pinned near the stove and let it dry. Of course, it goes without saying that one must not allow the paper to become scorched or get so heated that it will be brittle.

While on the question of sensitizing, it might not be amiss just to mention the sensitizing of fabric, which is, after all, the work that induces most people to do their own sensitizing. The fabric must be perfectly clean, and free from all dressing, soap, etc., and it must be If the material be silk, linen, sized. satin or fine canvas, soak it well in hot water to remove the dressing; wash it well with soap and then pass through changes of hot and cold water to remove all traces of alkali. For sizing such fabrics, gelatine is advised as follows:

soak half an ounce of hard gelatine under cold water until quite soft and then heat well until thoroughly dissolved. Immerse the fabric in this for ten minutes and then hang up to dry. Before sensitizing, see that the fabric is stretched quite tight on a board and that there are no creases. The sensitizing mixture ought to be somewhat stronger than for paper, and is best applied with a flat hog's hair brush. As usual, dry quickly before a fire.

To bother to go into the different kinds of work to which the blue-print is specially adapted, would not only be superfluous, but as well, would involve the using of a considerable amount of space. To comment upon how applicable it is to different land and seascapes is unnecessary. Attention might just be called in passing, to how well certain kinds of figure studies look in blue. For instance, studies of the Japanese and other natives of the Orient have a certain atmosphere about that lend themselves especially well to this sort of thing, while for certain scenes taken in the flowery kingdom, I have seldom seen anything that will surpass the blue-print. Then again, in floral photography, where the flowers themselves hover on a shade of blue, the blue-print stands pre-eminenc. Cloud photography, the season for which is just commencing, is also a kind of work that lends itself very readily to the magic of the blue-print.



The Dog Show.

BY D. TAYLOR.

Those who have had any experience in the management of dog shows will at once admit that, as a cause of mental worry, unsettled living and physical discomfort for a prolonged period, there is nothing to equal a position on a dog show committee. For months previous to the actual event the committee have to hustle for all they are worth-there are so many things to accomplish, so many difficulties to encounter and surmount. There are the patrons to be looked up and reminded of their duty to encourage the breeding of high class dogs, the prize money to be guaranteed, attractive "specials" to be secured, and a thousand and one other things to be thought of and provided for, so that if the committee man is really in earnest there is no lack of work to occupy all the spare time the average man has at his disposal. Then why is it that so many people are to be found willing to sacrifice business interests and home duties, endure with meekness and resignation the wailings of disappointed feminine competitors or the deeper growlings of the masculine element, all to wear a badge as emblem of authority for a few days. Why is it, we ask, that we see the same men, year after year, voluntarily submitting their necks to the yoke after registering .he most solemn vows never again to allow themselves to be dragged into the canine vortex? It cannot be that this doubtful honor is the attraction for men who, oth rwise, are looked upon as perfectly sane. No, it is not that; it is not even the fact that the committee man during the actual function is looked upon as an oracle on all matters pertaining to the canine race and willingly allows himself to be button-holed by visitors of an enquiring turn of mind. There are some, of course, who take a secret pride in the glory of their position, who look wise when interviewed, and discourse learnedly of the relative difference between a dachshunde and a great St. Bernard, and look with a superior air upon their hard-

working confreres; but in general, a committee man is chosen because he is a true fancier, who delights in the work from pure love of the canine race. And it is this, and this alone, that leads him time and again to undertake a too frequently thankless task. To the born fancier the yesping, barking and baying of hundreds of dogs is sweeter music far than a Beethoven symphony played by a highly trained professional orchestra, and this is why a dog show has such an irresistible attraction, sufficient for him to counterbalance all the trouble and annoyance of months of preparation, and the petty jealousies and recriminations which usually attend the show itself.

There are several such enthusiasts among the members of the Montreal Canine Association, and to these is mainly due the success which has hitherto attended the shows held under its auspices. The coming annual event this month promises fairly to excel its predecessors in the number of entries; at the time of writing these being far in excess of those at the corresponding time last year. To anyone taking the trouble to compare this year's premium list with that of last year will find that the number of specials offered is very much greater, which goes to show that the present committee has been work-ing to some purposc. The specials are also of a much higher class than hitherto, and embrace valuable silver cups and medals down to fedora hats, silk umbrellas and bottles of perfume for the ladies. Among those who have contributed valuable specials this year are His Excellency the Governor-General, who offers a cup for the best brace of dogs, any breed, entered by a resident of the Province of Quebec; His Worship Mayor Cochrane, who offers a cup for the best brace of dogs entered by a resident of Montreal; S. Coulson, Esq., who offers the "Wesley Mills Cup" for the best kennel of four, open to all breeds; the "Montreal Cup," for the best specimen in the following breeds: St. Bernards,

Russian wolfhounds, greyhounds, Scotch deerhounds; the "Quebec Cup" for the best specimen of the following breeds: English, Irish and Gordon setters and pointers; Jos. A. Laurin, Esq., offers a \$25 cup for the best bitch, any breed, open to members of M. C. A.; D. W. Ogilvie, Esq., offers the "Glenora Trophy" for the best dog, any breed, open to members of M. C. A.; H. L. Thomas, Esq., offers a \$25 cup for the best specimen, any breed, entered by a lady; the American Collie Club offers the Club trophy, value \$300, for the best American bred collie, and a medal to the best of opposite sex to winner; also the "Van Schaick Cup" for the best collie, and a medal to the best opposite sex to the winner; the Association also offers a money prize of \$20 for the largest exhibit entered and owned by one kennel or exhibitor, and \$20 to the handler having the largest string. There is a full classification for nearly all the breeds, and among the novelties provided for this year are French bulldogs, toy bull terriers, Welsh terriers and whippets. With such inducements, and the low entry money, the Committee ought to be rewarded with the biggest entry they have ever had, as well as a record attendance on the part of the public.

The judges are : Mrs. John A. Pitt, of Montreal, all toys except pugs; J. J. Lynn, Esq., of Port Huron, Mich., Fox terriers and Boston terriers; George Douglas, Esq., of Woodstock, Ont., cocker spaniels and field spaniels; F. Freeman Lloyd, Esq., of New York, all other breeds.

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One of the most genuinely funny books that have appeared lately is "A Dog Day; or, The Angel in the House." by Walter Emanuel. Here are a few random entries from the pup's journal :

8.30—Ate breakfast with difficulty. Have no appetite.

8.35-Ate kittens' breakfast.

8.36—An affair with the cat—the kittens' mother. But I soon leave her, as the coward does not fight fair, using claws.

9—Washed by Mary.

9.30—Showed myself to family. All very nice to me. Miss Brown-whom I rather like-particularly enthusiastic. Kissed me again and again and called me "a dear, clean, brave, sweet-smelling little doggie."

9.40-Had a glorious roll in the mud.

1.30—A windfall. A whole dish of mayonnaise fish on the slab in the hall. Bolt it.

1.32—Curious pains in my inside.

1.33—Pains in my inside get worse.

1.34-Horrid feeling.

1.35-Rush up into aunt Prown's room and am very, very ill there.

1.37-Better. 1.41-Quite well again.

1.42—Jump twice on to the waistcoat part of old Mr. Brown, who is sleeping peacefully in the armchair.

1.43-Miss Brown beats me. Verv nice. Just like being patted. I yelp, do the sad-eye business, and pretend it hurts frightfully. She soon leaves off and takes me into the next room and gives me six pieces of sugar! Good business ! Must remember always to do this.

4 to 5.15—Slept.

5.15—Awakened by a bad attack of eczema. Caught one.

7.15—Ate kittens' supper. But I do wish they would not give them that eternal fish. I am getting tired of it.

8.40—Fight the cat. She scratches my paw viciously, drawing blood, and making me howl with pain. This brings Miss Brown down in a hurry. Wraps paw up in bread poultice.

9 to 10-Dozed.

10—Led to kenuel.

11.15-Lights out. Thus ends another dull day.

Ceccore Contraction

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A Woman's Venture.

BY C. A. B.

Sir Donald, the highest peak in the Scikirk Range of British Columbia, is 10,600 feet high. It is one of he grandest peaks of this western continent--black, splintered, forbidding. No Indian ever even attempted, so far as is known, to climb it, and it was not until 1890, four years after the last spike of the great Canadian railway had been driven, that Emil Huber and Carl Sulzer, members of the Swiss Alpine Club, accompanied by the Swiss guide, Hasler, and the porter, Harry Cooper, balanced themselves upon its narrow, knife-like summit.

Eleven years later, there having been several ascents in the meantime, Sir Donald yielded to the fair sex, Mrs. E. Evelyn Berens being the first woman to set foot upon the highest peak of Canada's Pacific province. Mr. and Mrs. Berens happened to climb Sir Donald by the merest chance, for when they left their Kentish home to take a run through Britain's biggest colony the last thing they had in mind was mountaineering, but, finding themselves at Glacier and becoming permeated by the enthusiasm of the place, they resolved to do or die. Mr. Berens is said to have remarked afterwards that he, personally, had considered when half way up the peak that the odds were enormously in favor of the latter alternative. For a day or two previous to the attempt the guilty pair held surreptitious interviews with the Swiss guides, meeting them by stealth under the gloomy pines, in order that the other visitors might not get wind of their fell purpose. And yet it did leak out somehow, and when they finally got off by lantern light at 3.15 a.m. one August morning, several windows were tenanted, and more than one wish for a safe return was shouted after the plucky little English woman then heading her pony up the stony trail leading to the glacier. The rest of the story had perhaps better be told by Mrs. Berens herself. She says:

"Before deciding on taking the trip I was greatly puzzled as to what I should

wear-as not being a new woman. I did not have unmentionables packed away at the bottom of my trunk, and did not think it safe to attempt it in skirts and After a time my kind friend, frills. Mrs. Schaffer, of Philadelphia, suggested that I should go through my husband's wardrobe. The result was I picked out a pair of something-and, naturally, being a woman. I picked out the very best pair of shooting knickers, as being the prettiest color, so as to be as becoming as possible under the circumstances. I account my greatest courage was not in getting up at 2 a.m., but in appearing before the guides in my new rig, and I think that most people will confess that, having been a girl all my life, it was certainly embarrassing (to say the least), this sudden blossoming into a boy.

"However, that trial being over, we started gaily. I may mention a thing which greatly amused me—I kept unconsciously holding a piece of cloth in my hand when walking on the level. I suppose being a girl so long I had got accustomed to holding up my dress. It is funny how habits stick to one.

"When I first got on the rocks I asked the guides how long it would take us to reach the top. The reply was, 'Oh, four or five hours.' Thinks I to myself, what nonsense, I am sure we can easily get there in an hour or so. Alas, my conceit was very quickly taken out of me, as I soon found it was not such an easy climb as it looked. Be wise, friends, and never despise a mountain ; it always gets the best of you in the end.

"I looked down once, and once only, at the valley and ice below, and it looked as far away as Piccadilly or Chestnut Street, and to look up seemed almost as bad. In climbing always look for your next foothold and nothing more, as if you look down it is apt to frighten you, and if up you may become discouraged.

"It really is surprising what a delight mountains take in growing gradually higher when one is climbing them. I am afraid the photographs we took on the summit are not very good, as we could only get away two or three feet, but I think by them one can realize how very small the top of Sir Donald really iscertainly there is not room to dance a set of lancers. I cannot attempt to describe the scenery, I only try to write from a woman's point of view, and the points I would like to suggest to any lady climber are : 1st, To wear knickers ; 2nd, To wear putties to prevent her legs from heing knocked to pieces by the rocks ; 3rd, To wear good strong boots with plenty of nails; 4th, To drink as little as possible (I only took half a cup of tea); 5th, To take a good breakfast before starting, and to have but a sandwich or two and an orange, if thirsty, on the way. 6th, To take a coat, which the guide can carry, and which one can slip into on reaching the summit, as it is cold up there. I should not advise gloves on the rocks, as they are apt to get wet and slippery, and one can take a firmer hold with one's bare fingers."

This modest account was written by Mrs. Berens in the register at Glacier. Last year a Boston girl, Miss Marion Raymond, followed in her footsteps, and also stood upon the lofty crest of Sir Donald, and with these two exceptions no woman has reached so giddy an elevation in the Dominion of Canada. The late Marquis of Dufferin happily described British Columbia as a Sea of Mountains. There are yet innumerable ascents to be made, and, no doubt, when American women shall have become as enthusiastic about mountaineering as are their British and Swiss sisters, many of the other glorious peaks of that wondrous western land will bear th : imprint of nail-studded climbing boots, very much smaller in size than the workmanlike, but hideous footgear affected by the male climber.

The marvellous increase in the number of those who wish to go to the woods of Canada for the summer necessitates a liberal supply of guides, canoes and out-There was a scarcity of guides and fits. canoes last year. The Canadian Pacific Railway, with its usual enterprising spirit, will endeavor to arrange a full supply for 1903. The very successful play of "Hiawatha," given annually at Desbarats, has been the means of bringing together a considerable number of the more intelligent Indians, who have become gradually educated as to the wants of the white people who wish to take a summer trip in canoes and camps. Mr. Armstrong, who originated the play, is taking a special interest in giving shape to the guide-supply enterprise. He will at Desbarats provide Indian tepees or lodges, set them up and furnish all necessary conveniences. He is also laving out a series of canoe trips of various lengths, and of different degrees of excitement, in the way of slow waters and fast. Desbarats, 27 miles east of Sault Ste. Marie, is very convenient of access, and is to be the point of canoe trips departure. From here will be made eastward to Temiga-

ming and Temiskaming in Northern Ontario and Quebec. The Mississaga canoe trip, immediately to the north of Desbarats, is one of the best on the continent.

There is a very delightful little canoe trip, quite near Desbarats, which can be done in one day, but which can be better done in three. This canoe trip is the breaking-in trip, wild and enjoyable, but short. Then to the west we have the many rivers running into Lake Superior, ending with the far-famed Nepigon, where the best trout fishing in the world is to be had.

Information about these canoe trips and summer camps may be had by writing to Mr. L. O. Armstrong, Canadian Pacific Railway, Montreal. There are a couple of summer camphotels at Desbarats, and for the everincreasing number of those who are afraid of canoes, there is fishing to be had here, either in large boats, or without boats at all, by driving in waggons to the lakes, where large, flat punts are provided for nervous fishermen and women. Desbarats is warranted to cure the worst case of this species of nervousness in a fortnight or less.

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IN CLIMBING COSTUME. Mrs. Berens, a young Englishwom (n, was the first to climb the highest peak of the S-lkirk range—Sir Donald.



SIR DONALD. The master peak of the Selkirk range, British Columbia; elevation, 10,007 ft.



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The Grouse of Timiskaming.

BY C. C. FARR.

The first thing that strikes an observant man about grouse is the surprising fact that there are any, for such a succulent morse' as a well-fed grouse must of necessity have enemies, whose name is legion, and the wonder is, that the whole race has not been long ago exterminated. Nothing but the wonderful adjustment of the balance by nature has saved them, by the evolution in them of a power to protect themselves from the assaults of animals of prey, by ways and means, that we can not always fully apprehend or understand the significance of. For instance, the ordinary partridge, in spite of its apparent reckless daring, or simplicity, is very rarely caught on the ground by a dog, and hence, by analogy, a fox would have to do some very fine and dexterous stalking in order to compass the destruction of one of these, so called, silly birds.

The russet colour of its plumage is an undoubted protection, but not alone sufficient to account for the survival of the species.

I have been told by Indians that a fox cannot locate a "drummer" by the sound, which seems credible enough, unless the quick eye of the bird, even when engaged at this grave function of its being, can catch the stealthy movements of the wily reynard in time to elude the spring; in which case it would not matter much whether the fox could locate the drummer by the sound or not. I know that a dog cannot find a drummer as quickly as I can, so there may be something in it after all.

The sight of a partridge is wonderfully keen, and yet it will allow an enemy to approach it very closely, instinctively knowing that no harm can befall it as long as a certain distance is maintained; in fact this peculiarity is one of its modes of self protection, for remaining absolutely still, even when an enemy is close, often enables it to escape detection, where a sudden motion of flight would betray its presence. The actual shooting of a perched partridge requires no skill, but it is the seeing them after they have been flushed that requires skill, for though they make no great pretence of hiding when they alight, they remain so absolutely still and are so assimilated in colour to their surroundings that it requires a quick and practised eye to see them.

If, after alighting, the partridge makes the slightest noise, then it .s a sure sign that it is not going to stay there for any length of time, and if the sportsman wants to get a shot, he will have to shoot quickly, or he will not shoot at all.

There is one enemy of the partridge, however, to escape whom, nature has not endowed the poor bird with half enough sense, and that is man. Fortunately for the partridge, men are not proportionately plentiful in the bush, and in this lies safety, but when civilization advances, and the number of men increases, then the number of partridges decreases, until, finally, the unequal contest is ended by the extermination of the partridge. The Ruffed Grouse, or Partridge, is known to the Indian by the generic name of "Peenay," "The Bird, " implying thereby that it, above all feathered bipeds, holds the first place in his esteem, and well it may, for it is the best friend in feathers that an Indian has. No need for him to go hungry as long as there are partridges near, even if he has no gun, for they are easily killed, in various ways, without one; a well aimed stone will knock them over, though a surer method, and one that I think I have already mentioned in ROD AND GUN, is to attach a snare to a long pole, which snare is deftly passed over its head, the partridge helping the operation by poking its head through the noose, provided that it, the snare, is brought up to it in a skilful and proper manner; for, as I said before, nature has not prepared the partridge to elude the wiles of man.

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In the spring the "Drummer" is

caught by setting a snare upon the log where he does his drumming. So important is he, and full of his own business, that he readily puts his head through the snare in his march backwards and forwards on his log.

When a drummer is killed, it is said, that there is always another to take his place. I suppose that the number of spare drummers must be limited, but I myself have seen three killed off the one log.

The diet of a partridge is very varied, and naturally regulated by the supply of such things as it can eat, which again mostly depends upon the season of the year. Generally speaking, in the spring the buds of the various deciduous trees supply it with all it needs, especially the leaf buds of the birch, poplar, and balm of gilead. In summer the young leaves and shoots are relished between frequent courses of insects, but fall is the fattening time, when every kind of berry is plentiful and ripe. It would be impossible to enumarate all the different kinds of berries upon which they feed, but for the sake of those who are travelling through the bush, with the hope of shooting a few of these birds, it will not be amiss to mention a few facts that may be useful to them in future.

Along the courses of streams, and the shores of lakes, a number of different kinds of berries grow that find much favour with the partridge, the principal of which are the high bush cranberry, the "partridge berry," a pink berry (*) that grows on a low bush, and is very unpleasant to the taste, and of the "muk-o-min" the bear berry, a purple berry that has a very nasty odour, and which is evidently a kind of dogwood berry, for the wood of the small tree or shrub that bears it is very tough, while the leaves are round, and dark in colour, and after the first frost, emit a most unpleasant odour.

Wherever such berries grow in fair abundance, partridges are pretty sure to be found, especially on a sunny, end-of-September or October day.

The very best time to kill partridges is during the last few warm, sunny days of the year, before the first permanent fall of snow, and it is strange to note the effect of this first fall of real winter snow upon them. While the sun shines, and the ground is bare of snow, in these late October or beginning-of-November days, the partridges frequent the roads, or naturally cleared spaces, and are busy upon the ground, hunting their daily food, but, immediately that the snow comes, they disappear as if by magic. I have gone forth on such a day, and have seen dozens of them feeding along the road, but owing to a defect in my gun, or possibly having no gun, I could not shoot them; however, I would think that it did not. matter, as I could have a chance at them on the morrow. During the night it snowed, and the weather turned very wintry. When I would go back to the spot, or rather a number of spots, not the vestige of a partridge would I find, not even a track in the snow, and so it is always. The Indians tell me that they retire to the shelter of the balsam or spruce groves, but even if they do I could find them there, and I think that when the snow comes, they are somewhat like hens, and do not care to walk much in it, but keep aloft, and hence are not visible.

The Indians of the Temiscamingue country recognize only four kinds of grouse. The "Peenay," which I have just attempted to describe, the "Wabapeenay," "the white partridge," or Ptarmigan, the "Ish-coot-ays-ie," the spruce partridge, and the "Argusk," the sharp-tailed grouse.

Though the ptarmigan has often been shot around Temiscamingue lake, it is not either a regular resident or visitant. During some seasons a good many are killed at the head of the lake, where are large expenses of willow-covered flats, and six years ago I killed quite a number at Haileybury, but these visitations are very rare, in fact I have never seen a ptarmigan since. Looking. through McIllwraith's "Birds of Ontario," I cannot find the Spruce partridge, or Wood Partridge, as it is sometimes called, (Indian) "Ish-coot-ay-sie,"

^(*) Partridge Berry—called by Indians Man-i-josh-i-min, meaning that it has no regular name, but is one of the poisonous berries, from Man-i-josh-qrub (adjective), uncanny, bad, poisonous.

mentioned in it, unless it be the Canada grouse, which, by the description, it seems most closely to resemble, but if this is the case, he does not menthe distinctive feature from which it takes its Indian name, I mean the bright flame-coulored streak on the side of its head, "Ish-coot-ay," in Indian meaning The reason why it is called the fire. spruce partridge is that it apparently feeds on the shoots and leaves of the spruce. These birds do not seem to be able to adapt themselves to the advance of civilization, and are consequently becoming more scarce every year in this immediate neighbourhood, though further north and west they are as plentiful as ever. They are, in their habits, like the ruffed grouse, but they are more difficult to find after being flushed, for they fly higher into the trees, and instead of lighting upon a limb of the tree, they will often light upon the brush of the spruce or the balsam, and hence cannot easily be seen. The flesh of the spruce partridge is dark, and strongly impregnated with the flavour of spruce.

The sharp-tailed grouse, (Indian) "Argusk" is not uncommon some seasons, but its visits are periodical and are supposed to be regulated by the severity of the winter. During the winter just past I shot a pair of them, a photograph of which I am sending with this to ROD AND GUN. They were only a few yards from the house when I first flushed them, and they flew only a few yards further on, patiently waiting for me to fetch the gun, poor little things. I felt sorry when I had killed them, and

Bait-casting for game fish has become one of the highest forms of piscatorial art, and a knowledge of this beautiful and most successful style of angling is worthy of careful study by one who occasionally "goes a-fishing" as well as by the most enthusiastic angler. A booklet, the object of which is to instruct anglers in this fascinating art and acquaint them with the use of modern artificial bait, is published and sent free on request by F. C. Woods & Co., of yet I consoled myself with the reflection that they might, when dead, interest readers of ROD AND GUN. After I had shot them, I showed them to an Indian, asking him if he knew the Indian name for them, and was surprised to find that he did not, though he knew the birds; but he told me that an Indian, who used to live further north, would knew their name, and that he would ask him, which he did, and the result was the name that I have given above.

I remember onc winter, about seven or eight years ago, that there were a great number of these birds killed on Temiscamingue, but they were looked upon as a somewhat *rara avis*. By the by, my Indian friend told me that they wer very plentiful on the plains at the head waters of the White River, about the Height of Land, and that they only came so far south or west when the winter was very cold, which was the same thing that I had heard before.

I find that McIllwraith, on other authority, pronounces them to be the true prairie chicken. I have never seen the prairie chicken in the west, so am no authority, but I have asked those who have and they unanimously agree that this bird is the prairie chicken of the west.

Judging by what little I have seen of them, they would be very soon exterminated unless stringently protected, for they seen very tame, and easily killed. Only last week I heard that five of them were killed by some fiend with a gun. There were only five in the covey, and this kill-everything-in-season-and-out-ofseason-pot-hunter bagged the lot.

Alliance, Ohio. This company are makers of accessories.used in this art, one of which, the "Expert" Wooden Minnow, with their new patent perforated spinner, is designed to overcome the annoyance, expenditure of time and money, which the securing and caring for of live bait entails. This little device is of handsome appearance, and as to its efficiency the company have scores of testimonials.

Forest Fire Protection in Europe.*

BY A. HAROLD UNWIN, D. OEC.

This, one of the primal cares in forest management, has been developed to a wonderful extent in Europe, but presents a great diversity of plan, though in all cases it is exceedingly effective. One of the first things which is done is to eliminate as much as possible all causes of fire which can comparatively easily be remedied, such as that caused by locomotive sparks. The engines have spark catchers in the form of wire netting, which is only imperfectly effective; a better means of making the sparks harmless is by clearing strips 30 to 60 feet wide on each side of the line. These strips are always kept cleared of any growth, and the men working or patrolling the line are compelled to extinguish any fire which they find. In more densely populated parts of the country, such as in France and Germany, where the railways have to be daily patrolled, this is very effective, though less, so in Austria and Russia.

A great cause of forest fires is carelessness on the part of those working in the woods, tourists, etc., in fact, the population in general. In Russia, Finland, Norway and Sweden, in case of fire all the male population in the district (sometimes a day's journey away) where the fire has broken out, have to turn out with any implements they have, to put it out. In cases of very large fires in France and Germany, regiments of soldiers are sent to the place. The above law has worked well, and before Germany was so densely populated as it is now, a similar regulation was in force, (one of the best was in Saxony in 1745). This seems a very judicious measure in sparsely populated districts and where the forests are large in extent. Of course, buildings are not allowed in the immediate vicinity of the forests. A natural cause of fire is lightning, which, according to European statistics, is infrequent, partly perhaps due to the clean condition of the forests and lack of dead or dry rotten trees. The periodical burning of heather or

moorland, for purposes of agriculture, in the neighbourhood of forests, often causes fires. This system, which is practised in Germany in one of the driest districts, the Luneberge Haide, has not caused as many fires as might be expected. Here, out of several 100,000 acre tracts only about 50, or at the most 100, acres of forest get burned in any year. It is practised in parts of the Black Forest, and there for years, owing to the care exercised by those burning the areas, no forest has been destroyed. This is also due to the forest rangers, especially in the first case, although the ranges are very large (8-10,000 acres per man), owing to the almost valueless nature of the forests (pine of the lowest quality), Their labours are lightened, however, as they can be called up at any time from a central watch-tower by means of telephone and informed as to where a fire has started.

Inside the forest there are factors which influence the question, the first and foremost is the species of tree found on a given area. As a general rule in Europe it has been found that Scots rine (Pinus sylvesiris) makes in its younger stages the most inflammable forest, then come spruce, fir and other conifers, then the lighter foliaged trees such as birch, poplar, willow, and lastly, oaks and beeches. This, of course, means that greatest care is exercised in the pine forests to prevent fires. And here again the next protective measure, that of dividing the forest into ranges, first becomes imperative in pine woods, at least if they at all are valuable, which they are in Europe. The forest ranges vary in extent according to the situation and value of the forest concerned, as was stated in my article in "ROD AND GUN" in October last year. In the ranges themselves again in the whole of Europe, even in Northern Russia, strips up to 100 feet wide, called fire traces, are cleared and run right through the ranges from end to end, every quarter or half

^{*}Contributed by the Officers of the Canadian Forestry Association.

mile, and, with the addition of the roads, the forest officers are enabled in case of fire breaking out to rapidly locate it and cope with it. These bare strips also prevent small fires from spreading, as they cannot spring over these. In case of combatting a fire these give a starting point for cutting down the trees to form a wide strip or for making a fresh fire to burn towards the real forest fire. This clearing strip, well in front of a fire, has proved most effective but requires a good deal of labour.

Another method of protecting a forest is to plant broad strips of birch or beech trees through coniferous forests, especially pine (this has been done near Dresden, and was a few years ago the means of preventing a small fire becoming a very large one) These strips act as a check to the fire. being less inflammable. Of course, this is done and can only be done in forests which are of great value.

The seasons of the year also have their effect. In Europe March is considered the most dangerous, as the forest is driest then and all the old dry grasses form the best material for a fire. The latest statistics show that most fires in Europe occur in March. In each country this of course varies. The soil in a forest also influences the spreading of a fire. Dry moors and heaths are a constant danger, and fires have been known to smoulder on these a great length of time before breaking out. But forest fires after all depend on the human being, and the more educated he becomes the less fires there are. This is clearly shown in European statistics, where forest fires are steadily on the decrease, not only as to number but also as to extent. The latest way the European, especially Belgium or German peasant forest proprietor, protects his forest against fire is to insure it. Several companies undertake this risk with rates varying from 0.05 p. c. or 0.2 p. c. of the value of the woods, according to the species, age and local circumstances. It goes without saying that various governments in Europe do not nor ever will insure their forests against fire for the simple reason that they are so large that it is cheaper to lose forest every year than to pay premium on the whole area. The great thing always done is to properly divide the forest up by roads and fire traces, and good fire rangers do the rest.

The Savage Arms Co., Utica, N.Y., have adopted the 30-30 and the .303 1899 Model Savage to take the following well-known loads: 25-35, 32-40, and 38-45. The Model 1903, 22 caliber, has a standard length of barrel of 24 inches, side and to the right; the takedown is very simple; it has a solid top: is hammerless; strong mechanism with few parts; positive extraction and ejection; magazine quickly removed and inserted; clogging is almost impossible; there is a



octagon barrels only. Extra lengths of barrels, up to 30 inches, can be furnished. Stocks of all 22 caliber rifles of this model are made with pistol grip only, without extra charge. The advantages claimed by the Savage Company for the new rifle are : Shells are ejected to the direct straight feed ; cartridges may not be discharged until action is closed and locked ; efficient loader ; light weight and easy manipulation, the arm being the lightest 22 caliber repeating rifle on the market.

Natural Reproduction in the Adirondack Forests.

In the second number of the Forestry Quarterly, published by the New York College of Forestry, is an article on Natural Reproduction in the Adirondack Forests, by A. Knechtel, which is of special interest to Canadians, as the reproduction of the forest by natural methods will probably be the only plan followed in Canada for some years to No matter how strongly any adcome. vocate of scientific methods of forest management may express himself as to the defects of the present system, the fact remains that no careful study of the reproduction and growth of timber trees has been made, and, while general advice is quite easily given, the practical problem is still to be worked out, and, without fuller knowledge than is possessed at present, there is a possibility that the best intended efforts may fail of the desired result just as completely as the efforts of the past. If there were but one species of tree or if all were equally valuable, matters would be greatly simplified, but there is always the difficulty that in removing the valuable species the advantage may be given to the inferior and thus the whole forest be steadily on the down grade. With the slow growth of the forest such a mistake would be irreparable for many years. The displacement of the white pine by spruce and other less valuable trees is quite apparent on cut-over limits, and the question of how far the process may be carried downward by the closer cutting of spruce is not lightly to be set aside.

Mr. Knechtel's plan for studying natural reproduction was briefly as follows:

Selected so as to give variety of conditions, quarter-acre circles were chosen here and there over Township 5, Hamilton County. Within each circle eight squares, each ten feet on a side, were measured off on the forest floor proper, evading old decaying logs. All the vegetation on these squares, from the smallest plants and seedlings up to the largest trees, was noted. Attention was then given to the old rotting trunks that had fallen on the quarter-acre plot and all the small trees growing on them were classified and counted. Record was made of the location of the circle, the degree of slope, the exposure of the plot, the light admitted through the crown, and anything else that would furnish a useful record. Mr. Knechtel thus states the conclusions of his investigation :—

"It was intensely interesting to note the manner in which the reproduction was going on. The pine, spruce, and hemlock were, of course, regenerating only from seed. Under the conditions prevailing in that township-virgin forest, dense shade, much duff on the forest floor-these species were reproducing almost entirely on the old, decaying tree trunks lying in the forest, and these trunks were themselves pine, spruce and They were not reproducing hemlock. on old, decaying beech, birch or maple Occasionally an old hemlock was trees. found literally covered with little spruces and hemlocks, while on the forest floor not a small tree of these species was to be found upon the quarter-acre. Patches of young spruces, from one to five or six feet high, were found, apparently as if they had germinated upon the forest floor, but upon close examination these were generally seen to be arranged in rows, which would indicate that they had come from some such seed bed as old logs. Frequently, too, the undecayed knots of an old hemlock could be kicked up along the row.

"It is true that these species were also found germinating and growing on the forest floor. It was only, however, where the mineral soil was exposed, and this is of rare occurrence in the virgin forest; usually it occurs only on steep slopes and at the roots of upturned trees. Even in forests where lumbering has been carried on, unless fire has burned off the humus, the mineral soil is not much exposed. Skidding tears up the soil to only a slight extent, not enough to warrant the assumption that a seed bed will thus be furnished to reproduce the softwoods in sufficient numbers to keep up a forest lumbered periodically.

"When fire goes through a softwood forest, leaving here and there a seed tree, the young growth comes up in abundance, for the reason that the fire not only burns off the humus, exposing the mineral soil, but it leaves a covering of ashes just suitable, when leached into the soil, for encouraging the growth of the trees; in fact, just the mineral matter that the burned trees took from the soil, the fire driving off into the air only the elements obtained from the air.

"In a forest lumbered periodically, the regeneration of white pine, spruce and hemlock is, then, largely dependent upon the existence of a good mineral seed bed.

"The hardwoods, especially the maple, birch and beech, reproduce freely everywhere. The abundant regeneration of these as compared with that of the softwoods is everywhere noticeable. Almost any kind of a seed bed seems to be sufficient for them.

"The softwoods are more exacting than the hardwoods in regard to light requirements and are more easily injured by frost. Nurserymen are careful in raising conifer seedlings to see that the plants are shaded from the hot glare of the sun, and that the screens are removed in continued cloudy or wet weather. In the winter the beds are well covered with leaves to protect the plants against the frost. No such careful treatment of hardwoods is necessary. In the forest, then, it is only where the light conditions are good, and sufficient protection is afforded in the winter, that the conifers can be reproduced.

"But it is not only in the matter of seed bed and light conditions that the hardwoods have the advantage, for they

Charles Plath & Son, 62 Fulton Street, New York, N.Y., have issued a new illustrated catalogue and price list. Their stock is large, varied and excellent, and their prices are as low as is consistent

also sprout from the root. Beech roots run frequently above the surface of the soil, and these, when wounded, as by the skidding of logs, send up bunches of suckers. Groups of from two to ten trees of maple, birch, basswood, or, in fact, nearly any species of hardwoods, can be frequently found growing from the same root. It is common in the woods to see four or five basswood trees thus situated, each more than a foot in diameter. To be sure, such shoots from stumps or root are generally short-lived, but they take up the light space, and live long enough to produce seed. To replace a softwood tree that is taken from the forest, another must be grown from the seed; but when a hardwood tree is removed, many may spring from the root.

"In case of fire, the hardwoods, as is well known, have the advantage. The softwoods are more open in structure of wood, have thin bark, especially when young, and are resinous and hence more easily burned. The hardwoods are not easily burned. They are so resistant that a belt of hardwoods is often planted as a protection to the softwood forest."

This is an important contribution to the study of the forest under natural conditions, and the results of the investigation are well worthy of consideration. The fact has been referred to in discussing the growth of white pine in Canada that seedlings have been found growing most frequently on old logs and stumps, and it is a matter of observation that pine forest has preserved its character as such more fully where lands have been once burnt than where the pine has been cut out, so that the conclusions reached by Mr. Knechtel are so far confirmed. The problem still remains as to how the seed bed required by the coniders shall be furnished and in what way the natural advantages possessed by the hardwoods may be overcome, but the conditions which govern it are more clearly defined by the data gathered in this investigation.

with the quality of the goods they supply. Anglers in need of tackle—and what angler is not in need of tackle in the bonnie spring time?—should write for this catalogue.

Northern Ontario.

BY H. BARNARD.

(Concluded from the April issue.)

We will now just skim over the route, starting from where our canoes were first launched, the foot of Barriere Lake. There is no doubt that moose, red deer, caribou and bears abound in this country, and are scattered pretty thickly all over It is apparent that they are slaughtered all the year round by Indians and parties who go out for pleasure, both fror. Canada and the United States, particularly the latter, in season and out of season-bull, cow or calf-for their hides, their horns and flesh, much or little; and that which cannot be utilized is left to rot. The law is not regarded, and there does not appear to be anyone to enforce it. Partridges and rabbits, or hares, are plentiful, and fur-bearing animals-beaver, otter, marten, mink and muskrats are plentiful.

Fish are abundant, but not of quality to be of commercial value to any extent. There is an unlimited supply of pulpwood, poplar and white birch, which at present is valueless in the absence of railway communication. Minerals gold, silver, mica, asbestos, etc.—exist; but whether they possess much or little value remains to be ascertained. The water in the chain of lakes to Abitibi is not clear, having a muddy appearance, and springs are not plentiful.

After leaving the Height of Land, the country is uninteresting for a pleasure trip, but might possess advantages for the prospector. For a pleasure trip, to branch off at the head of Long Lake, and connect with the Blanche River. affords a splendid vigorous outing. Trout fishing is not to be had here. The country through which the Blanche River runs is the place where settlers have been pouring in, and the land all along the river from the head of navigation to the mouth has been pretty much taken up. Thomstown will likely become an important place, being situated just at the rapids, where splendid water power will be available. The land

all along is covered with a thick growth of poplar, birch, spruce and lar. The soil is a sandy loam, with a heavy subsoil of white clay, and seems to have great fertility. Numerous springs of water are to be seen running into the river, which would indicate that good water is easily obtainable. The climate is good. Winter sets in early and is steady, the spring opening up quickly, and while the growth is a little later than it is further south, things seem to thrive and ripen, and are not affected by early and late frosts more than anywhere else.

Sawn lumber for building purposes can be had at Leskard and at Judge's, six miles up the river. Leskard is a thriving place, and promises to be the principal town in these parts, being at the upper or Ontario end of Lake Timis kaming, west of the Blanche River. Α good opening might be here for a druggist, a good hotelkeeper, a doctor, a banker or enterprising merchant. At Haileybury a large dock is being built by the Government. This is a work much needed, and will make this a place of considerable importance. The harbor at Leskard will also be dredged, it is understood, as the water is shallow, and at present merchandise must be lightered to the wharf or shore. The land from Haileybury north is flat and sloping, and is of the best for farm purposes, the soil being very fertile and well watered, and The drawbacks at the free from stones. present time are lack of rail and telegraph With a railway touchcommunication. ing Haileybury and Leskard, and on to Abitibi, and eventually James Bay, a country of rich farming lanos, immense tracts of spruce and pulpwood, poplar to fill the vacant place of basswood, white birch for furniture and other uses, will be opened up, and land rich in all the requisites to prosperity for the individual who is prepared to go out and develop it, and willing and manly enough to go to work. Many hardships will be encoun-





The cook (Sid Baker) was twice wounded at Spion Kop-but he is a good cook yet, and can pack anything with four legs. Photo by Mr. H. W. Du Bois.

tered at first, and must be met with stamina and ability to withstand them. Patient, hard work, persistently and intelligently applied, must prevail. There is 1.7 calling in life that can be gone into with so small a capital which will be productive of such large results, with so much hope of success, and so conducive to health and happiness.

We are now at the last lake we are to traverse, and from which we get into the river which flows into the Blanche. We can take either of two routes. One is to go by the long portage of a mile or more, which would bring us out at a point on the river below the falls and rapids; or enter the river here and make three portages along its course. The long portage is the one nearly always taken, because the trail is easy, while the three portages along the river are all of the most formidable nature, consequently less used. The guide said, by taking the three portages we would stand a better chance of sceing something, as it was unfrequented and wild. We therefore enter the river, which has a swift current, and we quickly get to a place where it is quite apparent that a portage is to be made, for there is a steep rapid into which we appear to be going on to certain destruction; but a dexterous move of the paddle sends the canoe to the bank, not ten feet from the eddy where it would be impossible to stop. I think the guide did this to try my nerve; but I had confidence in his strength and ability, and did not flinch. We land our things and load up for a start across. The trail leads along the side of a bank, and it is a wild place, indeed. Magnificent photographs could be had all along this river. Rocks. crags and chasm, wild river and dense forest, deep canyon and cascade, you have it all here. We get over the first portage, lose no time in loading our canoe, and off again, for we have quite a stretch of river before us, which gives us a rest, as the strong current takes us along with little effort on our part. This is a sort of compensation for the hard work of the portages. We have some difficulty in locating the next trail, the portage being so little used that it has become almost obliterated; but having found it, we go ahead with the

axe to clear away some fallen trees, and finally make the place passable. The path leads along the side of a steep, rocky hill, down through a ravine or swale, and up again over high and slippery ground.

It was on this portage that our first misfortune happened, and the little dog was the victim. I had crossed first, the guide following with our provision box, tent and other stuff on his back-probably two hundred pounds weight-and in going down one of the slippery places his feet slid from under him, the weight of the whole load striking the ground. Unfortunately, the dog had followed the guide instead of me, as it usually did, and being close behind received the weight of the whole load. We missed it at the end of the portage and in going back found its lifeless body in the track, with the head crushed. We carefully laid the remains by the way-side, covering it with stones, and it was a long time before I could shake off the feeling of regret that took possession of me, for the little animal, by its faithfulness, intelligence and playful activity, had gained a warm place in my affections.

The portage over, we start again, and here the river takes a short turn. I must have been getting tired of looking for game and was off my guard, for as we rounded the turn the guide startled me with "There's a deer!" Sure enough, standing in a little grassy place. in full view, one hundred yards distant, was a deer, entirely unsurpicious of danger, quietly cropping the grass. The canoe moved forward as quietly as a log floating down stream, but much quicker my Winchester was ready, and when within thirty yards I took a steady, deliberate aim and fired ; but whether I killed that deer or whether I did not this brief narrative will not record.

Proceeding, we have now some five miles of river to cover, which took us along a very nice part of the river, where the country was more open and flat. We had several rapids to get over, which the guide said we would run. We caught good fish on the way, and at one place, where a deep, swift current was running, a splendid chub was landed : it would weigh $2\frac{1}{2}$ pounds. Great sport could be had at this place, as the fish took the bait sharply and was game to the last. It looked beautiful coming out of the clear water; its deep reddish golden color would delight the eye of any sportsman, and its quality. food was just as good as its personal appearance.

Under the skilful management of the guide we got over all the rapids safely. One of them being shallow, be got out to walk, and incidentally hold the canoe back; and at another I was asked if I could swim. Being assured in the affirmative, he let her go, and we went in great style, getting through with a good bump on a rock as we neared the end, which he said he knew would happen, but the rock was round and would not damage the canoe. We slid over into deep water and safety. The guide is a "rapids expert." We landed at a nice place, a little further on, for dinner, and to take a little rest after the work of the morning; and having before us the most difficult portage, which is over a jagged mountain of rock, at which we arrived in due course. It takes two trips to get We scale the rocky height over it. twice, and, having gotten all our things over, sit down on the rocks, where a little stream of pure cold spring water flows, quench our thirst, and contemplate the scene here presented, which is one of great magnificence and grandeur. To the left, through a low gorge, forty feet wide, formed by the rocks, we have just surmounted, and an opposite corresponding rocky shore crested by a steep woody bank, the stream glides on in glassy and graceful undulating curves over the huge rocks which form its bed, till it reaches the brink of its more rapid descent, there to be dashed against immense boulders; then moves on its silent way out of the large basin here hollowed out.

Leaving the basin, low, muddy shores, covered with bushes bearing the white berries which the bears cat, lead up to the steep banks. There is no doubt about bears being here in plenty; their tracks are thick in the soft mud. The guide says, "If you want a bear we can get one in the evening"; but as we round a little turn in the river his whole being is changed in a moment. The alertness of the hunter is aroused; I can feel his magnetic influence as he remarks

in an undertone, "I see a moose-there are two of them—to the left; get your rifle ready and shoot the big one when I tell you." I knew the man I had to deal with, and I knew I would have to shoot. I had revolved the matter thoroughly in my mind previously, and had decided upon my action when the time should come, if it did come. I was new in the presence of big game for the first time—an immense moose cow and her six-months-old calf. The calf stood kneedeep in the water, while the cow was nearly submerged out further from the shore, its great head and shoulders standing out strongly. I saw the head go down slowly, and again come up with the same measured deliberation, having secured a large mouthful of root of the pond lily above referred to. The immense jaws began to work. The head was turned sideways to me, so that its large proportions and the action of the jaws in chewing were quite plain. I was perfectly cool as we rapidly approached; my nerve was as steady as a rock. I was just taking in the sight of these animals in their wild state; I had no intention of killing; so I deliberately sighted my rifle at 200 yards, took a steady aim at its head and fired. "You have missed! shoot again." It had turned sideways now, and I aimed straight behind the shoulder, with the same result. I had fired directly over, as we could see by the bullet hitting the bank. "Fire again !" The animal was walking out of the water now. I fired the third shot, which went in pretty close proximity to its head, but directly over. The moose hurried now, having seen us, and in a moment was under cover and lost to sight. The crackling of a stick once was all we heard, and all was stillness. It is surprising how quietly these large animals move through the thick woods. They might pass within ten yards of you, and you would not hear them. This was the only occasion the guide spoke to me in anything but a respectful manner. He said in a sort of contemptuous way, "I thought you could shoot better than that." A few minutes after the moose were gone he relaxed, and laughed, saying, "After all, it was nothing "-the first moose he shot and he was just as glad that I did not kill it, as there were only two of us; but if I had given him the rifle there would have been a dead moose there all the same. He said I could say that I had seen the moose, and had a shot at himthat was perhaps enough. I did not tell him that if I were so disposed I could have sent a bullet within three inches of any point on the animal-but such was the case. We were not thirty yards from it. We let the canoe drift with the stream for a little while, till we had discussed the size and every move of the moose, and our nerves had regained their accustomed balance, for I can tell you that when you see these animals your nerves get on a tension, and a feeling takes possession of you that has to be experienced before it can be understood —it cannot be described.

My object now having been accomplished, we started along in good earnest, and, helped by the swift current, arrived at the conflux of the Blanche River, which is a muddy channel sixty feet wide, and when the mud is stirred up by a freshet its white nature gives a milky white color to the water; hence the name Blanche River. We soon arrive at the head of navigation for small steamers the rapids, at which point civilization commences and the city (?) of Thomstown is located. We know it is Thomstown, because a pole is stuck in the mud at the side of the bank and a piece of rough board is nailed crosswise at the top, with the word "Thomstown " very badly scrawled upon it in large ietters. There is also a good sized house built with rough boards, probably to be eventually covered over with metal The door is shingles and siding. labeled "General Store." Two ugly dogs ran out to dispute our right to land, and the proprietor, a hardy-looking fellow, soon followed to counteract the dogs. I am sorry I did not go to inspect the store, but it was getting late, and we were busy getting our things carried over this our last portage, and we were in a hurry, having carried all but the box of provisions. The guide, left in the canoe, signified his intention to run the rapid, to the astonishment of the native, who is apparently the whole population.

The canoe is quickly afloat, and one

or two strokes of the paddle sends it into the swift current. It is helped along faster by rapid and powerful strokes. The guide is a study as he passes the critical point, and he indulges in a chuckling laugh as he shoots out below safely and sends the canoe into the bank. A snapshot of this would have been a gem for magazine illustration. Our things are again loaded, and we start off. It is now 4 o'clock, and we have determined to finish the trip to-It is twenty-six miles to the night. mouth of the river, and four more to the head, thirty miles in all. I shall not say anything about the country hereabouts at present, as it is my intention to give my impressions by the way in my next and concluding letter of this series, and in which I hope to be able to give some information for intending settlers, or those desirous of interesting themselves in the advancement of New Ontario.

We therefore keep up a good race for two hours, then land to get supper, and gum the canoe, which has begun to leak after the trials and tribulations of the In an hour's time we are journey. again off, and just here we meet a boat with two men in it, and apparently all their worldly possessions therein. They were settlers looking for their land, with no one to direct them where to go to find it. They had been all day rowing from Leskard, and when they asked me how far it was to Thomstown, and I told them ten miles, they seemed stricken with despair, and I truly felt sorry for them. Tired out, they would have to pass a night in their boat on a dismal, lonely river. What will be their feelings when they arrive at the city of Thomstown?

We settled right down to work now, on and on into the twilight, still on into the deepening gloom, and on into the shades of night, past the clearings of new settlers, where the fires of brushwood and logs being burned would flicker up and lend a little brightness to the way, only to make the darkness more intense being passed—on into dark lanes shrouded by tall overhanging cedars, making the darkness so deep that we can scarcely see our way. The air has become quite cold, and we have to work hard to keep warm in the damp atmos-

phere. It is dreary, and the way seems interminable. The pace is beginning to tell, though, and the country is getting Houses appear scattered more open. along, and good clearings are seen. The country gets gradually more open, and we come to a place called "Judge's," where there is a saw mill, store and several houses. We have ten miles to go yet, so there is no let up. The guide says we are making good time, and will get in sooner than he expected. The steady swinging of our paddles is kept up, and we at last get out of the river and into a marshy channel formed by an island opposite to the mainland. This place is full of stumps and snags. The guide tells me it is called the Devil's Knee. I readily believed him, for such a diabolical looking place could not easily escape some connection with the prince of darkness. Having passed out of this, we are in the open, and the direction of the canoe is changed. There is a heavy mist rising from the water, and I ask the guide how he knows the way, and he replies that he was brought up around here and ought to know it, mist or no mist. The moon is getting pretty old, but it is beginning to rise; it is 1 o'clock. We soon see a low shore ahead. This, the guide tells me, is the meadow lands of the H. B. company, from which they gather a heavy crop of wild hay yearly without the trouble of planting. The island seems pretty long, but we keep plying our paddles till twenty minutes to 2 o'clock, when our canoe grounds on the shore of Quinze River at North Timiskaming, after a steady i addle of six hours and a half from the place where we gummed the This is the record of our last canoe. day, we having started at 7 o'clock in the morning.

It is perhaps unnecessary to say we were a little tired. I soon roused the lodging house keeper. and, having been shown to a bed none to inviting in

The Sonne Tent & Awning Co., of Craig Street, Montreal, have this spring issued a very interesting and useful catalogue. Those who contemplate camping out should write for this catalogue. Boat-building is an important feature of appearance, was soon under the influence of "nature's sweet restorer." The guide packed up the remainder of the provisions, etc., and trudged home, a mile distant. I was up early, and having rid my face of a three weeks' growth of hirsute covering, and otherwise per-formed my toilet, felt all right and looked less venerable. The guide turned up about 10 o'clock, and I got him to secure a good-sized skiff, and after dinner put my traps aboard, and we rowed across to Haileybury, some thirteen miles, in order to be able to catch the down steamer the next day, and so on till I reached home, having been away exactly three weeks.

The other section of the party, Mr. and Mrs. Beworth, did not arrive at the Head till two days later, and were obliged to wait over till the following Monday, as the steamer only goes to the Head once a week. I learned later that they had a very pleasant trip, and had gone off the route to an isolated lake, and pretty nearly saw a moose-at least they were sure that they were in pretty close proximity to one, because they thought they heard it squeak. I am certain both the lady and gentleman will feel better for the outing. When I last saw Mrs. E. she was looking splendid. It is true that the city complexion was ruined, but in its place was a good brown substantial color, charmingly becoming, but not intense enough to hide the good sanguine color beneath. Mr. B. seemed to be enjoying life immensely, a somewhat anaemic look had entirely disappeared from his countenance, and he was in robust health. After parting we missed his cheery call, "Say, boys, can't we put in here to get dinner?" I hope to have the pleasure of meeting them again some time.

The guide has since departed north to Abitibi. and will penetrate still further, there to hunt during the winter, and not return till next June.

this firm's business, and promises to develop very materially as the season for boating advances. The Sonne Co. is now building several large and beautiful craft to order. Estimates for the building of boats, etc., will be furnished upon request.

Lake Timiskaming.

BY HELEN M. MERRILL.

In every country, and particularly in one like Canada possessing vast belts of unsettled territory, there are those whose cry is for unbeaten paths, regions traversed by none or few; and so when we first gave serious thought to going up Lake Timiskaming we saw visions and dreamed dreams of bark canoes and Indian guides, and tents and camp fires, with fish and dough-gods for diet, and balsam boughs and blankets by night on peaceful lake shores, or beside sweetvoiced river rapids. Imagine then the surprise on learning on our way north that the day in which tourists were obliged to travel on Lake Timiskaming by canoe was already a far cry distant, the wonder indeed increasing on finding at Timiskaming Station, at the southern extremity of the lake, a trim steamer with spacious decks, saloon and staterooms, and electric lights. Under the circumstances canoes and Indian guides would have been a piece of gross affectation, so we were spared the inconveniences of camp-life for which the novelty of a canoe trip over these waters would have atoned, had this little craft been the only means of transportation.

Lake Timiskaming, on the interprovincial boundary line (Ontario and Quebec), lies some thirty-nine miles north by northwest of Mattawa, a branch line of the C. P. R., which follows the cliffy shore of the Ottawa River from Mattawa to Timiskaming Station, connecting at the latter point with the steamer "Meteor," making tri-weekly trips to North Timiskaming, on the Upper Ottawa, some seventy-five miles distant. The Ottawa, with its wild rapids, its sheer cliffs of granite, and greep mountains, is a fitting approach to the perfect loveliness of the lake. At the station, from a pine-crowned hill-top, an excellent hotel overlooks both lake and river, the rippling waters of Timiskaming, the high green hills on the opposite shores, and the white-churning rapids of the Ottawa, the Long Sault, which extends some six and a half miles southward.

Timiskaming means "Where there is deep and shallow water," the bays being shallow, the cliffs on the margin in other places falling hundreds of feet beneath the waters.

There are a great many persons to whom all bodies of water look alike, dimensions excepted, one lake, for instance, quite resembling another. In each is seen only water and shore, no distinguishing features in the element and its environment being recognized. On the other hand, there are those to whom these objects present individual characteristics, as do faces of men, which differ peculiarly one from another. While the former predominate, no one, I think, would associate Lake Timiskaming with any other lake in the wide world. Timiskaming with its blue, transparent waters, its cascades, and song-birds; Timiskaming girt round with green hills and granite walls, gull-haunted, and mysterious with northland legends peculiar to wherever the red huntsmen have plied their paddles or set their Comparison has been made of traps. this lake with the Saguenay, and a similarity discovered to the extent that in either case the chasm has been created by earthquakes, the latter being not a river but an inlet of the River St. Lawrence. Along the Saguenay's frowning cliffs no song-bird, nor any living thing is to be seen, nor do its dark and gloomy waters, which have been likened to those of the Dead Sea, churn to foam about a steamer's wheels.

With the exception of the shores of the bays, the environing land is invariably high, in many places precipitous, varying from fifty to over two hundred feet. Here and there are cliffs which fall into the lake with that sheer-down effect suggestive of great depth of water; as is indeed the case, the waters reaching a depth below sea-level. In the vicinity of the Montreal River a depth of four hundred feet is reported, while off the mouth of the Kipawa River there is said to be a depth of 1,200 feet, or over 600 feet below the level of the sea.

Although the shores of Lake Timiskaming have been accessible by rail and steamer for a few years only, several villages which are the centres of prosperous settlements, now lend an atmosphere of civilization to the surrounding country. On the Ontario side, well to the north, are Haileybury and New Liskeard. The former, which consists of a dozen houses, hotel, store and two churches, and a telephone system of which the lake people are pardonably proud, is the centre of an extensive farming section. It is also the lake meterological station. New Liskeard, four and a-half miles to the north, is increasing so rapidly in population that one is liable to err in giving figures. While its population in July last had reached 400, it has since that time increased to the extent that it has recently been made a town. It is a very popular point of settlement, on the shore of what is known as the Timiskaming District, were the farm lands have been taken up to a distance of thirty miles Many of the veterans of from shore. '66 have had their land grants located here.

A number of fine horses have already been shipped to this district. On the up trip we ran in close to shore below Thornloe, putting out two long, heavy planks, over which, while scantlings were held in place as guards, two handsome, strong, young horses were led ashore by their owner. Plunging over a few small rocks at the shore's edge to a grassy slope beyond, they at once began grazing, and seemed quite at When this method of landing is home. impracticable, passengers are transhipped in a "pointer," a dinghy pointed at either end, and sufficiently large to accommodate ten or a dozen men, and an incredible amount of baggage, the horses being put off into the lake to swim ashore. As yet there are wharves on the Quebec side only, at Timiskaming Station, Haileybury and North Timiskaming.

A first afternoon on Lake Timiskaming, if the weather be fine, is one never to be forgotten. On account of many headlands, and occasional islands, it seems as

if there were a succession of lakes rather than one, the only point from which a shoreless expanse of water is obtainable, being off Fort Timiskaming, below "The Narrows." We arrived here before sunset. The sky for some distance sunset. above the horizon was brilliantly suffused with pink in which floated a few rosecolored clouds. Above these the sky was blue as an April sky, and in the lake the painted heavens were duplicated, and on looking through a gateway between dusky green points, as through a gateway to the sea, the eye followed the reflected glow up an enchanting, illimitable vista. After sunset, slowly, very slowly, as is the way with the north, the colors faded and the shadows of evening closed in, the sky growing peculiarly blue, northern lights appear-Then recurred to me the belief of a ing. singular old man, that the Garden of Eden lies in the north, at the Pole, and that the northern lights are flaming swords placed round it after the banishment of Adam and Eve to keep human beings out. If there be any truth in this let us hope that those who have not returned from Arctic explorations have in some wise gained admittance to this Polar paradise.

North Timiskaming, an Indian reserve of some 600 population, a few whites included, is situated some four miles up the Quinze, or Upper Ottawa River. On account of the "Meteor" having considerable freight to tranship in her dinghy to Thornloe, we signalled the tug "Comet," and came on to this port on her, and as she was not sure of her course, such a time we had finding and losing the channel, or snye, the popular name for channel on the lake, and running aground. This diversion began about a mile from the mouth of the river where its deep channel winds through shallows, where beaver meadows, from which tons of hay are mown annually, appear toward the end of August, at the period of low water. We ran aground twice going up. Returning we almost grounded again, being misled for the moment by a gull which we mistook for a buoy.

On disembarking at North Timiskaming the first thing which attracts one's attention is a notice in Indian: "Kawin Sakaswa" (no smoking), in

bold capitals on a store house. This port as far as one can see from the landing consists of little more than a shop where various goods may be purchased, including Indian moccasins and mitts made on the reserve, and guides and cauoes engaged. To many it is a point of no little interest, since here begins the portage route to Abitibi House, the route traversed by the Abitibi fur brigade. The distance to Lake Abitibi is over a hundred miles by canoe, the only means of travel, the usual time taken by the trip being The scenery on the fourteen days. lakes, rivers and portages is unusually interesting and beautiful. The Height of Land occurs, on this route, between Opasatika Lake and Lake Matawagogig, this water-shed, singular as it may seem, being swampy, which necessitated its being planked by the Hudson Bay Company to facilitate the transportation of their furs and supplies.

Down the northern slope, as the elevation decreases, the climate in summer attains, it is said, to a higher temperature than that of southern Ontario, the decrease of elevation over-balancing the increase of latitude. There the waters flow from Lower Lake Abitibi through Abitibi River to the Moose, and thence to James' Bay, the Abitibi at its junction with the Moose being threequarters of a mile wide.

On Lake Timiskaming the mean temperature during June, July and August, is under seventy. The elevation of this district, and its mountains on which pine and balsam grow luxuriantly, account for its possessing a climate antagonistic to disease, particularly epidemic and pulmonary, it being commonly reported that, Indians excepted, the lake people die of old age. Notwithstanding its position and elevation, Lake Timiskaming opens in April, navigation beginning then, and remains clear of ice until December, occasionally until late in the The explanation given for this month. is that the deep waters become heated to a considerable depth during the summer. and continually come to the top, thus preventing the lake freezing over earlier.

On the return trip down the lake, after tea on board the steamer, we took a walk through the pretty French village of Ville Marie, formerly Baie des Peres. situated along the curve at the head of beautiful Kelly Bay. Here the Oblat Fathers have a Mission. The church and priest's residence, and also the hospital and school, which are under one roof, and in charge of the Grey Nuns, are fine red brick buildings, the latter having a chapel in white and gold. On our making bold to seek admittance to the hospital and school, the nice-looking nun who opened the door inquired :

"Parlez-vous Français, mademoiselle?" At which I managed to speak just enough French to inform her that I do not speak any. So she motioned us into the parlor, where the Mother Superior, speaking our language, soon appeared,

to show us over the building. Lovely indeed is the village of Ville Marie on a moonlit, midsummer evening. The gardens were full of flowers, 105es climbing about the verandahs, and forming bowers, from several of which drifted musical lullabys of young matrons singing their little ones to sleep. Everywhere outside of the gardens, alsike clover, the sweetest clover growing. blossomed, perfuming the air exquisitely with its fragrance; while on the outskirts, from the hills and glens, the thrilling song of the White Throat echoed between intervals of expectant silence.

Fort Timiskaming, situated not far south of Ville Marie, was once an important post of the Hudson Bay The chief factor of the Company. district resides here, the business being carried on at Ville Marie. It has already become a favorite summer resort. Here and elsewhere on the lake shores and islands, Americans are beginning to pitch their tents for a season of rest and recre-To me the most attractive spot ation. on the lake, as a camping ground, is the little flat bit of land, a mere interval in the green wall of the hills, at the mouth of the Kipawa River, a breadth of snowwhite, tossing rapids being all that is seen of this river in passing. Here I should like to pitch my tent in June, for the summer.

West of Lake Timiskaming lies a labyrinth of beautiful lakes and streams, in which are many islands, waterfalls, and rapids. Lake Timagaming (lake of deep waters) the fabulous paradise of the Algonquins, is the chief one in the group, and contains some thirteen hundred islands. An excellent portage route through this labyrinth begins at Haileybury.

In various localities in and around these extensive northern lakes, fish and game in variety are abundant, such as whitefish, bass, dore, grey and speckled trout, pike (kenonji), and maskinonge (maskinonji, big, lanky pike); moose, deer, bears, wolves, lynx, beaver, otter, mink, martin, foxes, hare, duck and partridge. Canoes and Indian guides to the different hunting grounds may be engaged at North Timiskaming, Haileybury, and Timiskaming Station.

There is an old saying to the effect that the longest lane has an ending. So, it is to be regretted, has a pleasure trip, and this Station is the homeward turning point to North Bay, the gateway from the happy northlands, through which on an evening when Lake Nipissing was

The J. Stevens Arms & Tool Company, Chicopee Falls, Mass., have been working for the past two years on a new drop torged, sliding breech-block action to supplant the old style action that they have been using on their Ideal rifles for many years, and have perfected what they believe to be the best, simplest and most durable action yet brought out. scarcely perceptible through the shadows, we passed reluctantly, with hearts harking backward. The final, parting words, which are from Swinburne's "Reginald," a characteristic description of England, apply aptly to lovely Northern Ontario :

The country would be better than the south Anywhere : give the south our streams, would it Be fit to match our borders? Flower and crag, Burnside and boulder,..... you don't Dream you can match them south of this?"

And in reference to the streams :

"Bright and tawny, full of fun,

And storm and sunlight, taking change and chance

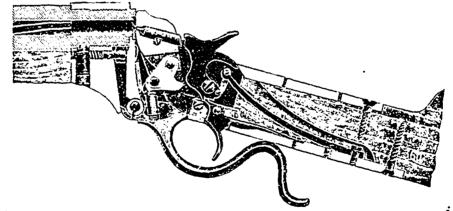
With laugh on laugh of triumph. Why you know How they plunge, pause, chafe, chide across the rocks

And chuckle along the rapids, till they breathe And rest and pant, and build some bright deep bath

For happy boys to dive in and swim up, And match the streamlet's laughter."

loading quickly. Bringing back the lever raises and carries forward the strong breech-block with a rocking motion which prevents any possibility of buckling the shell, thus properly seating the cartridge in the chamber and finally securely locking the action ready to be discharged.

The standard length of barrel for rimfire cartridges will be 24 inches, weight

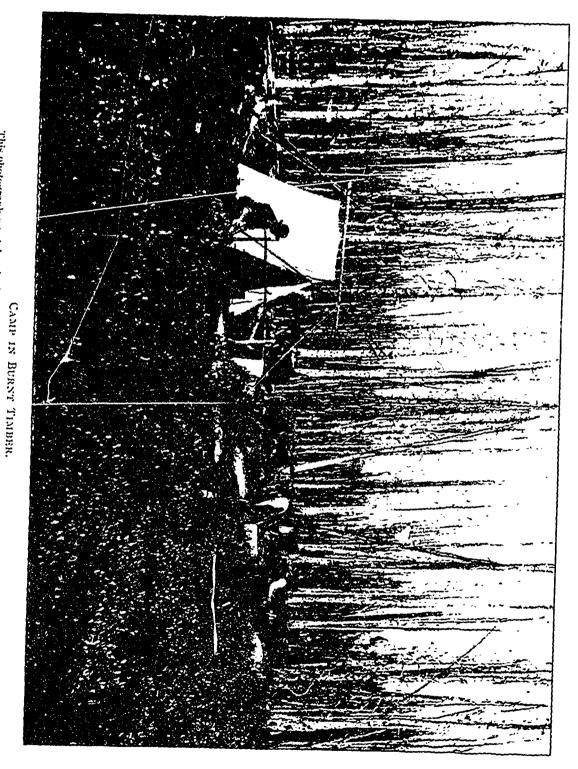


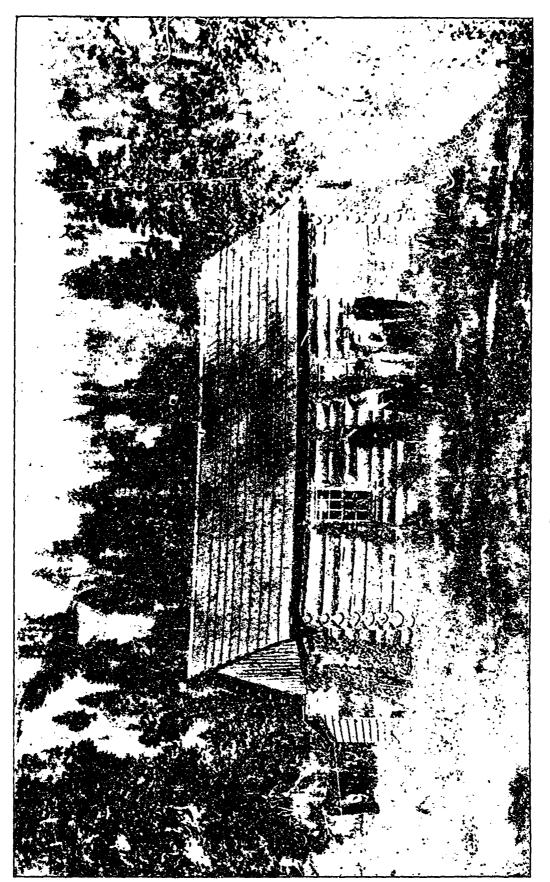
Mr. H. M. Pope, the well-known rifle expert, is more than satisfied with it.

The strength of this new action permits the use of the modern heavy charges; its ease of manipulation is a conspicuous feature. The popular lever action is retained, but greatly improved, with sliding breech-block. The dropping of the lever leaves a free inspection of the barrel from the breech, permitting 7 pounds; for center-fire cartr¹dges, 26 inches, weight $7\frac{1}{2}$ pounds, and made in all the standard calibers.

All of the Ideal rifles, No. $44\frac{1}{2}$ to No. 24, will be fitted with this new style frame and action. They will continue the manufacture of the No. 44's with the old style action, but in 22, 25 and 32 rim-fire and 25-30 and 32-20 center-fire calibers only.

This photograph was taken by Mr. Howard W. Du flois, near the Simy son River, Rocky Mountains.





A lome in the finest climate of the continent. Peaches, apples and grapes grow to perfection in this favored valley—and the shooting is superb.

IN THF ONANAGON, B.C.

Great Bear Lake.

BY PROFESSOR H. A. CONROY.

I will try to interest the readers of ROD AND GUN by giving an account of the Upper Mackenzie and Great Slave Rivers; the Great Slave River is a continuation of the Lower Peace River. I have skirted very nearly two sides of Great Slave Lake. That part of the country lying north-east of the Hay River is known as the buffalo country. There are supposed to be about 1000 wood buffalo roaming over an immense territory. They are protected by a close season of seven years. One would think that they would multiply very fast, but the Indians tell me that about 80 per cent. of them are destroyed by timber wolves.

The timber wolves of that country, as nearly as I can understand from the pelts, are fully one-half or two-thirds larger than the Ontario or Quebec wolf. As a usual thing, they travel in twos; they are sometimes seen in threes. The Indians tell me they have never seen more than three together. The wolf is the hardest of the animals of that country to trap, so the Indian claims. They are very wary of a gun.

On the northeast shore of Great Bear Lake is what is known as the great barren lands or the musk-ox country. I have had conversations with the Indians many times concerning the musk ox, and they say that the animal will never diminish much in numbers. The hunters cannot follow them more than three or four days into the barren lands; they generally hunt them with dogs. Around the shore of Great Bear Lake their pelt is considered prime in the month of October. After that time the undergrowth of fur becomes longer and longer until it falls off about April.

The reindeer come south to the northeast end of Athabasca Lake every year. They are a small deer, weighing from 80 to 100 pounds, with long antlers. They have never been known to come further south than Fond du Lac, and they come in countless thousands. Around the last days of February, the Indians go about three days' march into the interior of the barren lands to meet them. The decr turn north again, followed by the Indians, who must kill thousands of them. I have seen tons of reindeer meat.

The fish in the far northern lakes are in abundance; whitefish, salmon trout, grey trout, speckled trout, jackfish, and a fish called the unknown.* This unknown is a beautiful fish with a kind of silvery sheen over its body when taken from the water. It is commonly called the Mackenzie River salmon. One thing peculiar to my mind is that there is no real salmon in the Mackenzie River. There is a fish called the bluefish † found in the Mackenzie River. It is about the size of a mackerel, very pomy, and takes a fly as readily as a speakled trout The Mackenzie River is the only water in which I have seen this species.

* L'Inconnu (Slenodus Mackenzie, Richardson). + Artic grayling ; Poisson bleu (Thymallus signifer, Richardson.)

"The Complete Campers' Manual," or "How to Camp out and what to do," is the title of a very interesting and instructive booklet published by "Buzzacott," complete camp outfitter, Racine Jct., Wis., and Chicago, Ill. Copies of the book can be had on receipt of 10c. in coin or stamps. It is well worth many times this price. From cover to cover the booklet is replete with the most valuable information, which every sportsman will appreciate. What to take and what not

to take on a hunting or camping out is a perplexing problem to the average camper. It is the aim of "Buzzacott" to solve this problem.

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Anglers may procure the "Missassaga" bass fly from T. W. Boyd & Co., 1683 Notre Dame Street, Montreal.

N.B.—Do not be without a few of these in your book next time you go bass fishing.

Our Medicine Bag.

AND GUN IN CANADA this month. Its growth has been most satisfactory. We hope, and expect, to add to the size of the magazine from time to time.

. 42

Mr. Graves, of Ottawa, has sent RoD AND GUN two of his celebrated "Missassaga" bass flies, with and without jungle cock cheeks. This is undoubtedly one of the best flies for bass, especially in shady forest waters. It is a very taking fly, and many of our friends tell us they have found it simply irresistible, the bass probably taking it for a luscious green frog.

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Catalogue Number 70 of the Winchester Repeating Arms Co. has reached us. It is, as usual, full of information of the greatest interest to riflemen. The new guns described in it are the Model 1886 rifle for the .33 caliber Winchester smokeless; the Model 1895 rifle for the .35 caliber Winchester smokeless; the Model 1902, single shot rifle, for the .22 caliber, and the Winchester breechloading saluting cannon. In addition, there are some details of trajectories and penetrations, and a full description of the high velocity cartridges made to suit the new rifles before mentioned.

We omitted to state last month that the gentleman who discovered the birchbark letter, of which Mr. C. C. Farr sent us a translation, was Mr Stephen P. M. Tasker, a Philadelphia sportsman. Mr. Tasker was carrying out an exploration on the Height of Land when he discovered the letter in question. By the way, how comparatively few have visited that interesting and mysterious Height of Land, whose sinuous ridge divides the waters of the Arctic zone from those of more temperate latitudes, and which extends from Hamilton inlet, in Labrador, to the Rocky Mountains? Thousands have crossed the Great Divide between the Atlantic and Pacific waters, but how small a company have

Eight pages have been added to ROD gazed upon the streams flowing into the frozen north. All honor to the daring, enterprising spirits who have led the way into a region that will some day palpitate with busy life.

> The Canadian Camp, Fire Club seems to have been launched in a very auspicious way. It is the strongest of its kind, and its officers and members are well-known sportsmen of the United States and Canada. The eligibility for membership is having camped out in Canada. Once a year there will be a great dinner in New York, and some of those who have not been so fortunate as to enjoy open air life are to be invited, and will probably be made to see the error of their ways. The Club now has a membership of three hundred, including many women.

> The Winchester Repeating Arms Co. have just issued a very useful little manual, The Trap Shooter's Guide, which will be sent gratic ' all applicants. The scientific spirit of the age is well illustrated by the demand that evidently exists for such hand-books as the one in question. Withir 'he memory of men yet living, the ordinary field shot was content with "two fingers" of a lord for ordinary work, and may be an extra "finger" or so for long shots and tough fowl; now he requires to know the correct load to a grain, and that is just what this little book will tell him. There are, in addition, the trap shooting rules, and a full description of the various systems for dividing purses at tournaments. Moreover, some sayings from the trap shooters' philosophy have been interwoven in the text, giving to the work a high moral flavor, and one that will doubtless be appreciated by shooting men. For instance : "Raise thy gun often, but thy voice seldom."

> The April copy of Baily's magazine (Vinton & Co., 9 New Bridge Street, London, E.C.) contains an admirable article on polo, by Captain E. D. Miller,

the famous English player, which discusses at some length the sweeping changes that were made in March by the Hurlingham Committee in the Rules of Polo. Captain Miller is one of those who were classified as first class players by the committee, and he is consequently entitled to speak as one having authority. By the bye, all the American players on the International team of last year have been included in the list; this shows how rapidly American polo is coming to the front. Salmon fishermen will be interested in Mr. W. Murdoch's "Gloaming Salmon Angling." Mr. Murdoch is, unless we are mistaken, the well-known Scotch fisherman who hails from Perth. "With the Border Mew" is the title of a contribution by Mr. W. H. Ogilvie, and as it refers to a type of fox hunting that is but comparatively little known, should attract considerable attention among hunting men.

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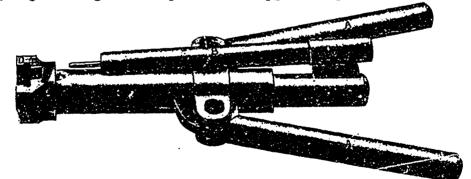
Fores' Sporting Tales and Sketches for March is, as usual, entertaining, and

The "Stevens-Pope" Re and De Capper is the quickest and most serviceable tool for the purpose. The body C is hollow and contains a plunger for seating primers a spring for returning parts to initial and position. To the rear end of this body are fulcrummed levers—A A—which engage said plunger. To the rear end of this plunger is hinged the expeller B. may be taken up to while away an idle hour, with the certainty that an Anglo-Saxon sportsman, no matter where he may dwell, will find something to interest him. We hope that the Editor of Fores' will give as much space in one of his forthcoming issues to Canada as he has given to South Africa in that of March. We have no baboons in Canada, but we have grizzly bears, and as material for blood-curdling yarns, the grizzly is rather more than a match for the baboon that carried away Elsie Myers in Unicorn's contribution to this magazine.

The eighth annual report of the Forest, Fish and Game Commission of the State of New York has been received. It is not so elaborate as its predecessors, but contains a great deal of useful information, especially upon forestry matters. We miss the magnificent work of the late A. N. Cheney, and it will doubtless be difficult for the Commission to replace him.

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over shoulder C. On removing thumb, the shell drops down so the head of shell falls behind shoulder C, which prevents shell shifting position when levers A A are closed expelling old primer. The shell is then withdrawn and reversed with one motion, and head of shell dropped into slot D, a primer is then dropped into pocket E and levers again



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CONTENTS

May, 1903

New Brunswick Moose. By Geo. E. Armstrong	•	425
The Blue Print. By Hubert McBean Johnston .	•	426
The Dog Show. By D. Taylor	•	429
A Woman's Venture. By C. A. B	•	431
The Grouse of Timiskaming. By C. C. Farr	•	435
Forest Fire Protection in Europe. By A. Harold Unwin		438
Natural Reproduction in the Adirondack Forests	•	440
Northern Ontario. By H. Barnard	•	442
Lake Timiskaming	•	449
Great Bear Lake. By Prof. H. A. Conroy .	•	455
Our Medicine Bag · · · · · · ·	•	456

Communications on all topics pertaining to fishing, shooting, canocing, 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.

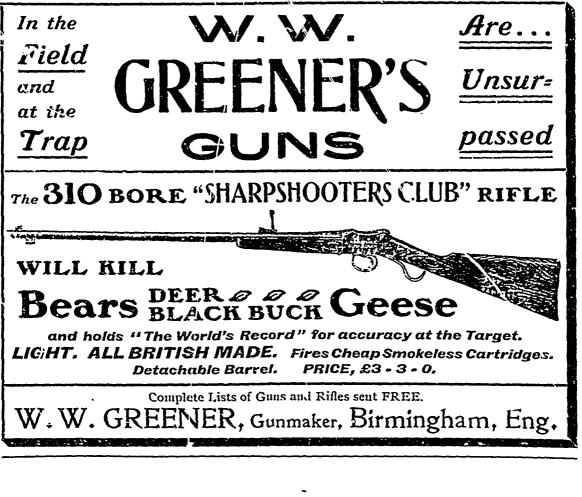
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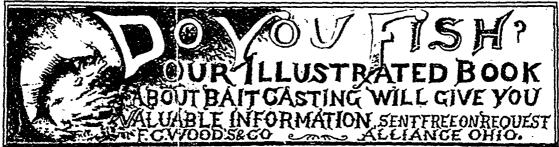
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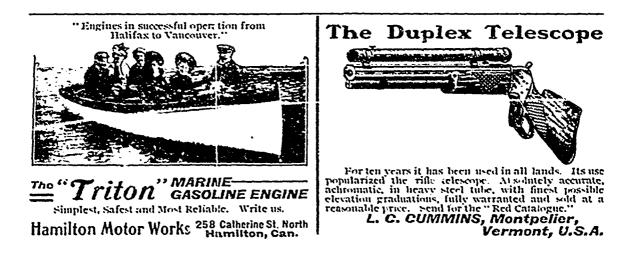
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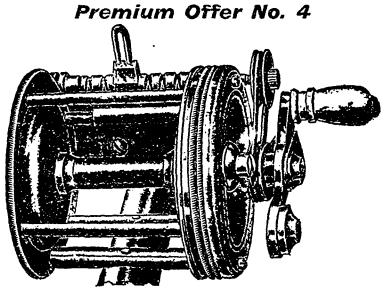


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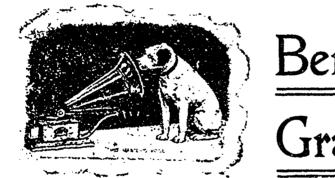
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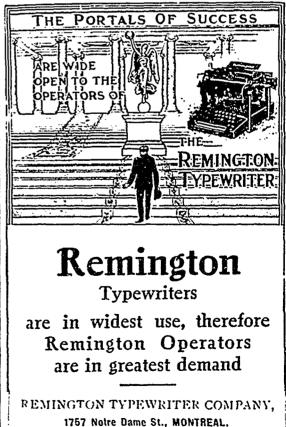
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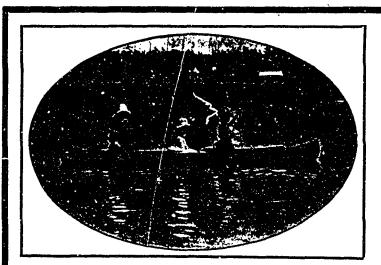
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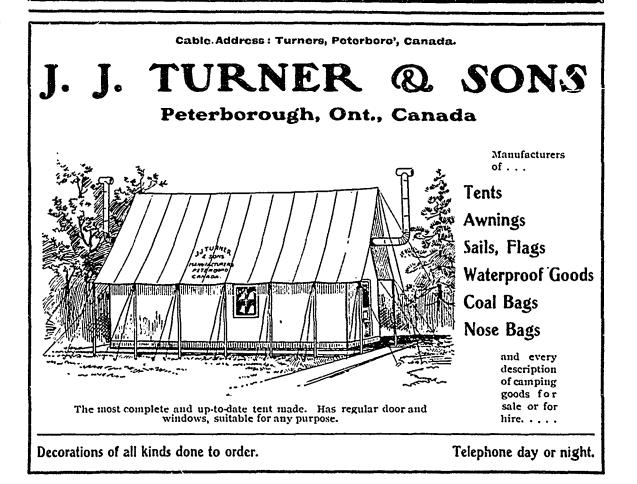
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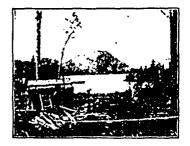
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