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# The French River Trip. 

Ry L. O. ARMSTREONG

I have been for many years a reads of the "Relations of the Jesuits," and of Samwel de Champlain's story of his canoe trips in Canada in 1612, 1615, and later I have travelled over the ground covered by two of these trips, following his itinerary closely. At the end of each trip I have felt as though I knew Sam, and that he was just such another as I am, only more so and better. For instance Sam had two guides 10 every bark canoe. There were four musketeers with him, and each had his canoe. Champlain sars that on the portages he carried three guns, three paddles, and tagatelles. I see that in 1615 the Indian carried his canoe just as he does to-day. There were three paddles to each cance. Two paddles were tied lengthwise along the thwarts in order that the canoe might rest easily upon the carrier's shoulders, and the third paddle was carried with the rest of tine impedimenta. The musketee"s with Champlain would take the heavy baggage as they were privates, and he, as the officer of the partr, shouldered the bagatelles.

But his point of view and mine differ : $n$ the matter of his appreciation of the French River. He travelled from the 0ttawa River via the Mattawan River and a little creek near North Bay, which was for 150 years the connection between the waters oi the River Ottawa, Lake Nipissing, the French River, and the great routes to the West. He admits that they had p'enty
oi fish and plenty of game But l.e dismossed the French River and its attractions in a few lines, saying that he had not found ten acres of good land along its entire course, and compared, with great. advantage to the latier, the fertile hardwood country of Ontario to the south east where the Indians grew pumpkins, corn and beans, and where they harvested great. crops of wild grapes. Had Champlain left. his canoe and walked inland, he would have found more than he saw on the French River. But the thrifty French colonizer did not leave his canoe on the river bank, and could see nothing in the pine covered rocks, or in the exquisitely colored blufls, and islands with their multitudinous tints so full of harmony, delicacy and beauty, and consequently so impossible of adequate. reproduction by the photographer.
That is where I difier, as a sborusman and ? lover of the beautiful, with Champlain. These rich farm lands of Ontario make only good prosaic farms. There is now little or no suspicion of game or good fishing about them. Their population is respectable to the point of dullness. To the lover of nature the cultivated Ontario. country is only a second rate attraction, although nature has not yet been marred; there to the same degree as in other: places which once were beautiful.

On Oct. 17th, 1904, I had anothef oppor-. tunity of visiting the French River, and that opportunity I eagerly embraced I
was commissioned by a number of friends to find the ideal fishing cround, with rel deer and moose, and parts idge and duek as a corollary. I thought I new where to find it. U,pon the date mentioned I left, the Soo train as it is called (the expre is that runs from Boston to Minneapolis, via Montreal, over the Canadian Pacific Railway, through Northern Ontario) at Wanapitei, about eleven in the morning, and went to the Qucen's Hotel, kept by Sky Jack Mcllonald- $\Omega$ name given to him hecause he is a dealer in spirituous thangs. Three of our party and two guides had a dollar's worth of dinner each for which we paid tweaty-five cents. This promised well for a start. We had good soup, a partridge apiece, three or four kinds of vegetables, delicious. celery, and cranberry pie. Everything was clean and the dinner was well-cooked, and we wondered as we ate, but we ate it all nevertheless. Strange to say we bought some good cigars in the same hostelry.
We had two cedar canvas covered canoes 17 fect in length, 32 inches beam, and 12 inches deep. This style of craft was new to our guides, and when they saw 1,000 pounds or more of haggage, including a heavy photographic outfit, three well-fed men, and two guides for two canoes, they shook their heads and doubted. But when everything was packed in the two canoes, and the passengers seated on high cane seats their height out of the water satisfied them. When they had paddled a few miles and had that amount of experience. they were loud in their praises of the eraft. Both guides declared that they had never paddled any canoes so steady, so fast, and yet so light.
A two miles' paddle brought us to the first portage of the Wanapitei, a short carry of 150 yards. But as a dam was being built just below the first portage, we had a second portage a quarter of a mil in length, and about a guarter of a mile further on. Here little tugs and rowing craft were loading material for the construction of a branch of the Canadian Pacific Railway through this territory. We found that we could race any of these craft by means of short cuts at the bends, and for a short distance. The raft punt is an exaggerated dory, and an equally good sea
boat. We passed a hospital made of tents. for the victims of dynamite, which is fairly patroni\%ed.

A couple of miles below this we had a very nice camp in a silver birch bush. The silver birch is the next hest thing to dra pine for an all night fire. It forms good material for tent poles, and for crotche, both for tent and fire, and with a little dry wood to start it makes a magnificent re. 1 of red coals, that both for cooking ans heating purposes proves it to be an invaluable wood. We made a moonlight exposure of our camp, which apart from the pleasantly suggestive details, shows how far the moon travelled during the exposure. the short broad line in the sky being the moon.
Our head guide, Joe Racicot, turned out to be a treasure. He knows the Wanapitei River from its source to its mouth, and is a good guide to the Togomassing Kokogaming and Lake Wanapitei country, north of where we were and west of Timagami, where there is moose and trout ill abundance.
I will be as minute as possible as to dates and portages, because I know this is a trip which will be largely patronized by others and my recital may prove useful.
On Oct. 18 th we left white Fish Camp, and our white birch fire at $7: 30$ in the morning, first putting out the fire.
During the day I met an Indian who twhd me that wolves were rather abundani. The Government, however, is taking steps to exterminate these pests, and I think irom the arrangements made that they will le successful.

A paddle of two miles brought us to the mouth of Elbow Creek, which has hecome a very respectable wide river, through the construction of a dam just below where it runs into tine Wanapitei River. Just bete the embankment of the Canadian Pavific Railway is built to the edge of the river. We lurned to the east and went up Flbow Lake. Late as it was we had no difficulty in catching enough bass and wall cyed pilie or dore for our wants, and we could sce that this lake is a good fishing ground. The railroad passes close to Elbow Lake, and is being blasted out of solid roc.s. Sour of the rock is wasted, but is put int:"
rucks and drawn to the hollows, where it is used to make a very solid roadled.
Four or five miles from the mouth we were to have found a team to take us across an eight mile portage to Lovell's lake, and other lakes on the route. But when we renched Foley's Supply Camp, there was no team to be.had. The roads were execrable, and to face an cight mies portage with two canoes, 1,000 pounds of baggage, and two guides was not at all •"l enjoyable prospect.

The trip round by the Wanapitei River, our guide told us, was not at all a difficult one to make, and by that means we could get over to the French River. We were very easily convinced. We came back to the mouth of Elbow, and contmued on down the Wanapitei in our canoes. It was an easy portage to Red Pine Camp, and from thence a two miles' paddle brought us to another camp, where our head suide's iriend, Jim, a prince of good fellows, whom we found loaded for bear, would insist upon our accepting the camp's hospitality for the night. But a stable full of fever-stricken horses, quite close to tile camp, and one huge dead horse, whose odor was spread over the scene for half a :nile, decided us upon refusing this very sincere offer. We found two magnificent heads of moose rotting here. The men who had killed the animals wanted to sell the hearls to us, and they told us that any mumber of such trophies could be iad in the nei, rhborhool. Evidently it is a good moose country in need of Government supervision.
We padded for another mile or two and camped on a delightful spot, a little point formed by Paddy Meyer's Creek, rumning into the Wanapitei at this point. We were lold that the dead moose came from up this creek, and that there were many of them.

At the sources of this ereek there are a series of lakes-Horse Shoe Lake, Burnt Lake, and Miller's Lake, where there is good hunting and excellent fishing. ihe walers of some of these lakes run into White Oak Creek, and from White Oak ('reck into the Wanapitei. We paddled up White Oak Creck for a mile or two, and fomed it a very beautiful river, with slate-

Iy oaks on both sides. There are good hats of land here for settlement.
Todiay, Oct. $19 t h$, we paddled 16 or 18 miles to a very pretty camp. The water of the Wamapitei is deliciously cool, pure and sweet. It is slightly amber in color, although very clear.

Our outfit we iound from experience to be as nearly perfect as it could well have been. I had prepared for myself some oil hags for corrying packs, made of seamless cotton bags, about three and a half feet long and two wide. To these 1 had firmly allached with copper rivets well fitted shoulder straps, with strips of hickory running up and down tine bag. When full the top of the bag projects above your head behind, and forms an admirable holder for another pack thrown across it, which you can carry on the shoulders and neck. In this way the weight of the second pack is on your neck and shoulders, and does not seem to add murh to the weight on the strap. These bags, oiled with common linseed oil, are absolutely waterproof as we were glad to find out later on. I carried a very warm sleeping bag, and three pairs of blankets in one pack, and about forty pounds of miscellaneous stuff in another, laid hori\%ontally across the neck, and held by the perpendicular bag, which was strapped to the shoulders. This is an inexpensive, very light, strong. useful, carrying bag. I had with me two hags that I think cost me ten dollars apice in New Yorkone was an Adirondack camp basket, and the other a brown canvas, each covered with, and held together by many straps. These did not prove waterproof in all situations. We all agreed that for work in the woods the new invention was infinitely superior, and these seamless bags have a carrying capacity at least forty per cent. greater than the ten dollar bags, and are only half the weight.

We regretted very much that we could not get a good photograph of our camp at the outlet of Paddy Meyer's Creek. It was a really beautiful spot, and our camp was an ideal home of a night. This was so, first in the "Goat-kick-why-not," as the Indians call the poles and crotches that held all our five pans for cooking; se:ond, in the beautiful fire, situated between the two tents, our own and the guides', which
threw the heat into the in emeo.t o:ner of each tent, and made a toat easemb'e that was about correct. We camped too late that night, and in the morming there was too much mist to allow us to make a good picture.

On Oct. 201 h , a two miles' radale brought us to Ragged Chute, where inere is a very massive and solid-looking old bridge over the Falls. This will prove a death trap to some one, if allowed to remain as it is, for while it lcoks de eivingly strong, it is really falling to pieces through decay. It is a good place to portage around. Two miles fartiner on we reached Bear Chute with in easy carry, and some small rapids that are easily run, landed us at McCarty's or the Devil's Own Portage. Here there are some incky rapids that are not advisable to run at low water. There is a half mile portage, around these rapids, which if another man says is a mile portage I will contradict him very softly. It would be called a mile by any one but an optimist.
At this point we found a nickel mine man, who appeared rather discouramed wer his venture. But he was surrounced by so many rich nickel mines, which are leing woiked at a profit, that lee said re fe.t like going on a little more.

We reached the foot of all tre Devil's Own napids at 11:25, in the morimg, and found a splendid place, with plenty of dry wood, for dimner. Leaving at 12:40, we paddled ten or twelve miles to the Crooked Chute, where we stopped a little while, and made a couple of photographs, which for a late autumn day are not bid, and give one an idea of the attractiveness of this water.

On the Wanapitei there is a grood deal ef burnt timber, but it is being covered with a second growth of green timber which is not unattractive, and will be very 'beautiful in the near future.

At $3: 30$ we found an axe on a portage, and we lost it on the next. Our plessu"e and our pain was, therefore, about lalanced, and the profit and loss entry unnecessary.
Some very pretty portages iollowed, and our next camp was at Island Chute, or one mile akove it. This proved to be an excellent campiug ground, though wood
was a little bit scarce. We did not suffer, but found quite enough fuel to leep us warm without burning tent po!es or crotchcts.

Joe Racicot informed us at the point that he liked our "bakings" very much. We found out afterwards that it wes our smoked and green bacon which pleased his gastronomic tastes. Joe is fifty-four years old, and one morning he discovered three or four grey hairs on his head. He annou:aced his discovery, and added, "I dunno wot giv me dose." I told him I knew a few other men of his age who had the same symptoms and were not alarmed.

The portage around Island Chute was a pretty place with a little swift water and a strong eddy, which made a portage round the rapids advisable. A light canoe might have run it, but it would not have been safe with heavily laden canoes.
There is a magnificent demonstration here of the grinding work of the glaciers. I never saw this action of the glacier more thoroughly demonstrated. For miles one side oi the river is rourth and broken, the other is smooth and polished.

The eddy would be a little difficult here at high water, but it was all right whea we went through. We had good weather up to this point. The moon was so dry that the hunter's horn was not given any chance to hold on for even a second.

At Sturgeon Falls, after a short portage with a steep climb, we left the Wanapitei where it fails into the French River system. There is good fishing here. We dined off bass of as gamey and firm a kind as I have ever caten.
. iter making an unsuccessful attemnt to no along our way by the northern brancin of the French River, and having been stopped by nilles of logs, we came back to the more southern chamel.

As we wese going leisurely along, admiring our surroundings, we saw a boat aheal of us. This was 'anned by two Indians-. an old man in the stern, who was paddling vigoroas!y, and a young, stout fellow, in the bow, vino was rowing. Our guides had been telling us about the number oi moose that are killed simply for the hides, and I felt pret.t. certain that these Indians had been brealing the :aw. The ste:n chase proved, as usual, a long one. But


A SHETTBRED B:AY.
M3lulf lake, french rever district.


A (UL1F\% Rに:
On the fair $W^{\prime}$ apitae.
we were pretty well seasoned paddlers by this time. and we finally overinalded them. We asked them to stop and said that we wished to speak to them. But the answer came, in broken linglish, that they were too busy, that they were in a hurry to reach home. and could not stop. Nothing remained but to draw alongside when we foumd, as we expected, about 1,000 pounds of moose meat in the boat. We iollowed them to their home, where we found more moose meat in plenty, and about four or five heads, which were spoiling. One was the head of a cow moose. which a siguaw, in absolute ignorance of the law, was mounting in her rough way. Se explained to these Indians the illegality of the whole proceding. and also the wasteiulness of it. Nie tried to show them how much it was to their interests to obey tile laws in order that moose might continue to abound. Then good Indian hunters would find plenty of employment as guides at $\$ 3.00$ per day, and, in addition, the gentlemen so employing them would give them the greater part of the meat so long as they brought home the trophy. Then the Imdians mbent, and the eldest said: "Nishishin chemaun saganish," which being interpreted means, "Mighty goid canoe of the lenglishman"a compliment to our owerhauling powers We were told that moose and deer abounted, ant that these Indians could kill as many as they wanted. They hed one re:y fine set of antlers. The elider Imitan fold us that he had shot the animal throush the nose, and then through the heart. When we arrived we iound that ane of the squaws had cut off the nose. and a good tiral oi the stim of the heat, thus spoiting it allogether.

We made some goom photographs of this Indian camp, and of the moose heads and meat hanging up smoking. The types are very gond types of the Ojibway Indians. These Indians are excecdingly fond of time children, and ble one spoilt child can be seen in the pacture. with his al:surd little shop coat and male face. His clothes are too good to allow him of run about. The other litule chaps who were allowed to roll around in the dirt and have a good time, were a remarkably healthy looking lot.

Isla $\quad$ is innumerable we saw in the French

River and Georgian Bay at tinis point, many very suitable for building upon. Onc can get a riage twenty or thirty feet in height alongside of a gravelly beach, witin a little good land about it, and a natural and easy slope up to the buiding spot. There is plenty of shelter for hoats and canoes, and there is often enough ground for a small garden, where vegetables could be sown in sufficient quantities to supply the family in the summer months and durmg racation time.
That evening we camped on a pretty island close to the Indian camp, and found it a very convenient place. It will prove a desirable residential spot at some future time.
A:1 this water, ever since we le?t Saturgeon Chute, proved goon fishing groind for bass, maskinonge, and dore. We hooked one fish whieh we thought might have been lake trout, because while he was not as same as maskimonge, he appeared to teas firm, and may have been a maskinonge. He was about four seet in length and was holdmis our enormous spoon bait in his mouth bint was not hooked.
We had a delightful padde from this island home, with a strong wind on our tack, and went past many isaands antl suitable points on the way to the mouth of the Pickerel. which is anotler of the mouths of the French. But we found it locked with logs. It was really the main trouth of the French that we found, and the Pickerel River here falls into the same wairr only a few yards away to lle south. We missed it by looking for it furbiner north. lis then determine: to paddle down to French River village (or Coponaning, as tl:e Indians call it) for information and not to lose too much time. Here we found a tug and a scow loading to go up the French liver to whe "e the C'anadian Pacifie lailway crosses both brancles of the French. We came and made ia't alongside the tug, determined to stort with her in the moming, so as to get the hencfit oi Tre information the pitot could give. This proved io lic a wise wove By the information obtained from him we were enabled in lay out a route that demenstrated fully to us an almost illimita'le reyion for fishing and shooting-a region which it would late many yoars (even if we cld careless
way obtained of allowing fishing and shoctug to be destruyed wholesale) to exhaue t . But with the modern regard for the law ernments and local muncipalities are now which is growing, and tine interest the govtaking in this matter, the entire country on the shores of Geergian Bay and Lake Huron, from Parry Sound to Little Curront and beyond, and up the many trancles and exterstion- of the French hiver and t.ake Nipissing, will firnish sammer homes :or thousands of prople, who a e looting tor just such places, with good fishing and shooting for all time to come. There will be excellent rallway accommodation by experese 1 rains into the very beat of this conniry in another year.
We spent all day of Oet. eend in exploring these many damels of womurous brauty, and lakes with matchles sett nge, catching all the fish we needed, although we travelled fast, picking cranherries, and supplementing our supplics wilh all the hirds and game we requred, and which it ans legal to sheot.
Mans of the territory through which we passed were made by us, and previously able to supply copics of the same to any able to supply copies of the san e to any impuiring sportsman or canoeser next se:asom.
It was on Oct. 23rd that ue took the tug Imperial, Captain Gantey, and went with him about one-third of the way ip: the Freach to Cantlin Isand, where thent is an Indian reserve on the west side of the island. We passerd man,y most desir athe lecations, ins luding lear mofi, Twin Wands and also aseertained from the Captan th. names of a considerable num! er of the other istands. Some of the tradheons attachert to the various slames and poims were at:o related to us. We mate an mward decision to return io this comury iat the winter, when everything will te frowen over. in order to surver some of these islames, and obtain them from the Goternment, for bona fide summer residents, aru. to do what we cond to prevent speculation in the islands.
This country is about 150 miles irom Toronto. The Canadian Pacific Railway is huiklinge a first rlass road, at preat cost. which will fouch at points along lates Simme and Mluskoki. Parry Sound, Byng

Intet, and twice cross the French River on its way to Sudbury. The man from Bumalo will be able to leave his home after dimer, and catch his own fish for breakiast next morning on the French River. In May anil June they have high water in the French. but at the end of June the water falls, and when the leaves are hard-that is full grown-mosyuitoes are done. It is net a bad country for mosquitues at any time.

The neighborhood of Squaw Rock, where there are plenty of islands, furnishes encellent fishing. There is room here for an almost imbefinite number of summer hom: $:$. This is the bass fishing centre of America, both ior the guality of the fish, and the ereat area of the fishing water. No doubt speckled trom takes will be found on the higher levels of the French River by following up many of the little streams that run into that river. Everywhere the water is clear and good to drink.
On Monday, Oct. etth, we came down the sicer 18 miles, past many beautiful islauds. and turned to the east into the main French Rover as far as the erossmy of the Canadian Pacific Railway. The surromalinges are very grand, and as impressive as the Sagumay. The French is quite as good in every respect, and more "canoeable," if 1 may be allowed fo com a word, and finely sheltered from the wind. We were never weather boum, althongh it was late in the season, and there was much wind. We dined on the future town site at the erossing of the French River.

At this place we came across a very inleresting party of Swetes, who were at work on the railway. These wen proved, upon aequaintance, in be intelligent and well cducated. They were apparently theroughly reliathle, for although the bess was away they were putting in their time as faithfully as though the eye of the forman was upon them. We photograpt:ed the party and a long log tomse they were buikding, and in which they were putting some chararteristic Suedish ideas, whith wele mit only serviceable, hut were al:o extemely picturesque and suitable to tre combitions mader which they were living and werk'ug. Is there was mo sawmill in the neighborhood tiey had no sawn lumber. Our respecet and concideration for the Swedss as a peophe was increased by this intereew.

We invested fifteen cents with them in the purchase of a big dish of potatese, and this investment, we all agreed, was the best we made on the entire trip. With our foacon and some big bass taken in the French River that morning, we dined luxuriously.

Inquiries hail heen diligently pursued as to whether there were serious difficulties in the way of our canoeing down the northern branch of the French River, and we heard alarming stories about the Recollet Falls, just a short distance below where the line of the Canadian Pacific Railway crosses the river. But many years of canoeing and travelling have taught me to largely discount alarming reports. I usually get information from as many people as I possibly can and strike an average. The cook at the Swedes' camp told us that it was all right and would shorten our journey very much indeed.

What we wanted to do was to take tlie northermmost branch of the French River and get back to French River village. We had followed the Pickerel River going up, and we knew that the main French was blocked at the mouth with logs. But this northern branch we knew very little atout. When we came to the Recollet Falls we found that, at least at that stage of the water, there was no difficulty whatever in portaging round the worst, and "running" the other half. We did this with much pleasure and success, and then lcoked for a branch ruming to the northwest, which would take us out on the most northerly granch as marked on the map. The Recollet Falls, or as they are sometimes called, the Granil Recollet Falls, have a drop of seven feet, and camot, of course, le run by a ranoc. Below them is another danger in the shape of a considerable eddy, which might possibly swallow a canoe at very ligh water. We shot down this eddy from the foot of the fall in comfort and safety, and with much enjoyment, and we alsn found the fish: here in perhaps a little more abumdance than elsewhere.

Having passed three islands in the river, we entered a little stream called Contants River, rumning from the north, and here the only mishap of the whole trip happened to us. We ran the canor on a dark green, mossy rock, which was quite invisible to
us, and standing up to push it off the rock the moss gave way, and the canoe tobstganed sideways, upsetting the bow man. He was gruick to catch the rim of the canoe. and only got wet a little above the knees. But in throwing himself from the canoe to the shore, he filled the canoe with water. and our packs went floating down the stream. It was then that we realized the inestimable advantage of having our things packed in watertight bags. Norhing inside those packs got wet. Hut the pietent bags and the Adirondack basket and othen expensive portions of the outfit were hut waterproof at all, the water fouring in at the eoverings. We found a shettered reeti and speedily made a fire, by means oi which we dried everything that was wel, and stayed here in comparatuse comint while $n$ re of the wildest storms of the :ratson passrd over our heads. Later en we read in the newspapers of the havoc :atised by that storm and found it hard to realize that the same storm passed over us in the open. Contants Creek was found to be a great place for moose.
Next morning all dry, well rested, and well fed, we paidlled down stream and continued westward to Contants Creck. Two miles further on we came to the forks and to the northwesterly channel, which we should have taken. This is a leautiful channel in which there are loicly islands. Continuing up this channel we came to a short hali mile portage, at the end of which is a lumber camp, which had been deserted. On the Ontario Govermment maj) this is marked as a through channel, but the Dominior Government Geological Survey man gives it correctly; and this map is by all means, and in every respect the hest map to take.
When we reached Bluf lake, through another very pretty bay, we found a heary sea ruming. There are many islands in this lake, and we were able to go from island to ishant, taking all the shelter we could get, with our loaded cannes without taking any water. We ramped on one oi the islands, at the foot of a perpendicu lar rock against wineh we bunl our fire Such a goom fire did we make that it threw out heat for twenty feet, and made us as comiortable as though we were in a steam heated house. Tiere are about one hundred


IN (:MID.
ley the shotes of the Winapitac:


Hocmin fl funch Kiver wince

-J.J. lk lunlidG.
Srue on the Winnaphine.
islands in Bluff Lake, and it is a very desirable camping place and summer resort region.
French River village was reached about four o'clock in the afternoon, and we ielt then in much hetter trim than when we started. There is a lug and scow service for the railway builders from the falls a mile above French Ruer village. Our canoes raced together for the last mile or so as we came in, and we enlivened the labourers on tugs and barges with all the canoe songs that we knew. At French River village we found a comfortable hotel, giving a good service at one dollar per day. The village is one of the quaintest that we have visited for some years. There are no roads, but narrow rocky ridges form the sidewalks in part, and in part they are made of rough, hewn logs stretched and floating across the bays. These bridges reminded me of that famous one from the maimand of Ireland to an island remarkable for its reputation of being able to feed twelve sheep but starving thirteen. The point of resemblance is that tenderiect dislike this kind of sidewalk very much indeed. The logs are squared but half of them are on the slant in the water. Altogether one would prefer asniphalt or paving stone, particularly when, as we found it, some suow and ice make the foothold most precarious. But we started boldy to make the crossing, and we succected in doing so in safety.

The steance service is somewhat uncertain at French River village. We waited one day for a steamer, and had just made up our minds to a detention of a day or thoo iurther, when we heard the whistle of the Maniton, and had just time to get ourselves and our belongings on board when it started across Gporsian Bay, direct to Owen Sound, where it connected-very closely, indeed, but still we connected-with the train for Toronto, and thus brought to an end a delightiol trip late as was the season.
The results of the trip are many and substantial. We found splendid fishing grounds, and beautiful locations for summer camps. In addition to Lake Nipissing, and the many extensions of that lake, and the myriad branches and bays oi the French River (which is really not a river but a
lake, with very large islands in it and many smaller ones) there is that vast stretch of island dotted Georgian Bay, from Byng Inlet to Desbarats, near Sault Ste. Baric-200 miles of coastline or more, and 15,000 islands. Amid these islands there is excellent bass fishing, and along the inland passages which can be taken by canoes from Byng Inlet to French River Jillage, and further, there is very good bass fishing. Again all througi the great archipelago between Killarney village and Algoma wills there is much better than good bass fishing. Too strong superlatives cannot be used about this fishing. Hitherto this country has been a little difficult of access, but it can now be reached by Canadian Pacific Railway to Algoma Mills for the people of Chicago and the middle west via the Soo; and it will very soon be accessable via Byng Inlet by express trains of the same railway on the air line now building from Toronto, Buffalo, New York, ctc.
The country affords many unequalled chances for canoc trips. For instance from Sudbury southwest to the centre of the archipelago about Little Current and MeGregor's Bay; down the Wanapitei from Wanapitei Station to the French River; from Warren station up the Veuve River to Nepewasing Lake, over ten miles long, dotted with islands; from Cache Bay, Sturgeon Falls, or Nortin Bay, across Lake Nipissing, down the Frenchi River; and then in all directions from Lake Nipissing and the French River are bays and rivers. I have not yet found a lake in that country that is not well supplied with fish. The streams where they are very swift, are sometimes denuded of plant life and fish by the action of the ice in the spring, but wherever there is still water in the same stream or in eddics fish are to be found in great abundance. The average size of the bass, dore, and maskinonge in the French biver is greater than anywhere else I have fished.
Great as are the attractions to sportsmen in search of moose, feer, partridges, etc.; surpassingly good as is the fishing ercrywhere; it is as an ideal a country for permanent summer homes that the district is most attractive. A legal friend who accompanied me, proved io be an excellent
camper and canoeist. He had come with the intention of staying three weeks, if necessary in order to find a suitable place for himself and his friends to erect a permanent summer camp. He wished to find a place large enough to establish a hundred cottage locations in the midst of sylvan wildness and beauty, and in a country which could also give good fishing and shooting. At the end of the week my friend claimed that he had seen enough. Instead of a place which would accommodate one hundred such families as he was commissioned to arrange for, he had found room for thousands, and was abundantly satisfied. But 1 urged him to stay a day or two longer and see other portions of the territory which I wished that hoth he and I should see. At the end of that time we had explored about one-half or a litule less, of the territory. paddling at the rate of nearly thirty miles a day along channels and bays that so a'hound here, and he was satisfied to have the remainder point ed out to him on the map.

In the spring the water of the French River fuctuates with the extent of the thaws, and the needs of the lumbermen to open and close the dams. But when the spring rush is over, the water remains at a steady level, and the country being free from large swamps, is also fairly free from mosquitoes. While the islands in the French River are very suitable for summer homes, the vastness of the area-affording perhaps 600 miles of coastline on mainland and is-lands-prevent any possibility of crowding for a very long time to come.

A very encouraging feature in comnection with the fishing and shooting in this virgin country is that it is to be opened up, and will receive the first summer residents at a lime when the Provincial Government and the public have been educated up to the point of realizing the importance and necessity of protecting the fish and siane. Such summer settiements as were stalied ten, fifteen, twenty, or twenty-fice jears ago had not the benefit of this wholesome change in public opinion, and the fishing and shooting of the neighborhood were destroyed by people who never thought of the mischicf they were doing, and of the permanent harm they were wreaking on the
district concerned. But in the case of the French River the fishing and shooting, and the wildness-irresistible charms to the jaded town-dweller-will remain, because the Govermment, the railway companies, and above all the general public, will join in preserving these valuable assets for all time. The banks of the river, the islands, and the shores of the lake are generally mintted for cultivation. The agriculturist will come but he will be a mile or two bact from the river where his farm will afford supplies necessary for the comforts and convenierpes of the summer residents, and at moderate prices.
The Ontario Govermment has just established a Department of Forestry and Parks which will take special care of such territory in the interests of the people; and those who buy land irom the Government may rely upon faithful and intelligent protection of their interests. This system will be found to work better than that where the land was leased at so much per square mile and had to be protected by the owners or lessees.
The enthusiasm of the comparative few who have visited the French River during the past season is so great that I have no doubt the number of visitors will be greatly increased next year. But there need be no fear of the possibility of this discommoding anyone. The area is so vast as to prechude the very idea of such a possibility.
I shall be very glad to give "pointers," gained in the course of my long experience as to outfit and equipment of the most uscfu! and complete ani least inexpensive kind; also notes of localities, and the best means of getting there with the least loss of time. Had we had the maps of the Geological Survey on starting we might have saved much time which was lost through following the inexact or rathor incomplete Untario Government maps.
For the next season there are three possible roads to get in, probably the best being via Sturgeon Falls, and steamer to the sources of tive Sturgeon River, and thence by canoe, from Wanapitei, down the Wanapitei River, which is a very pleasant route; or by steamer to French River village from Owen Sound or Sault Ste. Marie, from which point several steamers run to French River village, and from

French River village there are tugs a scows run by the Ganley Bros., who a very fine and obliging fellows. We were very comfortably quartered on board one of their tugs.
The Pickerel River in its lower part is really one of the branches of the French. It is a beautiful river with very many sites for camps, and like the French River,
is really not a river but a lake in which the greatest part of the water is covered with islands.
On this trip we were too late for blueberries, but we found many cranberries, and they formed a very pleasant and welcome addition to our bill oi fare.
We lived well, worked well, and were even like Kiphing's Waterman, "busting" happy all through.

# The Old and The New. 

Continued from the October Issuc.

When we left off in my last letter we were at Kipawa station on the Canadian Pacific Railway, a place almost unknown, except to Indians, until the arrival of the steel. I knew that bay well because it was there that a man lived, when I was in the fir trade, who brought me, for sale a muskiat skin, to which had been sewn a mink tail. At that time a mink was worth irom $\$ 1.00$ t.o $\$ 6.00$ and they were worth looking after. I looked at the thing and laughed.
Said he, "What is the matter?"
"Well," I said, "tinis is a muskrat sewn to a mink tail."
"It cannot be," he said, "for I bourht it from an Indian, and you, being a Hudson's bay Co. man, ought to know that Indians are so honest naturally, that they mever cheat."
This was a poser, seeing how industriously the white man has cheated the Indian, from time immemorial, and consequently, all the explanation that I could give was, that probably the Indian had learnt how to cheat from the white man, for, in support of my contention, this very man had bought valuable skins from them for the price of a few glasses of diluted high wines.
This branch of the Kipawa is practically a bay, different from the main lake, being comnected with it by a narrow "Narrows," and hence its Indian name which is "Pa-
kaygomah," meaning a dhecent lake, "I'akahn" signifying "difierent."

This branch of the Kipawa (to return to recent history) has played an important part in the history of the lahe, that is the more recent history for, it was through here, from the ()'baushene ('the lake with the marrows') that the great drive, in the winter, used to pass, in the halcyon days of the ijpawa, when hay was worth, in the barn, eighty dollars a ton, and sold retail at over a hundred dollars a ton. When a man with twenty acres of hay land need only to watch his hay grow, and have atout two thousand dollars to spend at the end of the season, in whatever manner suited him best-and it suited the majority to spend it in whiskey, which gave an awful lot of food for the fishes, for the majority of land-holders, in this particular part of the lake, were drowned.

Every point oi this Pakayoma is fraught with history, history of the wald life of the backwoods, ranging between the sixties and the seventies. In days gone by there was good trout fishing in this bay, dud Kipawa trout were reekoned amonset the very best, even as Kipawa pike are today, but I have heard tiat the daming of the waters has killed the trout, or what is more likely, has made them change their spawning grounds, and, in that case, there will be yet, good fishing of the kind un Kipawa.

Early in the morning the fiend, in the shape of Mr. Kelly, who is the best man that I know to encrust oneself with in winter, roused me out of bed while I was dreaming of the Windsor, the St. Lawrence, of Montreal, and the King Edward, of Toronto, but he bade me take it easy as there was plenty of time before breakfast. I took it so easy that I nearly missed my breakfast, but was in time for the stage. It was not yet decently daylight, so that I could hardly recognize the old landmarks, though, on the left. I recognized a point where I was wind-bound for two days, on my wedding trip, and though a piece of wedding cake practically saved us from starvation, I have never had a quarrel with those two days, but that is recent history being only twenty-six years ago.
As the dull daylight of a winter's morning began to make things visible, $I_{;}$recognized many spots, that were historical. First was the "crossing" tinat had drowned so many of the old "habitues," good canoesmen, but made unsteady by the all-pervading "forty-rod."
I recognized the spot where a man had burnt himself up for jealousy, a simple soul, such as one would hardly have given credit to, for having a sentiment that has immortalized, through Shakespeare's genius, the dusky Moor; and yet there have been Othellos of the bush.
I remembered, with a smile, the account that I heard of the inquest, a very primitive one, without a coroner, but composed of a jury, whose instructions were to decide whether the remans of the poor suicile were his own, or those of a moose, for, in those days, moose were plentiful, and no well regulated house was without a quarter of this quadreped.
As we spel through the "narrows," the place srew more famhiar still, for I had spent mue years of my life at Hunters Lodge, the old Hudson's Bay Company's Fort, and it was there that I should have branched off to the right, into the long, narrow bar, which led direct to the old, dismantled post, a spot. I have not scen for over twenty years but about which many memories cling.
When 1 was first there Indians held the sway, and a white man was a rarity. I
could not help thinking about dogs, for it was there that I gave the Indians a iesson on dog.
a poor, decrepit, toothless bull-dog had strayed from out the confines of civilization, and had adopted me. Poor thing, he was but a shadow of his former set... I took pity on him, and adopted him. A mongrel Indian cur, half dog and half wolf, tried issues with him, but the poor bull without teeth, could do nothing with a thing that he could have killed in a few minutes, if only he had the teeth. I remonstrated with the Indian who owned the cur, and told him that such fighting was unfair-as I have said before, those were days when the Indian reigned supreme on Kipawa te simply jecred at me, and told me that the white man's dog was no good. I had no dog of parts to prove that he lied, so I was obliged to bide my time, but the time came, and with it vengeance, as the sequel will show. A friend of mine happened to come along that winter and he had with him a magnificent mastiff. I have an eye for a good dog, and when I saw his canine companion, I was an hungered, and I asked him ii he would not leave the beast with me. Much to my delight he told me that he would he glad to give me the dog, because the beast wanted to kill everything in the dog line that he met, and that I would have to muzzle him if I wanted to keep him. I made up my mind very quickly how much muzzling I wonld do, and I took the dog for better or worse. In the spring my Indian friend, the owner of the cur that had bullied the poor old bull-dog, came ashore with his furs, as was then the custom for Indians to do, and with him his dog, bristling with importance and rage, fully expecting to chew up the poor old bull-dog, which had, in the meantime died of honorable old age. I did not mention dog to the young buck, for I wanted to get hold of his furs, before his dog was killed. Business before pleasure is an essentiality, especially when one is working for a company, so I persuaded my mastiff to stay in the office, while I negotiated the furs. After that was done and the man with others of the band had gone to his camp, I took a casual stroll to the camps, with my dog. About twenty dogs
came yelping at us, a temporary inconvenience that was soon setilea by "Captain John'-for thus he was called-who gave the curs a few shakes that sent them off howline. But the fun was yet to come. for my old friend the cur heard the howls, and came out with a bound, while his owner, with a smile on his face, thinking that I had the same old bull-dog, also came out to see the fun. If anybody ever saw a chang. come ove an Indian's countenance, I did that day. Captain John grailbed the brute by the throat and wanted to kill lim, right there and then. The Indian begged me to take him un, but I told him that he need not be afraid, for the white
man's dog was no good, but he cried out the more, saying that his dog was a good dog for beaver, and if he were killed his hunt would be short. This was 'argumentum ad hominem' and I had to take a hand in it, which I did, but the other dog never recovered, and the Indian allowed that the white man's dog was good.

Sirange to say, Captain John turned out to be a splendid hunting dog. He would kill skunks, and tree partridges 'better than the best spaniel, but above all he was death on lynx, and my wife was able to buy a splendid shawl out of the proceeds of the skins of the stunks that he killed, and of the lynx that he treed, and which I was thus enabled to shoot.
(To be Continued.)

The sudden and unexpected death of Dr. W. H. Muldrew, Dean of the Macdonald Institute, Guelph, Ontario, which occurred in the 7 th of October after an illness of only a day or two, is a great loss to the In.titute and to the cause of nature itudy generally in Canada. Dr. Muldrew had for many years given special attention to natural history and at the High School at Gravenhurst, where he was previously engaged, had established an arboretum .ncluding specimens of most of the Canall.t: trees and shrubs. He also published a work entitled "Sylvan Ontario," a most useful little handhook giving a description oi the trees and shrubs of that province illustrated by drawings by the author. As in this book the leaves are taken as the first basis of classification it is of grext assistance in supplementing those more ambitinus works which cover a larger field and usually depend upon the floral characteristics for the identification of species, a feature whicn is not always present at the time when botanic rescarch is possible for the ordin.ry student.

When through the munificence of Sir William Macdonald it was made possible to establish an Institute for nature study in connection with the Ontario Agricultural College, Di Muldrew was chosen to organize and superintend the school. The splen-
did building of the Inslitute was just compleied and the staff organized. The classes were well filled and the work was developing with the best prospects of success. In a day, however, the busy brain that organized and the strong hand that wrought out were separated from their work forever, and the great silence fell. Why a young man, strone and vigorous, with a career o. usefulness and honor opening before him, should thus be taken away is one of the mysteries of life for which the present gives no adequate solution.

Dr. Muldrew was a member of the Canadian Forestry Association and took an active interest in its success. At the annual meeting held in Ottawa in 1901 ho submitted a paper on "porest Botany in Schools," which is an important contribution to the discussion of this phase of the education problem. This paper showed a large grasp of the subject and will be found to contai., much useful and suggestive material.

The decpest sympathy of the mem'bers of the Association will go out to the family who have suffered thir great loss, and especially 'om those who have had opportunity of associating personally with Dr. Muldrew and of experiencing his kindly and cheerful help.

# Bear Shooting in Alaska. 

By C. G. COWAN.

Far away from the beaten tracks of civilization amongst the frozen heights of Alastic, and at the end oi a beautiful bay, an Indian Kolka and myself were encamped. On either side of the bay large mud flats, covered with a tender growth of young grass, extended back to the forest, which clothed the comntry until near the summit of the mountains In the spring these flats are the main feeding grounds of the bears, and as night approaches the animals emerge from the cover of the woods, and feed without fear in the open. One fine evening, after the sum had dropped behind the icy peaks, Kolka and I could see at a distence feeding on the flat an enormous beast, different from anything I had ever seen before, in size it was like a full grown moose, in walk, as if a bear. Taking our rifles we moved out over the flat on hands and knees, covered with last fall's withered grasses, until we arrived at a barren beach lying between us and the bear. Here, we could b:tt wait and follow the movements of bruin, movements that were ever bringing him closer. Nearer and nearer he came swinging on unsuspiciously towards us. When at forty yards or so he suddenly stopped and dug from the beach a clam. I brought my glasses to bear upon him and could see his enormous size, his great canine teeth, the excessive length of his claws and his long, light brown, waiy hair fluttering in the brec\%e, even his little eves could I see as they shone fiercely through the hair that covered them At this moment the wind changed. passing over our heads and carrying with it the scent of danger, the scent of man, that scent no wild animal however formidable, can inhale without perturbation. It reached the nostrils of this mammoth beast, and threw him into a frenty of mingled age and fear, making him rise on his hind feet and unconsciously expose his most vital parts to my bullet, which, when it struck him, felled him to the ground with a roar that sent the wild fowl piping and screaming into the air, that made for the moment my heart hound and filled my native with superstitious terror. It echoed and re-echoed
over the bay until it was at length lost the depths of the forest. Again and again I fired, and yet after each shot the bear rose intrepidly, struggling and moaning and fighting for its life. Painfully and sorely wounded it made a final and desperate attempt to reach the cover of the furest, but my Winchester ever at work prevented this, and as the fifth and last bullet struck him, he sank to the earth groaning piteously. Then the screaming gulls rising and falling overhead dropped quietly to the beach, and a stillness settied over the flat in great contrast to the uproar awhile ago. For a time we lay as motionless as the 'bear, then we rose from our concealment and approached him, and while the animal was yet warm, stripped him oi his skin.
In the bay there were plenty of seal, eider lucks and other widd fowl. Herrings came with the incoming tides in great shoals, chased by the white whale to the shallow waters amongst the rocks, where it was an easy matter for us to scoop out, by means of a hand net, all we required. On this diet we lived for days, until one morning at dawn we left the salt water and wandered inland and up the side of a high mountain until we reached its summit where we could see below us the foaming waters of a great river, rushing madly between high and rocky banks, forming, as it were, two abrupt walls on either side, ard flowing through a valley of the densest green timber, with an undergrowth rich in willows. We descended the mountain to near the river, and by its banks moved for a mile or more, when we came unon a wrll beaten trail-the trail of the moose. His we followed until evening, when we emerged from the forest into an open walley, dotted with clumps of conifers, in the centre of one of which we found a snug slecping place, protected from every wind. The following day we were up and out from under our bush cover at dawn, and before the sun had reached the middle $o$. the heavens we had killed a two-year-old moose, loated the best part of its meat on our backs and returned to our camp on the
bay. We had now enough meat to do us for some time, and throughout the day kept the flat as still as it was possible, discharging no fircarms, chopping no wood, and making $n$. unnecessary noises. In this way we went on, ever keeping watch at night over the flat, amidst perfect silence. A silence that remained unbroken for, I belicve, three nights when the reports of our rifles again rang out, disturbing all livin,
creatures. The anjmals of the forest ran, the birds flew, the wild fowl sereeched as they rose, fluttering, from the beach, and the seal shot their heads under the water with a splasl. But between us and the forest, the pale face of the silvery moon shone brightly on two motionless animals, two brown bears, a mother and her yearling cub. They had died hard and in dying added to my collection two beautiful skins.

## The Tamarack.*

The Tamerack, Hackmatack or American Larch (Larix americana) is found commonly in the swamps and low lands of eastern Canada and its name is a familiar one. Tamarack gum made it known to the boys who did not learn about it in the more prosiac way of cutting it up for cordwood. This tree has one characteristic that marks it out from all other coniferous trees in Canada, that is, the leaves are deciduous. In the autumn they fade to a dull yellow. and gradually drop off, leaving the branches bare throughout the winter. In the springtime the light green foliage pushes its soit needles out in tufts of delicate verdure Scattered along the stem these fascicles of numerous short leaves, not move than an inch in length, give a soft and peculiar appearance to the foliage which is easily recogr izable. In contrast are the fruiting coner. half to three-fourths of an inch in length, brilliantly purple or crimson, and turning upwards from the branches. Browning with age, the cones fairly open their scales and allow the seeds to scatter during the winter though they themselves usually persist for another year.

The tamarack is as a rule on slender tree but the wood is hard and close grained. It is durable and one of the most imporiant uses oi it has been as railway ties, for which it is well adapted both by its durability and the firmness with which it. holds the spilies by which the rails are fastened. It is also employed in shipbuilding, particularly for linees of vessels.

Throughout the greater part of Canada the tamarack was destroyed in 1885 and subsequent years by the lareh sawfly. It
was first moticed in Cenada in 1882 and in a few years fiad spread through all the northern forests, devouring the' leaves of the tamarack and causing the death of the trees. This insect destroyer has, however, apparently been brought under control, probably by some parasite, and young trees are beginning to take the place of the old forests which were destroyed. The dead trees are being destroyed by worers and over a great part of the northern districts the railways must have recourse to the jackpine for a supply of ties.

The species of tamarack described is found in Eastern Canada to the Rocky Mountains. In British Columbia it is replaced by two other species. Larix oceidentalis or Western Tamarack is most abundant in the Columbia-Kootenay Valley and occurs sparingly elsewhere. The distinguishing characteristics are the triangular leaves and large cones with the bracts projecting beyond the scales. It grows to a great size, sometimes five or six feet through, with a thick bark, separated into oblong sections. From the bark exudes a fummy secretion of sweetish taste, which is eaten by the Indians.
Larix lyallii, or Mountain ., arch, is the other British Columbia species and, as stated by Macoun, forms the last belt of timber on all peaks of the Rocky MounLains above 7,000 feet from Cascade Mountain, Bow Rivor Valley, westward on the line of the Canadian Pacific Railway.
The leaves are four-sided, and the bracts. of the cones protrule beyond the scales as in I. occidentalis. The twigs are tomentose or covered w.an a woolly substance.

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# Birds of Prey of Alberta. 

By HENRY GEORSE. M. R. C. S.

I have taken as my stibject, "The Birds of Prey of Alberta." These are called raptores (or suatchers), becauso they seize hold of their prey or food by their feet, armed with powerful claws or talons, with which they tear to pieces the flesh on which they live. The raptores are divided into three classes; vultures, hawks, owls.

The vultures, unlike the birds in the other two groups, have not the courage to attack living prey, preferring carrion and animals in the throes of death unable to make a stard for their lives.

The hawks and owls, on the other hand, bravely atlack prey larger than themselves, and are often ugly customers to tackle when wounded or unable to escape.

The chief characteristics of the raptores are their fierce, wild eyes, their strength, and power of flight, and their strong and hooked beaks and talons. Most of them are very handsome birds and inspire respect and admiration. One curio's point about them is that the female bird, as a rule, is larger than the male. I am sorry to say that, as the country gets settled up, these useful birds seem to disappear and become scaree.
The vultures in Alberta are represented by one sprcies only; the turkey vulture, or buzzard (Cathartes aura).

- The hawks are divided into three groups: (1) The accipitrines, or kites, buzzards, hawks, goshawks, eagles, etc.; (2) the falcons, proper; (3) the pandioninae, or ospreys.
The accipitrines are represented in A!'erta by the following birds: The marsh hawk, the sharp-shinned hawk, the American goshawk, the red-tailed hawk, the wesiern red-tailed hawk, the Swainson's hawk, the American rough-legged buzzard, the ferruginous rough-leggeh buzzard, the golden eagle, the bald eagle.
The faicons proper are represented in Alberta by the following birds: The peregrine the pigeon hawk, the Richardson's merlin.
In the third class of hawks we have the American osprey, or fish hawk.

The third group of raptores are the owls.

In this class are: The American long-eared owl, the American short-cared owl, the great grey owl, the Arstic American sawwhet owl (or Richardson's uwl), the Row Mountain screech $2 w]$, the great horned owl, the western horned ow', the Aretic horned owl, the snowy owl, tl.e American hawk owl, the burrowing owl, the pigmy owl.

This paper is specially prepazed for the purpose of pointing out to the farmers and sportsmen those hawks and uwls waseh should be destroyed, and those which should be entirely or partia!! protected.
I find that the number of rapacious birds thet do nothing but harm, and which should be destroyad, are very few. In Alberta there are only five. They are: The American goshawh, the sharp-shinned hawk, the percgrine falcon, the American osprey, the American hawk owl.

There are two kinds whicil in morhing lat good, and accordingly should be preserved. They are the American rough-legged buzzard and the ferruginous rough-legged buzzard.
Of the rest those that seem to do a lot of good in ridding the farmer of noxious vermin and insects are the marsh hawk, the red-tailed, Swanson's and sparrow hawks, the long-eared and short-eared owls, and Richardson's owl.
The remainder seem to do quite as much good as harm, viz.: The two eagles, the pigeon hawk, the great horned, the western horned, Arctic horned and snowy owls. The Turkey vulture is wholly beneficial.

To take up the five rapacious birds that nositively do harm, both to the farmer's poultry and the sportsman's game, I may repeat that there are four hawks and one owl.

I take it that all these birds are fotund chicily, if not entirely, in the bushy and wooded parts of Alberta, and not on the prairie.

The first one, the American goshawk, is one of the few hawks that remain all winter with us. It is a handsome bird, the head heing nearly all black, the feathers bluish on the back, wings and breast, and


lind lilsilok.
The ascom of Mome fon.
lue legs are grey witl: black specks and lutrs. It is often callen the blue mawh, nom its coloring. It is one of the boldest at the hawks, and will often prek and take .way game shot by sportsmen before they lave a chance to retrieve it. When raiding the poultry yard it is often driven away rom its prey with diffeulty by the indigwant farmer's wife. It is death to prairic chickens and rufled grouse, and it is the only bird that ever attacked me when taking its eggs. The male and female adults are similarly coioured, but the young hirds are brown.
The American goshawk nests in poplar woods, generally in the deeper parts and away from habitations. The nest is bulky and untidy, and only lined with bark, etc. The eggs are light blue, often fading to dirty white, frequently nest stained, but not spotted.
The sharp-shinned hawk has only come muder my personal observation during the last two summers. Until then I was sceptical as to its presence in these parts. This is a small hawk, but. just as bold ant bloodthirsty and savage as its larger brethren. It is about ten inches long, bhish grey above, tail crossed by several back bars, the legs and fect yellow. Its chief brey are the soung poultry, young grouse, and any birds of smaller size, useiul or not. I see that Er. Fisher says that it has only one redeeming feature, that of killing greai numbers of pestilent English sparrows. It would be worth preserving for that alone. It is a handsome bird and very jugnacious for its size, often attacking birds much larger. If it once starts on a poultry yard it will return, again and asain, until all the young chickens are taken, or itself fallen a victim to the farmer's gun. Their eggs are pretty, being blusha white splashed with difierent shades of brown.

The peregrine, or a:ck hawh, is to my mind, one of the hindsomest of hawks. It is marked something like a goshawk, only black instead of slue, the breast feathers leing white, barrel with numernus black lines from throat to vent. It is rare here, and I have only seen one set of eggs which were taken by John Sharples, on Sheep (reck, in 1s:0n. The name duck hawk is derived irom the fact that wild ducks are its
favorite prey. It is often called "bullet hawh," from the rapidity with which it pounces upon its prey. The eggs, like most of the blue falcons' are red all over, just as if painted. This hird amoys the duck hunters far more than the farmers, but it is plentiful enougl: to be taken into accomet as friend or foe.
The American osprey is the last of the injurious hawks. I myself am not satisfied in placing this among our foes, but I suppose if it were not so placed the levers of the gentle art, followers of Isaac Wa)ton, would cry aloud at the enormity of letting of their special foe, when the duck hunter's bete noir is put on the black list, for the chici food of this bird is fish. But what a handsome bird, with its crested head! It seems a shame to kill any of them. The bird delights in a home to rear its young, and, if undisturbed, will nest for years in the same place. It has one rather nasty trick, that is of compelling pelicans to drop their fish and appopriating the same themselves. The bald eagle in turn plays the same trick on these birds.
The oniy owl that I have conitraned as wholly injurious is the American nawk owl. Th. : is one of the few day owls, and I have watched it chasing prairie chickens in winter, the poor chickens screaming with fright, and their relentless but silent pursuer making great time after them. The owl has a long tail, is black and white and barred all over. The hawk owl is more in evidence in winter time, and plays great havoc among the grouse and rabbits. Its nesting place is rarely found. The eggs are not remarkable, leing like all owl eggs-pearly white and almost as round as a mariic.
Now, none ni these hirds affect fazmers very much, except in winter when food is scarce, or at breeding time, when there are several mouths to fill.

A word or two about the rough-leggei: buzard, as these are the farmer's friends, and do nothing but good. Their chice fard is gophers and mice. Thes are large like hawhs, ani their chief characteristic is that their legs are feathered right down to the base of the toes. Like the eagles, they nest all along the Bow River, and lay usually four eggs, of a large size, which are handsomely coloured with brown and
lilac. Occasionally they are seen in the winter, but they generally keep south of the snow line on account of their food supply.

This is only a short sketch to show that though a bird may be a hawk or an owl and a taker of lives yet it may, and does,
do a great work in the economy of nature. and should not be ruthessly destroyed, a it is in older countries. We have still th. chance of preserving birds that have heen exterminated in other countries, where now some of them would be welcome again even if they do a little damage.

# Our Forestry Exhibit. 

By REV. FATHER BURKE.

Canada has certainly entered the lists as one of the greatest wood-producing countries of the world, and her exhibit at St. Louis, which we had the good fortune to examine minutely on the orcasion of our recent visit, will do much to maintain her prominence as such before the nations. The magnitude and richness of her forests are attracting general attention. From the common spectator interested only in what appeals to his senses, from: the lumberman. from the scientist, from everybody, come expressions of admiration for her wood products. True she has not fully realized the richness of her treasure and the jealous manner in which it should be guarded: true she is far behind in scientific forestry; but many of her holders of timber limits lave themselves discovered that it pays to handle their acres economically and the Federal and Provincial authorities within their respective juristictions are at last secing that the torch be not wantonly applied to what is now regarded as a great national assct. The trend of afiairs points then, to still greater concern in these affairs in the immediate future irom all points of view in the conservation of the national wood area for national purposes; its restoration where impaired; the encouragement of private alforestation, and such a change in the fiscal policy as must secure to the country the prosperity which attaches to the tursing spindles in the production of fimished articies.
It was a pleasure to walk through the great wnod exhibits of the world gathered together in the Palace of Forestry, Fish and Game, and compare with them our own
woods as shown there and in the special Forestry Annex in the rear of the great Canadian Pavilion. All our heavy woods, logs, planks, ioards, etc., are in this annex and it is always filled with spectators. Mr. Armstrong, of the Exhibition Branch of the Department of Agriculture, is in charge. He acted in a like position at the National Japanese Exposition last year and has thoroughly learned his business. It is a pleasure to attest to his great knowledge of our forestry resources, his uniform courtesy and his unfailing devotion to duty.
In the Palace of Forestry, Fish and Game tere is a general domestic exhibit from Washington which runs all through the features of forestry, and special exhibits from orer twenty states. Foreign countries to the number of over tweaty-six occupy space and show, not only the rough timber but full lines of finished woods for cabinct purposes, building purposes, construction timber, lumber, staves, dye woods, barks, cork, resinous substances, hasket wood and baskets, wooden ware, wood wool, wood alcohol, charcoal, raw potash, etc. All the appliances and processes used in forestry are here to be seen from the collection of the tree seeds to the latest product of the most up-to-date sawmill. France sends al large and varied collection. Germany shows a complete line of her forest products and competes with America in outside nursery work. Great Britain shows all the woods of her home and colonial forests, the Indian section heing remarkahly rich and extensive; even Siam las a magnificent shos. Herc Can-
ada's collective exhibit of forestry and its products attracts much attention. It is constructed out of 3,000 specimens of native woods and is by far the prettiest creation in the great Palace.
The United States Bureau of Forestry has a splendidly equipped department in the west end of this palace. Its chicf feature is revealed in the immense transparencies illustrating forest trees, natural and planted trees, timber forests, forest topography, typical methods of lumbering, and the destruction of forests by fire and insects. This exhibit also shows the character and extent of government iorestry work, timber testing, preservation of construction timber by artificial means, forest management and turpentine orcharding. Indeed the contents of this marvellous building give one the best idea of the magnitude and wonderous evolution of the iorestic interest. There you see the tiny seed and the giant tree; the tooth-pick from Portugal and the huge log of yellow pine, 3 feet 6 inches at butt, 2 feet 6 inches at top, 144 feet long, from California. The won-
derful woods from the Philippines are full of interest, too.
In the Annex, Canada shows in great quantities tree sections, logs, wood carsings, wood for cabinet work and building purposes, lumber, shingles, staves, pulp wood and canoes made from cedar and brch. Sections of the immense cedars and Douglas firs oi British Columbia, equal anything exhibited at St. Louis. Photographic views of her great forests are hung up in prominent places. As much if not more by her forestry exhibit as by her minerals and agriculture, does she impress the world with her greatness. And it must be admitted that no disposition is now evinced to belittic her anywhere.

Among the woods prominent in Canada's exhibil we noticed basswood, hard and soft maple (bird's cye in infinte variety), black cherry, white and black ash, white, rock and slippery elm, sycamore, hickory, red and white birch, white and red oak, chestnut, beech, aspen, balsam, poplar, walnut, butternut, white and red cedar, white and red pine, black and white spruce, hemlock ${ }_{2}$ Douglas balsam and white fir and larch.

# A New Switzerland. 

By PROF. C. E. FAY.

If was not until 1888 that we, whose love for mountaineering had been nurtured by seven years of climbing among the for-est-skirted peaks of the White Mountains, and upon the soaring rock peaks of Zolorado, began to hear of the Selkirks and Canadian Rockics. In 1890 two of my young Swiss friends climbed Sir Donald. regarded then as a feat of no mean ordera climb not repeated for nine years, though now made frequently every season. That was the year of my first visit to this wonderful region. The next came in 1891, and s:ince then but a single year has passed that has not found me there with near friends, sceking fresh peaks to climb and incidentally exploring new or little known valleys. The story of our doings and our pleasures has seen the lignt on the pages of Appalachia, until that magazinc inas
gained recognition as perhaps the chiel 2 e pository of detailed information toushing the geography and topography of the Canadian Alps.
Naturally no insignificant list of peaks is that oi our first ascents; they comprise the highest and doubtless the most difficu!t of those whose bases are within a few days! access of the railway. Of those above 11,000 feet my personal list of "firsts" includes Victoria, Lefroy, Hector, and Guodsir in the Rockies. and Dawson, the highest thus far measured, of the Selkink range. Lesser than these, though still above 10,00 fect, are several more that it has been my privilege to set foot upon first since their creation. So rich was the field that until recently a peak already conquered had little of allurement. Thus it was sent until the present season that I cared to.
climb the superb Mt. Temple ( $11,627 \mathrm{ft}$.$) ,$ convenient of approach, and, next to Mt. Goodsir ( $11,671 \mathrm{ft}$. ), the highest peak visible from the line of the Canadian Pactic Railway. This and another peak in close proximity (of peculiar personal interest, since the Geographic Board of Canada has done me the great honor to a.ttach my name to it) and my third traversing of the glorious Abbot Pass comprise my brief list of alpine climbs for the season of 1904.
By a peculiar combination of circumstances I lost the privilege of making the first ascent of that peak in a certain sense my own. Dux femina facti. The privilege of building the cairn upon its summit fell to an Englishwoman who is belting the world in her quest for summits. With a hundred and thirty peaks of Switzerland and Tyrol to her credit, she is now making up her jewels in the Canadian Alps ,revious to a raid on those of New Zealand. July 20 was the date of her ascent. That of Rabbi Fleischer and myself fell on Aug. ust 5 , the seventh anniversary of the ascent of Mit. Yictoria. It was the Rabbi's bapno discredit when I say that, fearing it might prove rather extreme unction, he adjusted by mail in.advance certain affairs with his Boston attorney. It is a rery natural feeling, this, in approaching the t:nknown. Even the long experienced cilimber has strange waking dreams the night tiofore a perfectly new ascent is undertaien, though he knows in his heart of nearls that with two excellent Swiss guides-experts in crag and snow climbing-he is practically as safe as, say, at home during a thunder storm.
The approach to the mountain is one of the most exquisite of those deep blue alpine lakes, in the number and beauty of which Switzerland is quite outclassed by this region-Moraine Lake. So great is its charm that a pony trail ten miles long has been constructed to make it accessible from the hotel at Lake Louise-the famous "Chalet." Its environment is most impressive, yet almost forbidding. It rests in a lofty amphitheatre, in what was first called "Desolation Valley," but now is known as the "Valley of the Ten Peaks." On one side soars the vast mass of Mt. Temple as high above its sapphire ripples
as Mt. Washington above the distant surn of the Maine coast. On the other stecply from its very waters spring the initial members of the wild serrated range that gives the new name to the valley. An early explorer gave to these peaks the names on the first ten numerals in the Indian dialect of the country-an impossible nomenclature. as it has proved. No one can remember them, and so "Sagowa" has become "Deltaform," and my own patronymic supplants "Hecjee," the first in order of the series and, with its 10,637 feet of altitude, the third of the ten in order of height.
Our illustration finely sets forth its very characteristic form, quite unlike that of all its fellows. For the most part they leap up in sudden craggy peaks along a great wall of rock which here forms the ridge pole of the continent. Mit. Fay is another massive ridge rising, as if to form a second terrace, from a great arena filled to the depth of hundreds of feet with a crevassed glacier. Its feeding neve sweeps at a precipitous angle up this frowning ridge, and scems to curl backward like a breaking wave in a ponderous overhanging cornice that precludes saie approach upon this side.
And this is, in part, why the ascent was one of the longest, as well-as most arduous of all that I have hitherto made-fifteen hours from our camp by the lakeside and return, from half past three in the morning until evening at half past six. A direct ascent by the steep ice-fiall which descends by a gorge well down towards the border of the lake may doubtless be made under favoring conditions, though danger from avalanches must always be more or less imminent. This fact, and the long detour made necessary by the interposition of a brawling torrent, led us to take a wellknown safer way in scaling the first great wall of the Divide-the left hand of the two snow couloirs between peaks Three and Four. In our illustration, only the snow at its foot is visible, but its right hand fellow is seen in its entire length on the right hand of the centre of the picturethe irregularly shaped snow mass (really ice) slanting upward toward the suowy peak Two. The lower rock peak Thece ciccupies the middle of the view, and int. Fıt is the higher mass on its left. The foot of
the white ice in the couloir is rontinued in a dirty valley glacier strewn wall debras that impinges upon the forest-the dark portion of the loreground-and is interesting as being one of the few glaciers outside of polar regions known to be at present advancing. This evergreen forest comes down to the lake, not seen in our view, at an elevation approximately that of Mt. Washington. The valley of the Bow River, through which the railway passes, is in this neighborhoud some 5,000 feet above the sea.

To the top of the couloir we made our way, chiefly on the ice, with frequent stepcutting, but with one diversion for varicty to the crags. It was a parlous looking place, and as we noted it on our return by the ice below we asked ourselves how many persons inexperienced in such climbing would consider a passage over such a frowning donjon as in any way possible without wings. Then over snow fields and a briei rocky ridge between Three and Two then skirting over the latter's snowy sideavoiding in one place a mass of rock discharged at us as if in fury from the outcrop near its summit-and we found ourselves at the col, or depression, between Two and the great slow-faced ridge still left for us to surmoun: and even now towcring some thousand feet above us. For the first time we saw what lay behind our peak.

This was to me a moment of intense interest. No photograph of the many in my possession had heen taken from a point clearly showing the relation of this peak to the watershed of the continent. Was it or was it not on the Divide? Did the melting snows upon its hither side flow to Hudson's Bay and those on the reverse side seek the Pacific, or did all go to one and the seli-same sea? To determine this, and in general the line of the watershed ior a few uncertain miles, was one of the chiei objects of my ascent. Instantly all became clear. From the col now attained, the mountain fell away steenly many hundreds of feet to a very extensive snow field tributary to the Vermillion River, a ieeder to the great Columbia. The accidenten nulge, now high now low, that hemmed it in swept in increasing sweils up tor the farthest height ${ }^{\text {P }}$ our peak, which thiel"
fore through all its length ellog:s the ils. tinction of being a mountain of the Great Divide. A photographic record was immediately secured with our kodaks, together with a picture of the strangely beaufiful systems of flowing, concentric curves, or furrows, covering the entire surface of the great snow-field heneath us-mo doubt in the initial process of their formation the effect of wind curreats.

But the summit was still hours distant. Probably we should have reached it sooner, though less sensationally, had we mate our way downward to the level snows and skirted on these to a point from wheh a steep climb would have brought us at once to the farthest and highest summit. But our two excellent guides, Hasler and Michel are true sportsmen in their way, and preferred to try conclusions with the still unly partially visible rear of our mountain -in technical phrase to conquer it by a serir, of "traverses." Never, I am sure, have I had so much of this form of climbing in a single tour. Now up, now down; now pausing for a conference as to feasibility, now waiting for the unfailing Hasler to test the crucial bit: past steep snow couloirs, looked down upon by the weirdest of crags rising like gaunt giants a sheer hundred fect out of those shows; so it went until at noon we nall reached the crest of our peak and could pause for our mid-day meal.
For the ton of the ascent was now past. It remained only to pass over the ponderous dome of snow that crowns the midway portion of the great. ridge, and then beyond it by an casy slope to gain ats rocky culmination. A vast panorama is here uniolded, the most impressive icature of which is the seemingly perpendicular drop of about 5,000 feet on its northern side to the lakelets of Consolation Valley. The whole secret of this portion of the watershed, vaguely and inaccurately plotted even in the government mans, was ours in a bird's-eye view.

In returning we made the immediate descent to that great snow field on the casterly side, and for a couple of hours toiled across it in the intense heat of an August sun, circumnavigating, as it were, peak Two, and connecting witl: our route of the morning at the top of the great
couloir by which we had come up. The heat of the day had rendered the condition for passing it less favora'ble, particularly as regards the discharge of loosened stones, the one insidious and incalculable risk in alpine climbing. Where scattered fragments on the steep snow showed such batteries probable, we moved with speed and sidelong upward glances; but soon we were below the point of imminent risk, and ere
long cast aside for good the rope that for hours had bound us together. A grand glissade, by which we made a descent of several hundred fect in one exciting minute, and a climb, unroped, down several steep ledges bathed by cascades, where the guides, themselves, diiu iuv scorn each other's aid, were the closing features of a day involving every varizty of climbing usually met with in alpine tours of the first order

Mr. Thomas Southworth and Dr. Hudson F. Clark have recently been making an examination of the Timagami Reserve, particularly that part of it which has resently been included: This newer part does not contain such a good stand of timber as the original reservation having syffered seriously from past fires. It, however, presents many problems of great interest to - the forester in regard to the reproduction of the forest, and the young growth of pine, spruce and Banksian pine will be of much value in the future if properly protected. The land is mainly of the same character as the rest of the reserve, that is, rocky soil, little of which is of any value for agricultural purposes.
Dr, Clark has also looked over Rondeau

Park in Southern Ontario with the objer:t of working out a plan of management for the wood covering the 5,000 acres which are comprised in the park. The tract consists of land which has been built up by the action of the water of the lake and is heaped up in ridges which are now covered with a forest characteristic of the district. The hardwoods include walnut, liriodendron, white oak, etc., with pine as the chief renresentative of the conifers. The chief putpose of the reservation is as a park and game preserve, but the management of a characteristic Western Ontario hardwood forest is a problem of mucin interest which will present nam featares difleling irou: the more largely coniferous forests of the nortleern districis.

## Bank Protection.*

In connection with the floods which have occurred during the past season on the Kansas River the United States Bureall of Forestry makes the following suggestion for the protection of caving river banks.

The most successiul method of protecting a soft, alluvial river bank is to meke it sloping instead of perpendicular, and inn keep it covered with vegetation. The willow is admirably adapled to holding alluvial sonl in place. It is far more serviceable for this purpose than walls of masonry, and the facility with which it produces itself by seed, suckers, sprouts, and cut-
lings, both natural and artificial, makes its use very simple and inexpensive.
The great difficulty with planting any sort of tree on perpendicular banks is that tho caving of the soil is so rapid that the planted iree has no opportunity to get a start before it is undermined and precibitaled into the river. A plan which has been carried out and which is considered an excellent one for such cases is as follows:
"Crreen willow poles 18 to 20 feet long are secured in the sprone, just after thr ice goes out of the stream. These ooles

[^1]ate laid on the ground near the bank two feet apart, with their butts all pointing toward the river. Woven fence wire is then stretched along over the poles and stapled fast to each one. Sections of wire about 100 feet long can be handled to the best adyantage. After the wire has leen securely fastened to the poles, they are all pushed over the barik together, so that the butts of the poles will fall and sink into the soft mud at the water's edre. As the bank caves off some of the falling soil will lodge on the wire, partially burying and weighting down the poles, which will con-
sequently take root and grow. The wire will serve to hold the mass of willows together until they have become firmly rooted. The ends of the woven wire should be made fast to wire cables running back over the bank some distance and fastened to posts set firmly in the ground. The caving and crosion of the bank will soon round of its top corners, and i,he growing willows at the water's edge will catch the soil as it rolls down the declivity, causing a bank to form of just the right slope to resist crosion most effectually."

# Automobile Boats. 

By MORIIS M. WHII「ГAKER, B. A., N. A.

The last two seasons have seen the successful launching of a new sport and one which promises to have a great future, when once its pleasures are understood by those in a position to enjoy them-but before going into it in detail it would be well to trace its origin and deline what is meant by an autoboat. Power launches may properly be said to have been developed in the States about the same time that automobiles were beginning to be used extensively in Europe. Each was propelled by a motor deriving its power from the rapid combustion of air and hydro-carbon vapor. In the States, in boats, weight has no obsection, and consequently the development of the motor left this factor in the background, and the heavy, slow moving, cheaply constructed, two-cycle motor came to be almost universally used. In Europe, however, in the automobile, where every pound devoted to engine weight meant less carrying capacity in passengers, engineers strove to perfect the motive power and the light, flexible, high speed, four-cycle motor became the recognized standard.
As was natural, when power boats first became popular on the continent, the motor that proved so successiul in the automobile was transferred with very few changes to the boat, and the French term,
"canot," with the prefix automobile was applied to the product. After being used successfully several years in France, the automobile-canot crossed the channel, following the lead of the automobile, then commencing to be popular in England, and the French term "automobile," and "auto-mobile-canot" were Anglicised into "motor car" and "motor boat," and covered in each case the nighly developed ideas of French constructors. Thence, the terms have crossed the Atlantic and come to us today as new, when as a matter of fact, we have been working on the same ideas, lrut developing them in a different way So it will be seen that the term, auto boat, covers in general a boat propelled by a iight, high speed, four-cycle. automobile motor, placed in a light hull, and as easily managed and controlled and as reliable as the modern automobile.
As each year inas seen improvements in mechanical detail in the automobile until now those who can afford the luxury of a high-powered car have very little to complain of in the way of unreliability or discomfort; so in the auto boat, perfection of detail has done away with most of the uncertainty of oneration common to the cheaper, slower moving power launch. The reader must not, however, jump to the

[^2]conclusion that England and the States have been loing nothing while these improvements were being made. Each was developing its own idea in its own groove, so to speak, and it was not till they awoke to the resu!ts that were being obtained in France that they really tackled the problem in earnesi, and today, while they are behind, they are begimning to be a serious competitor with France both in automobiles and auto boats.

In many ways the power launch of today may be compared to the runabout, and the auto boat to the large touring car, in that the former is low powered and the latter high powered. Today launches may ve liad from $\$ 150 \mathrm{up}$, and hence are within the reach of the masses. The runabout costs fron $\$ 425$ up and it is also within the reach of those of moderate means. Autoboats, however, and poweriul touring. cars are costly and will ever be the luxuries of the well-to-do. Democracy is the keynote of the launch, and exclusiveness that of the auto boat. The launch will accomodate from five to twenty-five; the auto boat is built for three or four to six or eight, according to its size and speed.

Another distinction between the launch and autoboat, and perhaps its greatest, is the matter of speeds obtained. The ordinary launch jogs along at five to eight miles per hour and the auto boat tears by at specils varying from fifteen to thirty malss per hour, depending on the depth of the owner's pockethook, for this is, in the end the measure of speed, and yet the line of demarcation between them is rather hard to locate. In general, it may be said, however, that no power boat whose speed falls below twice the square root of the water line length can be considered an auto boat. As for example, water line lenrih is 36 feet, then twice the square root of 36 equals 12 miles.

It is also a dificult matter for the average man to realize the power required to obtain high speeds upon the water, "epucially when compared with power necessary to obtain speed on land. For instance, 90 H. P. on the water has produced a speed of just over 30 miles an hour, while the same power in a racing car gave a speed of nearly 93 miles per hour. On land one has a comparatively simple problem, having air resistance only to deal with, while
a boat has water resistance in addition and as the speed increases, the ratio o resistance grows very rapidly. A simpl illustration will make this clear. It is very easy to move a leadpencil throngh the water, but notice the different result when a bullet travelling at high speed, strilie the water-The resistance is great enoughr to alter the course of the bullet and mahe. it recochet.
The modern auto boat calls out the high est talent of the country for its production -not only of its engineers but its naval architects, and demands an harmoniou. blending of their work, as if either makes a mistake the result is failure.
So much for the boat and its production. but why is it taking such a hold on the sport loving people of all countries-because it has an exhilaration peculiar i.) itself, aside from the spirit of competition where it is extensively used. Suppose for instance, you had an invitation to ride in a really fast auto boat. You go down to the water front on a bright, clear morning, in summer, when there is just sufficient wind to top the little waves with white. Your host shows you a little thirty-foot boat rocking gently at its moorings-its highly varnished sides reflecting the rays of the sun and its brass work gleaming. It iooks so small and frail that you begin to wish you had not accepted the invitation, and when the boat is brought to the landing stage, and its cover removed and you sec its big engine and different governing levers, and your host advises you to get into the oilskins he solds out to you, you begin to think of your life and accident insurance. You are game, however, and step aboard expecting that little cockle shell will tip over, but you are surprised to find how stiff it is. You look at the little frames, thin planking, the light seats, and all the evidences of weight cutting, in hull and engine, and your momentary fecling ot confidence disappears. Meanwhile your host is busy with strange wheels, levers, cocks. and handles, and when he finally looks around and asks you if you are ready, you take a last despairing look around for something to grab in case of necessity. He has probably had guests just like rou be fore and smiles inwardly at your blank look as he turns the starting hande. Instantly there is a response, and the motnr


starts easily and ge, ly, and purrs to itself under the cover, which has been replaced when your host is assured that everything is in order. He tells you to make yourself comfortable, and, after throwing of the mooring lines, sits down in the driver's seat and grasps the steer ing wheel, with one foot he lets in lae clutcin gently and the little boat moves slowly into the bay or river. "Well, this isn't so bad," you think, but now your host begins to let her out, and as the speed increases and the spray commences to fly, you hegin to wonder how long she will hold together. Finally he turns with the remark, "Slie is going full speedwatch the shore." You are too busy banging on and wondering what would mappen if anything went wrong, to take much mterest, but gradually your confidence returns and you begin to take notice. Inpressions begin to form back in your sul. consciousness and the feeling of rague dread of something is replaced by interest in things about you. You notice the wall of water rising gracefully from each side of the bow, and hear the rhythmic the 1 : of the motor and then the idea of flying woris its way into your head, and tine smonthness with which she travels and the white wings of spray from the how, strengthen the illusion. Finally you gather courage to look about you and you see objects flitting by on shore, and now and then you pass some slow moving craft till at last you begin to feel a fierce joy in it all. The occasional dash of spray in your face and the rush of air that sings a song in your ears, makes your pulses throls in unison with the motor. You watch your host's back and begin to appreciate why he: has an auto boat. Suddenly he points forward
and you see another anto boat ahead of you, going your way. You are overhauling he . Then your interest in the motor is doubled. Will it continue to run as heantifully as it has been doing? Will you catch that other fellow? You are now on the qui vive and as you get nearer and nearer, your intensity of emotion increases till filally you have him saiely hehind, and making a big turn, start for home still at top speed. Your ideas are somewhat settled by this time, and you begin to feel an interest in the brain that conceived and the hands that executed the idea of the automohile boat. By the time you are back at the dock and tied up, if you have sporting instincts, you are a confirmed autoboatist and long to own one that will be just a little faster than your host's.
This is the bright side of motor boating, and the occasional mishaps decrease with experience and are forgotien, leaving only pleasant memories when the winter winds are blowing and the little boat is safely stored away, awaiting the return of warm breezes and summer skies.

Auto boating has another side and one which in the future may play an important part in the world's history. The high speeds now ohtainable with these light craft have attracted the attention of naval authorities the world over and its legitimate use in war times for scouting along the coasts, carrying messages between the fleets, and shore, and even in torpedo at. tacks in large numbers, is heing appreciat. ed. As it is now possible to successfully build internal combustion motors in large powers there is an increasing probatility of their installation in torpedo boats, and indeed a new era in quick water transportation seems to be dawning.

# An Invasion of The Camp. 

Br K ITHBRINE HUGHI:S.

Up in the Gatincau hill-country the birds and the beasts and a few summer tramps used to know a quaint little hunter, a product of London's slums made over into a Canadian.
We never understood the turn of fortune that had irought the mannikin's father
away from the dazale of Whitechapel Road, the coster's waggons and odor of ruasted fish, to that beautiful but lonely Gatineau Valley. But whatever the cause of his emigration he has not learned to love the open and prefers to seek odd jobs about the houses and camps of the summer visitors.

With Tommy, the boy, it is quite different. All the hunting instincts of some poaching ancestor have developed in him year by year. Not even Burrougns or lioberts loves the woods more. Sometimes Tommy has acted in the capacity of guide -memorably, for us one day in Indian Summer, when he led us to the deerhunters' camp, where our men had gone a week earlier. The camp was on the shore of a small lake between du Commissaire and Penichagan lakes in the picturesque country between the Gatineau and du Lievre.
It was not so many miles away, as the crow flies, from Gracefield Station, which in its turn is not so many hours away by rail from Ottawa's towers and boulevards. Yet the place seemed a primevally wild as though no regiments of lumbermen had passed through it "a-choppin' of the pine." working, feeding and swearing with animal vigor.
When we reached the last portage of our trip that day and dropped our canoes into a mountain-lake we noticed Tommy prick up his ears like a fine setter and stiffen for an instant into statue-like rigidity.
Mellow, faint, coming across the water, and over the veiled hills we heard the echo of the dogs giving tongue. It was thrilling music to the boy's senses.
"The hunt! The dogs!" he whispered, aquiver with excitement.
If there had been desire of speed before, it was redoubled then, for the emotion of the chase had communicated itself to us. Our fingers on the paddles tingled. The blades cut athwart the water with decision, every stroke bringing us nearer the knowledge of how the hunters had fared. This was hefore the'hunting-with-a-kodak epoch. Sympathy had never been aroused by touching narratives and a personal feeling for each limpid-eyed deer.
Buck-fever in a hunter was plain buckfever to us, a something in the nerves to be determinedly laughed down as womanish weakness. So there was little feeling for the innocent quarry of the dogs; there was only for each a longing to hear that one especial hunter had been for at least one hrief moment in life, perfectly happy, bearing himself like a conqueror. No regret for the bereft herd; but a savage desire that the others should not be able in
smile pityingly on one man's reluctant confession that he was empty-handed.
Our canoes shot forward in the sleepy water as the stern music of the hounds' cry came mellowed through the haze. It was past noon, and the hills and lakes of the broad Gatineau Valley lay steeped in somnolent sunshine. Tommy directed us into a tiny bay, where we found an excellent landing-place, with an upturned canoe lying near. This was the first sign of the hunting party.
Presently the tokens and signs began to multiply along the path that wourd up from the lakeside. At one turn the scattered feathers and bones of a partridge or hawk thrown to the hounds, at another an axe, a drinking cup, a hunting shirt, limply pendant from a branch, and at length, when the path came out upon an unsuspected clearing-there was the camp itself. The tents were pitched on three sides of a big fireplace where blackened stubs of logs and embers lay between the stones. Plank benches and nearby stumps were strewn with bowls and plates in a truly masculine fashion. They had not been washed, and they were literally crusted with the white grease from grillades.

This fact the various pairs of feminine eyes seized upon even while their owners were enthusing about the forest's ripe beauty and the cheerful promise of the big fireplace. They looked and realized again that the average man would almost prefer hunger to dish-washing. A rustle and clank of steel in the end tent discovered Ring, the leader of the dogs, He greeted us with delight, and stretched his head out appealingly but made no effort to rise.
This was surprising conduct in boisterous Ring, until we learned that he should be accorded all the petting and privileges of an invalid. These he received in full measure as he put his poor, inflamed paws in our hands. They were dry and burning, in need of a new dressing. Sympathetic Tommy hunted up the proper lotion in the supply camp, and the hound was made comfortable. We knew just how he had raced over the hills day after day keen on the deer's trail. Young and ardent he had recked nothing of each fresh cut, and even now was chafing to be out. Perhaps some anxiety to be free lent a deepened glow to
the fine lamble.t eyes that spoke his thanks.
Scraps of tempting game about showed that Ring was not hungry, but with all the manners of a well-bred dog he nibbled 'antily at a piece of fried liver brought to him.
The unwashed dishes were not the only tokens of male residents in the camp. There was no woodpile such as a forethoughted female timorous of future rains, would have provided.
The dishes, the pail of cold water, the yawning fireplace were all suggestive.
The visitors turned instiuctively to the duty nearest them, just as though no centuries separated them from the days and customs of our "anthropomorphic, flinthurling ancestors."
The afternoon was wearing on to the early autumn dusk, the hunters were si,he to return tired; obedient to the century-old mstincts the party started up the mountain to gather fuel. Five crisp bits of outer birch bark, tawny sheets of the imer bark, ends of fallen trees, and choice chips of pine chopped from the stumps-who does not know the possibilities in these for a glorious camp-fire? In the distance, the baying of the hounds arose again, came s:earer and nearer, filled the still woods with linge-ing melody, faded out, came again and a; length passed far to the souti, dying out in lingering melody.
Near the camp, bright-eyed, thievish squirrels scampered off in dread of the giant robbers energetically beating the woods for choicer bits. Scared partridge flew up with resounding whirr, late birds carolled encouragement. When at last the woodpile had grown to most generous proportions a fire was lit and presently the water bubbled and sang over it. The pile of dishes was attacked, not without speaking side-glances over the condition of the dish-towels; and for one evening the campers were freed from the bane of camp life.
:t was Tommy who appeared on the scene then with a shrill call of delight, and, heckoning mysteriously, dived back again into a tree shaded path. To the women racing after him, he showed his find with elfish exultation. It was a deer k:1led a day or so before and hung up conveniently in the camp larder.
Exhilarated with the strenuous fun of wood-gathering we chattered about the fire,
until suduenly one of the hunting party came suddenly out of the ring of trees, has soft moccasins making no telltale sound. It was a grudging, brotherly greeting he gave one of us, and the easier courtesy of smiling comment to the others. But it was to the same one that he presently turned, anticipating a question that he wanted to have over.
His very manner had already made it unnecessary. He was calm almost to dejection. It is not so a victorious hunter carries himself when visitors come to camp. So he framed question and answer himself, mindful of the brave hints at the home table.
"I did not get a deer,"-the tones were slightly flat-a touch of disappointment in the slow, good smile, a movement of the long fingers along the rifle barrel-"yet," he added in crescendo. It is so a real lover of the woods and the hunt took his iailure. And the only sympathy worth offering in such a case is a nod of fellowship, in intimation that there is no real failure but to give up trying.
His glance fell on the wood pile. No sense of deferred hope could repress the delight oi finding that before him. It had been his turn to gather the night's firewood, so he kept guard all day on the runway nearest to the camp that he might come in early. With thoughtiul aj nreciation the hunter visited the woodpile, but even his sense of gratitude could not repress the touch of masculine supeciority that bobbed up when he found some sticks of cedar piled up close to the fireplace.
Who but a woman would not know that cedar, with its flying ashes, is a demon of provocation to the outloor cook-an altogether undesirable flavour for the tea? One by one the hunters slipped quietly out of the encircling woods, the stillness of the watch still on them, and joined the gay grolip about the fire. Two had dogs in the leash; another, coming up the path from the lake, carried the body of a deer, and it is doubtful which had the heartier welcome-the tireless dogs or the lucky man to whose watch the deer was driven
A November nightiall is sudden and deep. It closed upon the ca:np precipitately leaving weird tepths of gloom about the firelit space. The logs burned with a heartening
glow; the rolls of birch bark crackled gleefully; the pots and kettles sang; the air was rich with the moving ociors of wood smoke.
The people seated ahout the fire felt themselves drawn towards it, and stories of the week in camp passed around in a deliciously lazy fashion.
Stories of the deer and the dogs, of the tempting small game, of big blufis at kingpedro in the camp at night, when the fire and torch-light danced so over a man's
face that even a tell-tale one kept its sec. rets.

Then supper was ready, a delectable a: fresco meal, sweel with mysteriou: flavours, gathered from the crisp night air and blazing fire. Venison steah fried to a turn in grillades, canned pras. potatoes and campers' green tea, while across the smoke wreaths, the hunter faces beamed in the firelight. It was . hunters' feast for mind and palate.

## Quinte Bass Fishing.

By WAI.TER GRIFNVES.

I spent three weeks in Belleville during the month of August and while there fished a good deal on the Bay of Quinte for black bass. I used the ny nearly all the time, but occasionally trolled with a spoon, a thing $I$, however, would not have done if bass had been fairly plentiful. The fact is that black bass have become very scarce in recent years in the Bay of Quinte, at least in that portion lying near Belleville, I heard of some good catches being made near Northport and at the head of the Bay, near Trenton and Nigger Island, but I did not visit these localities. My best catch was made in the mouth of the river, where I landed nine bass in one evening, all on my "Mlassassaga" ny. They were, however, small fish, with the exception of one of about $2 t$ pounds.
What a pity it is that owing to the
netting, at least I presume that is the cause, from what I heard, the fishing is so poor in this beaubiful sheet of water. I remember the time when my brother and 1 used to go down to "Massassaga" Poim or $O x$ Point, and, with, the lly, catch a dozen or more beautiful black bass ia a very short time. If the parties at fault could only he made to understand what an advantage it would be to the locality if the fishing were brought up to its former excellence (and this could be very easily done) surely they would stop this netting for the sake of what might be made out of the American and other sportsmen who would visit the locality in considerable numbers. I hope the matter will be taken up hefore it is too late. For one, I certainly will not visit the Bay of quinte again, for the fishing, with matters in their present simpe.

## A Deer Hunt in Manitoba.

By M MARKWELI.

It was when the West was young. Haring lost a not inconsiderable fortune and my health in the bargain, I was advised by my physician to quit southern incrt city liic and strike out for the Canadian West, which: had not at that time become the Mec-
ca of the "Younger Son." There was no Canadian Pacific Railway in those days, and a man going west had to "hoof it" to the prairic land; so, overland I started fron: Duluth, at the head of Lake Superior, tat. ing an Indian trail for the long mare:s westward.

It was up and away by grey dawn-rifle d-shoulder and ammunition bag swinging by my side; picking off a stray and surprised partridge; bowling over a distainful squirsel, and ever and always an alert cye 10 r the marks of bear. The loneliness was op. pressive, the only break between Duluth and Prince Arthur's Landing, being the chance meeting of an Indian dog team (the mail' carrier being since made an M. 1') and a stray Cree Indian, who rather patronized me; for he examined my nuzalcloading rife critically, proudly displaytug his own modern Sharp, and grunting, "no good," "se-ct-che," as he passed en. He, however, informed the that "plenty much deer" were "over there, far," "we-ed-e was-saa;" so, filled with the hope of a pair of proud antlers to carry back home as trophy of the chase, I went on with a light heart.
In those days every man was a game law unto himself; the prairie grouse-which far excels our own English woods' bird in taste-taking no notice of the hunter, who might easily, far too easily for honest sport. bowl 'em over like ninepins. I shall never forget the first meal I made off the prairie grouse; encamped for the night by a small lakelet, or "sloo," as they are called; the camp-fire blazing and throwing a red glare upon the green wall surrounding me, a tripod of poplar straddling the flame: and in the hot ashes, red coals surrounding and lining a deep bole in the ground, the grouse, disembowelled and well washed out, but still in its feathered frock-stifled in its owa juices, without sauce or jelly accompaniment-I tell you the taste was something to remember and to talk about yet! It was, indeed, a feast for the gods, and so I journeyed on for days and nights and days again, until I found myself, in hrown October, out of the woods, stalking the open plains.
I had at last reached Manitoba and was near what is now called Portage la Prairic, and, having been rather extravagant, was pretty short of ammunition. I, however, expected to reach one of the Hudson's Bay Company tr ling posts shortly, and woild replenish $\pi$, good leather pouch. The last charge was in my rifle and the last fragment of food supply eaten when I found myself at nightfall beside a splendid
lake, and not fifty yards of, all unconscious of man's presence, a splendid young deer. Plainly it had come down to drmk. I levelled my riffe, took careful aim, and fired. To my utter astonishment a second shot rang out immediately, and cre I reached, by a bounding run, the side of my prize, which had fallen where it stood, to my tremendous surprise, a great, burly, savage-looking fellow, shaggy of hair, and dressed like an Indian, in blanket, rose, apparently from the earth and laid his arm with an air of proprictorship upon my deer !
"Hullo!" said I .
"H'mgh!" grunted my friend.
"A good shot-and my very last cartridge!" said I, unwisely.
"Good," said the newcomer, "took him in the head."
"Yes," said I, "I aimed sure, but I wanted to save the head-see what a fine antler," and I made a motion to touch the quivering animal at my feet.
"It is my deer," said the man, frowning.
"No! It is mine." I returned.
There we both faced each other. I saw a look of anger sweep over his swarthy face, and, realizing how helpless I was-in a strange country without food, shelter or ammunition, I well knew I should make not lose, a friend. So, turning to the man, sullenly standing apart and eycing the game betwist us, I added quite pleasantly: "We'll divide our spoii- you take the meat and hide; I'll be satisfied to call the head mine."
He did not answer, but, stooping, suddenly, he lifted the deer quite easily to his shoulder, and, without uttering, "by your leave," strode through the trees.

There was nothing to do but follow him, so I trailed after, finding myself, light of foot as I was, kecping at his heels with difficulty. He stepped like a cat, the crashing of the branches, as they parted at his touch and swung hack again, (often striking me in the face), as without one word he marched on. By this time it was dark night, and there wasn't a sound save the whirr-rr of some winged night bird sweeping hy. Presently a single flame shone out and disappeared at once. Then a dark shadow loomed up, so ciose it apneared. so suddenly we came upon it, that
hefore I knew it, the flame had once more lit up the darkness and, as suddenly as if swallowed by the earth, my guide had disappeared. Then I came bump up against a wooden door, and the next moment stood within a rough log shack, and was facing my stolid rival hunter and an equally stol-id-faced woman-his squaw wife, I supposed. The decr lay on the uneven board floor, and the man was saying something in the Indian language to the woman. Neither took any notice of me. I therefore sat down. The husband laid away his powder horn and nung up his rifle. Then he sat down and began to smoke. There were no seats of any sort, but several skins or peltries lay in heaps; on one of these he sat-I did the same, keeping opposite to my unwilling host, who neither seemed to see me or to note my presence. The woman disappeared into an inner room, or through a rough, board door leadingisome-where-the fire, an open hearth, glowed hospitably and warm to me, a tired and hungry, as well as disappointed hunter!
I jadsome choice tobacco and offered some to my silent companion. He became quite friendly then, lifting his chin in an interrogative way and saying "what place?"
I answered, "very far away-very sickcome new country to find deer-go back again." I pointed to the deer as I spoke and at once saw his face lower. IIe resumed his taciturn silence, calling aloud to his wife, who at once returned to the room and set about preparing some sort of a soup or stew by placing upon a tripod of iron, a vessel which bubbled and sent out a fine savoury smell. Hunger drov: me to extremes.
"Can I have supper?" ! asked.
Neither one answered me.
"I can pay," said I, unguardedly, "Sce!" and I took out several pieces of gold unon which the firelight played merrily. Instantly I saw my host's face brighten, but the face of the woman was more dark and forbidding than ever. I tried to say that if they gave me supper and bed I would pay well; and that I wanted ammunition. The man nodided several times, issuing orders (by the tone) I judged, and the woman, rery slowly and withnut interest, produced two jugs and laial the steaming mess from the pot on the hearth before us.

This, with some hard, round cakes, called bannocks, made a fine supper. Hunger's sauce requires no sweetening. I think that was one of the best meals I ever had Memo.-I had eaten nothing since breahfast.

When the meal was finished I laid down half a sovereign, and said: "Bed-sleepvery tired." Fie nodded and leit the room, going to the inner apartment, where 1 judged his wife still was, and presently she came back, glancing sullenly in my dozection. She stooped, took up a bundle of the skins, carried them to the inner room, whence, presently, she returned, placing at my feet, a small pannikin filled with grease. upon which a twisted rag floated, one frayed end lying upon the edge, and the whole thing smelling horribly of stale grease. She lifted a glowing ember in her fingers, appearing to be oblivious to pain, and deftly lighted the frayed end of rag. Then she pointed to the imuer room and forthwith turned her back upon me.
I arose, took up the flickering light, and went towards the apartment indicated b! her. Within was a windowless square, walled by rough timbers. An earth floor, a pile of skins, which I saw was to be my couch for the night, and a shelf whereat stood my uncongenial host of the evening. He was mixing something in a tin pannikin, and a pungent odor of herbs was heary on the air.
"H'm'p!" a grunt hospitable in intent it was I knew 'by the tone, but the man did not look me in the eye. He shumfed about, mixing the villianous compound, whatever it was, and then his wife entereci, bearing a kettle of hoiling water. Two small tm mugs were produced, and while I removed my heavy shoes and threw of my coat preparatory to turning in, the two conferred in low whispers. Presently the man offered me one of the steaming mugs. I hesitated, but considering his intention a friendly one, and also considering the value of the pair of fine antlers, desiring not to seem cnurlish or ungrateful, I drained the dish. A quick, sly glance from the hateful cye of the Indian woman first struck me, next, the quick movement of the husband as ne left the room. He had filled two mugs, had given me one to drain, and the otl:er stood, still full and foully smelling of had gin or worse whiskes, unon the
shelf. I was alone in the clutches of Heasen knew whom. Facing worse dangers than those of the wild forests' depth. A wild beast might be met with and fought in the open-the struggle of the strong-est-but here, in human habitation $t:$ be trapped like a bear!
The small lig..t in the ill-smelling grease cast gloomy shadows about the dark corners of my chamber. Great, sprawling beetles came out from their dark nests. Slimy, crawling creatures, sounding a horrid 'zp, 7p, zp," came forth, and I found my brain forming conjectures more horrid still.
Was my life safe in the 'rands of these strange people?
Should I remain ? Should I boldly venture to go ? Go where? And then I found myself staggering-was it natural fatigue, or was it-Heavens! was the potion drugged ? Cold chills passed down my spine, and hot flushes swept over my iace. And then a fearful, drowzy langour overcame my limbs, as I fell upon the couch of skins, and, watching the weird shadows dancing on the lowering walls, slept !
Then Thought, like a demon, took possession of my brain, and, pnce, more I was staring, wide awake! Again I drowsed, and, notwithstanding, the fact that my lids inung heavy, and sleep overcame me, the disturbed thought conquered. Then I lieard the door of the room shut, and, in an instant I was on my feet. I moved towards the chink of light in the crack of the door and looked into the outer room, my heart thumping with terror.

In the middle of the room the Indian wife stood, sharpening a big knife on a whetstone held in her hand. Before the fire, the husband stood; in his hand was my rifle, and I saw he was in the act of loading it. A cold sweat broke out on my brow. I had handled my money very incautiouslywhat if-_? Then the overpowering desire to sleep came upon me, and I staggered to my couch of skins once more. Then again I slept, and again terrified thought mastered sleep. I hegan to recount the evening's doings. The husband resented my -lam to the deer. The wife was angered at. having to prepare n!y supper. I had dismayed my gold. I was an ulier strangrr in a strange land and if I disappeared, I would never be nissed. The latie was
deep-and handy, and-suddenly I heard a noise. In a moment I was on my feet, The next my anxious cye was at the chink in the door. The room outside had altercd in appearance; in the middle of the room hung the disputed deer, skinned and disenboweled. Before the fire sat husband and wife, their heads close together in anxious consultation. My rifle stood leaning against the wall, and two sharp knives, most murderous-looking ones they were, lay upon the ground; one blood-marked, both shining in the blaze. My head ; wam with excited thoughts. I had been drugged!
"They are going to murder me," I said to myself.

They would wait until sleep held me down, and then--? I drowsed in spite of my terror. I must not sleep! There was no escape possible. No window, no exit save by the way I had come and there whas my own rifle, the two knives and the man and the woman still awake and watching ! I must not sleep! Then cunning arose to meet the occasion. I remembered something one of the college professors had once said, that poison "might be worked out of the system by means of physical action'-in other words by sweating it out! Again I felt sleep overtaking me and I began to exercise. Then the fight between body and mind began; I stood upon my skin rouch and worked my arms like a windmull until I fell from sheer exhaustion. Then, f:cstrate and weary I almost sank into slumber ! Then thought would sting me into wakefulness, and wakefulness into action, and again I began the exercises, as laid down by Delsarte, and little intended for so extreme a purpose. The fecling of fatigue grew, the hody succumbed, and several times I found myself prone upon the couch and my own snores sounding in my ears. Terrified into action, again I was on my fect and cleaving the air with my handsleaping and dancing as one possessed-lifting my head and letting it fall again, making mind overcome matter, and finding after a time, that my head hecame clearer, my hody more active, my mind less distressed, but never for a moment relaxing my active motions of arms, hody and 'egs. The sweat simply poured from nic as I worked. This I must liate kept up for some hours. for a deep silence reigned, and
the fire-glow had died down to a mere flickering and inconstant glow. I knew it was almost dawn by the long vigil, the exhausted embers on the hearth, and that particularly grey cast of light which lay over the outer apartment upon which I was new peering. Not a sound or move was made.
I was wide-awake and actively considering how to get out without suspicion. My door might be fast, and breakiag the fastening would only precipitate danger, and while I waited to decide, decision came.
A creaking board gave warning of a footstep at hand. My eye sought the cracl: again. In the dim glow of the dying fire I saw the figure oi the man; he was standing midway betwixt the fireplace and the door of the hut. I could not see his features plaimly, but I knew it was my host of the night. His face was turned towards me, and, after pausing a moment, as if listening, he stepped onward. Every nerve in my body was alert it would be a fight for life I knew, and my one idea was to keep perfectly quiet, allow him to enter the room, and then, leaping out, secure my riffe and defend myself to the death. I had formed this resolution in an instant, and I stood behind the door, ready to act. The time seemed endless, waiting there, but soon another creaking sound gave proof of the man's nearer approach. I stooped to peer through the crack once more, and to my horror. found my own eye staring at
close range-as close as the inch board would admit-into the staring eye of the man now outside the door. Up to that instant I had no thought of doing so, but some sudden impulse caused me to open my mouth and cry, "W-a-0-u-g-h!" such a cry as - well, as I never have heard before or since. It was a bellow of fear, rage, anything you like to call it, but its effect was instantaneous!
With one bound the figure went llying across the room and dashed through the outer door of the hut, and aiter him, as if pursued by forty-seven hounds in full cry, went the Indian wife. Through the open door a streak of grey dawn came in; to me it was the loveliest sight I ever looked upon. I went forward and looked out but could see no sign of my host or his wife. The way was open, and I decided to take it; so picking up the fine pair of antlers-lying on the hut floor-I touk my gun, stepped out into God's glorious mornitig and swung Hown the trail.
I have the antlers still and I have often crossed the prairies since that long ago day; but 1 always buy my ticket on the Canadian Pacific Railway now when I travel, and instead of seeking shelter informally and uninvited, as on that particular occasion, I take my choice of the many pretty Canadian Pacific Railway chalets along the line, and find that much better and more satisiactory than my experience as a deer hunter out west in the early days.

# The Train Dogs. 

## By E. PAULINE JOHNSON. (Tek:ahionwake)

Out of the night and the north, Savage of breed and of bone, Shaggy and swift comes the yelping band, Freighters of fur from the voiceless land,
That sleeps in the Arctic zone.
Laden with skins from the north, Beaver, and bear, and racoon, Martin and mink from the polar belts, Otter and ermine and sable pelts. The spoils of the Hunters' Moon.

Out of the nigit and the north, Sinewy, feariess and fleet,
Urging the pack through the pathless snow,
The Indian driver, calling low.
Follows with meccasined feet.
Ships of the night and the north,
Freighters on prairies and plains,
Carrying cargoes from field and flood,
They scent the trail through their wild, red blood,
The wolfish blood in their veins.

## Caribou Corralled.

By MAKTIN HUNTER.

One of the greatest abattre I ever took part in happened many years ago on the head waters of the Gatincau River, and as "Rod and Gun" is coliecting hunting experiences for their Christmas nurnher. ihis may probably find a place.
1 do not look back to the event with ally degree of pride, for the lilling of that leerd of deer was rank slaughter, but the blood of my Indian companions was up and the word was 'kill, kill.'
The Indian chief of that section had told me at his New Year's visit that he had seen tracks of a very large herd of deer, but as the snow was yet shallow, le would not molest them until circumstances were more favorable for a successful hunt.
I gol him to promise that I should be one oi his party, and he was to notify me a day or two in advance so I could come up from the post, sleep at his camp and start with the hunters the following day.
Days and weeks passed without bringing the desired call and I had begun to think either they had started for carikou themselves, or, the deer had left tinat part of the country.

One evening along in March-I found a youth waiting for me in the kitchen and he said his father, the chief, had sent him to guide me to their camp. As the wig-wam was fifteen miles away 1 kept him at the post and we left together the next morning.

The boy was an intelligent young fellow, and, going along, told me how his father had, from time to time, during the winter, spied out from the edge of the liecr's ravage, their whereabouts and doings, and thereby at the present moment could tell almost the exact feeding grounds of the bunch.
It was the first time that I had ever been in an Algonquin winter camp, and I was surprised to see how clean and comfortable it was. The encampment of this particular band consisted of three birchbark wig-wams. The chief and his unmar. ried family occupied the largest of the three, and each of his sons-in-law lived in the other two.

Inside, to the height of three feet, the camp was padded all round with a thick lining of cedar branches. This not oinly lept out cold irom the thin outer covering of bark, but it also reflected the heat of the fire, which burnt brightly in the middle of the lodge.

The chief took me under-his special care and I was given the "coin des estrangers" and a supper fit for a king, baked whitefish, stewed rabbit, roast partridge and gallette baked in the ashes. Bread cooked in this way has to be caten to be apprecsated.

While we lolled back with our feet to the fire and smoted. the old chief unfolded his plans foi the morrow, and with a rude drawing on a piece of bark, irew the vutline of the lake upon and around the shoze of which, he expected to find the dear taking their siesta at high noon.

Our party was to consist of his two sons:-en-law, his two boys, one a youth of fifteen and the other twelve, himself and the writer. It was only the chicf and myiclf who possessed double-barrelled guns, the two married men and the youths having single ones. In those days we had no breech-loaders, but even with muzale-loading guns, one, by constant practice, became expert in loading and firing.

The guns were the standard 28 gauge Hudson's Bay, and carried a round ball up to a couple of hundred yards with almost the accuracy of a rifle.

As we were to be stirring before daylight, our second pipe was taken, each rolled in his blanket. I fell asleep watching the embers of the almost burnt out fire and speculating on what would be my luck next day. The next thing I knew was feeling my blanket being vigorously pulled and the old chief in a most stentorious voice calling, "Onish-kan," "Onish-kan," and varying this by "Leve," "Leve." Breakiast was soon disposed of, and theband of hunters fell in, single file, behind the old chief, the boy bringing up the rear, with the kettle, frying-pan and provisions for a couple of meals.
A shary, brisk walk of three or four
miles, partly on the large lake, and partly Whrough the forest, brought us to the viematy of the deer, so the old man said, an! zom there we followed with the utmost tare.
Ahead of us, and quite visible from where we were then walking could be seen a depression in the surrounding hills, and the old man said down in that valley was a small lake, and if we were fortunate enough to find the deer there, "Everything would be good."
All at once the chief stopped short in his tracks and with his finger on his lips to enjoin silence, he pointed down the mountain, and there lay the lake like a patch of snow at the base of thick woods that encompassed it on every side.

After our eyes got accustomed to the sight we could distinguish several deer on the ice, some lying down and others standing in a dreamy way chewing the cud of contentment. A council of war was then held, or, in other words, the chief unfolded his plans, and to cach was alloted a certain position, with injunctions that under no consideration was any one to leave his place until summoned by the chief himself. This summons was to be given by the old man standing out on the lake with his gun held crossways above his head, and a call as the night owl, three separate times.

Threequarters of an hour was the time lixed for each one to get to his alloted place and the boy, who was provided with a watch, told at the expiration of that time to give the dee the wind from the north end of the lake.

One son-in-law went to the east side, the other to the west, the youth to the head of the lake with his younger brother. The old chief took up a position at the narrow rischarge and placed me about a gun shot down the creek.
He told me when the deer came stampeding down the ice, he would let the first bunch pass by and I could attend to them. When this was thoroughly understood by us all we separated to take up our positions and await the coming of the deer.
My place was not difficult to get to as I was under cover of the frees right up to the edge of the creek, but the old man had his work cut out, as, for the last hundred pards he had to fairly burrow through the
soft snow to the two solitary trees at $1 .$, . point of discharge.

It appeared to me a very short time fro , the time we all separated on the mounta a till I saw the boy come out from 1:1 wools at the head of the lake.

In a moment after his appearance the deer got the tainted air and down the we they came. My heart beat two hundud revolutions to the minute as I saw throm coming head on for the old man. But the chief was cool and collected. He let the first bunch of four that entered the creek ice pass on, and then he rose up suddemy and poured the contents of his gun into the thick of the herd.
I had just time to take in this much when the four were down abreast of me, and the bullets of my gun brought down the first two. This so surprised those that followed that they wheeled about in their tracks and made for the open lake. In the meantime my old chicf had reloaded, and as they passed he brought down one.
Those first six shots gave us six deer as the old man had killed two with one bullet the first time he fired.
The main body of the herd made for a slight valley on the east side. There they were met by another hunter, again turmug they ran across the lake only to be met by other shots.
Again, in their fright, they came over the lake. From their speed it was evident they intended to force a passage through at any cost.
The old man bravely showed himself right in their path when they were within a few yards. This caused them to stop so suddenly that they bunched for a moment, and the chief let go both barrels from the hip. It was not necessary to aim as they were so thick.
One, however, was so persistent that he got past, so close to the old hunter that he punched the caribou in the face with the butt of his gun.
But he did not reckon on another "rhiel" further on the creek. I was prepared for any that got through the blockade and bowled him over so unceremoniously that he made a complete turn over and remained on his back with his four feet in the air.

As the deer made from point to point,
they became fewer in numbers, for one wf our party was at the only places they could leave the lake.

Finally the slaughter was over and they were all down but one. This, an immense buck, had come to a standstill in the middle of the small lake, his fellows lying about in all directions, and there he stood, as if defying us to come and laki him.
The Indians began to approach him irem the four quarters of the lake and I followed the chief from our end, but in my secret thoughts I wished heartily that the poor fellow would escane. It was useless to ask the grace of sparing his life from the Indians, ior their nature is to kill and kill. Fiowever, he did get clear to the outiet, from there to the valley and freedom.

Then began the counting of our bag which totalled forty-eight, and only that big buck lived to escape.
The lake upon which we found them was about half a mile long by a quarter of a mile wide. After the massacre there remained hardly a square yard of ice that was free from blood. Blood, blood everywhere. This sight and the smell of the meat, as the Indians set to skinning, turned me so ill that I nearly fainted. My steadfast old chief, however, saw the state I was in and gave me a hot drink, not of "fire water," but of the harmless, though effective, Pain-Killer.

We reached the camp after midnight, a thoroughly tired lot. Next day I returied leisurely to the post and sent my ruen back with sleds for some of the meat.

# My First Trout. 

By HELEN M. MERRILI.

It was a fine day in July or August, probably July, since they were still piching strawberries in a field through. which we passed on our way to Trout Creek. Although it was ten or twelve years ago, I very distinctly remember our stopping at intervals along the edge of the field to help ourselves to a strawberry or two, and how much more delicious they tasted with the warmth of the sunshine in them, than ordinarily as served at the table-not that I wish to encourage field-lifting, nor yet to verify that time-worn saying that stolen fruit is sweetest--several of the pickers were at work within a stone's throw of us.
These field people, by the way, are always more or less interesting. There were about twenty in the party, mostly young women, two men having had the good fortume to be included. The picture presented was an attractive one. The women were in calico garments of all colors-vivid dhades of red, green, blue, and yellow. Nor was one color confined to a single person. Their apparel had been chosen indiscriminately. An entire costume, for instance, romsisling of a bright pink waist, green
skirt, red apron, and pink sunbonnet. Nearly all of them wore old-fashioned sun-bonnets. The fabrics were cheap, to be sure, on inspection, and the colors common, but the sun, the master-blender, poured down his transparent gold in floods, and transformed the field-prople and their environment into a picture of perfect beauty.
But this is not trout fishing.
Only a common log fence separated us no:v from the mysterious strip of forest and stream which was our destination. In a moment we were over, and the change was as complete as if we had suddenly been transported to a wilderness in some pioneer land. On we went, cautiously, wondering almost with bated breath. Presently a small clearing in the forest appeared. There lay the little corduroy bridge, neatly fashioned of cedar saplings. Crossing this my brother presently disappeared among the cedars on the other side of the stream, and soon returned with two very slim saplings for fishing rods. Sitting down on a stump conveniently near he began cutting off the branches, ha ding me the first one that I might konn he mosquitoes off him with it. This I ell 'eavor-
ed to do. Presently, however, he asked me to brush a little faster. Being naturally obedient, I did so. But after a couple of minutes' vigorous brandishing o ay perfumed weapon, which I am afraid came rather too frequently in contact with his head or thereabouts, he advised me that 1 had better let them (the mosquitoes) come awhile.
Again I obeyed.
By and by, after the lines had been attached to the rods and the flies exam aned, we separated, he going upstream, I down. The creek is so narrow in places one could easily leap across it. At intervals it forms broader brown pools; while here and there a log, green with moss, spans it, or lies in or under the water. Near one of these I cast my fly. After a little while I moved farther down stream and tried another spot. Eventually I tried many.
The forest scenery along the creek was beautiful beyond words, and at last I came into a bit of old hemlock woods, full of brown and green shadows, and silence, and dead trees, in places impenetrable, a perfect bit of primeval forest. And then $I$ wondered if the day's outing would end in scenery. As yet I had not had even a bite.
Slowly I retraced my way up stream, trying my luck at intervals. Arriving at the bridge, I sat down on it, Japanese fashion, to protect my ankles from the mosquitoes, which were very persistent. Of that particular species of bite I had raught many. Calling to my brother, I
learned that he had had half-a-dozen bite. which encouraged me, and again I cast m: fly, this time close to a green log hard on the lititle bridge.
Flash-
Splash-
At the very instant the speckled beaul: leaped to my fy, I involuntarily suatehed it up, startled by the sudden motion of the fish, so that he slipped back into his brown-bedded element in a twinkling. i have only the recollection of a small shinmg object poised for a fraction of a serond in the air, and a sinimmering descent. This happened hall-a-do\%en times.
Nor is this catching trout. Neither dill we secure one that day.
It is some consolation, however, to know that we were not alone unsuccessful when whipping this creek. And now I must end with, not a fish story, but a story about fishing.

One day three men came to Trout Creck, entering the wood at a more western point, having driven there through a long country lane. On separating to go fishing they agreed to return at a certain hour to the carriage. Two of them arrived at th. appointed he:r, and were not long in discovering an old piece of timber standing against the phacton, and in the splintered end of it, a note:-

No fish,
No bites,
No fun,
November-
John Thaw-
Gone home.

Inspector C. H. West, of the Northwest Mounted Police, who has nad charge of the Arthabaska division for some years, with headquarters at Lesser Slave Lake, was in Montreal ricently, and while discussing the situation in those northern latitudes, gave some interestiug facts concerning the possibilities of that country.
Inspector West will leave for his post, shortly, and it will probably take him ten or twelve days from Edmoniun, a distance of three hundred miles.

When he first went into the country they had to camp out every night, while there
are at the nresent time comfortable log houses all along the route, where food can le obtained for men and horses, as well as fairly good sleeping accommodation.
Great changes have taken place throughout that country during the last few years, and he believes there will be still greater improvements in the near future.
He states that the Hudson's Bay Company has now a modern flour mill in operation at Fort Vermillion, three hundred miles further north, or six hundred miles north of Edmonton, and that great things are expected therefrom. Benefits are already
heing felt, as Mr. Frank Wilson, who is in charge of the Hudson's Bay post at the Fort, has shipped no less than 1,000 sacks if flour down to Arthabaska Landing. The market can handle a good deal more flour than the country can yet produce, but the settlers believe that the time is not far distant when the district will be able to produce sufficient wheat for its own consumption.
Inspector West is of the opinion that wheat can be raised as successfully as in the Edmonton district. For instance, he came up the Peace River a year ago last August, and the wheat growers were about to begin cutting, that being on August 20th. The farther north you get, he explained, the longer the days become, and the grain ripening is exceedingly rapia. He says that the Hudson's lay Company pays $\$ 1.50$ a bushel for wheat, and he cited the case of a man named Brick, the son of an Anglican missionary, who raised 1,500 bushels of wheat, and had refused the Inudson's Bay Company's uffer of $\$ 1.50$ per bushel. This wheat was raised at the Peace River Crossing, and Inspe:tor West is of the opinion that it will become a good wheat raising country. All along the Peace River there are large flats, and wherever the country is open fine gardens exist. He has never, indeed, seen better regetables than those grown in the great lone land.

Ten years ago flour was sold at $\$ 10$ a sack. Now it is reduced to six dollars.
The inhabitants are English, Scotch and French, half-breeds, and the inspector says they are not hustlers, and he thinks white men could do a great deal better. In fact, a good many intruders have already come in. Among others, several Norwegian families, and they seem to be doing well.
The Anglican and Catholic missionaries, he says, are doing good work amongst the Indians. It is difficult, however, to make much progress with the old Indians. They are baptized, of course, but the Pagan instinct appears to remain with trem. Inspector West declared that the action of the Government in stopping the importation of Florida water, ginger, and essences, has been of great benefit to the country, as they are now only to be obtained by permit.
The Hudson's Bay Company have now important competition in the Northwest in Messrs. Revillion Bros., having houses in New York, Paris and Moscow, and as they are fur manufacturers, their ability to purchase direct from the Indians is most adrantageous.
The Inspector renorts that the Hudsen's Bay Company is constructing a new stern wheel steamer on the Peace River. This boat will be 125 feet long and all her machinery is being taken up in sleighs from Edmonton.

## Our Medicine Bag.

Four licenses have been granted in Ontario to woman hunters this season.

Xo particulars have been received as to the number of moose shot in the Kipawa district this fall up to the time of going to press, but we hear on good authority that several have fallen.

The "Canada Gazette," of October 22nd, mroclaims a close season for musk ox in the North West Territories from August 31st to May 31st every year. We trust
that it will be found possible to eniorce this enactment.

Last month (page 302) we illustrated the Red Cedar, the Latin names for which are "Juniperus virginiana," not "Juniperus communis," which is the scientific name of the common juniper.

There are photographs and photographsand the best are never made with a poor camera. For instance, the excellent illustration we publish in the present issue entitled, "Off to the Fields," was taken with
an outfit supplied by the Canadian Camera Company, of Toronto, and its excellence is a proof that it pays to use the best.

An English exchange says that Miss Florence Lewis, the best lady rifle shot in Englant, is about to make her home in the Dominton. No woman has made such scores as Miss Lewis madn this summer at Bisley, since Miss Leal, of Guernsey, shot there during the early nincties. At the five hundred and six hundred yard ranges, she can generally score twenty-eight points at least, out of a possible thirty-five.

The Rifleman's Handbook, by J. G. Ewing, is published by the Laflin \& Pand Powder Co., New York. This booklet of three score pages contains all that is essential for an American military rifleman to know about the .30 calibre magazine rifle adopted for the U. S. Militia, commonly known as the Krag. The publishers say that "this book has been compiled expressly for the enlisted man, who is desirous of becoming a rifle shot," and we think they may be congratulated upon the handbook they have turned out.

According to the last annual report of the Dominion Express Company, 1238 deer, and 57 caribou were carried during the hunting season of 1903. Host of these were shot in the Province of Quelec. Gracefield contributed 168 deer, Ka\%abazua, 167; La helle, 197; Megantic, 374; Papincauville, 317; Kipawa, 8 and Timiskaming, 7. The caribou came from three places, Megantic, 2; Kipawa, 23 and Timiskaming, 32. No record appears to have been kept of the number of moose. These undoubtedly were shot mainly in the Kipawa region, and owing to their bulk were not hrought out in the carcass, the heads accompanying the sportsmen as baggage.

It is not so very long since the poacher
The G. W. Cole Company, manufacturers of the renowned "Tliree in One Oil," have just issued $1,500,000$ conies of a new "Three in One" descriptive pamphlet. They will send a free copy of this book and a generous sample of the oil to anyone who will write for it, and who will mention Rod and Gun in Canada.
and the out-of-season hunter did as h. chose in the Northwest Territories, with out fear of God or man, but the times hat. changed, as some of the before mentioned gentry are finding to their cost.
As an instance: Major Belcher, N. W. 11 P., at Morinville, fined a half-breed $\$ 25$ fo: trying to ship prairie chicken out of theTerritories without permission from the Minister of Agriculture. There were 12s chicken wrapped up in muskrat skins, and packed in boxes, addressed to a dealer in Montreal. They did not attract attention until they reached North Bay, where the Game Warden became suspicious, and after an investigation had satisfied nim of the correctness of his suspicio os he wired the Northwest Government.

Mr. E. Stewart, Dominion Superithtendent of Forestry, has returned to Ottawa from his inspection trip through the West. The interest in trea-planting by the settlers is showing encouraging develop. ment, and the operations of the Forestry Branch are steadily extending. At the mursery at Indian Head the supply of nurieny stock is more than three million plants, so there is ample provision for the rapidly increasing demand. The forests of Mamtoba and the Northwest Territories have not suffered to any great extent from fire during the past season, but in British Columbia fires have been numerous. The loss to that province will be very heary and also to the adjoining states of Washington and Oregon.
Mr. Stewart took the opportunity also of visiting some of the timber reserves in the Western States in order to gain an acquaintance with the methods of admmistration followed by the Forestry Burean of the United States.

In Baily's Magazine Mr. G. S. Lowe's contribution on "Tom Parr and his Times"

The Hunter Arms Co., of Fulton, N. Y., have purchased the American right tor the use of the Westley Richards single trigger action for shot guns and is now prepared to put the action upon any of its guns. The Company is also now putting on the market the Smith gun with this silugle trigger action.

1) very entertaining, and Captain Miller in course of a review of the past season's polo has something to say concerning the lack of horsemanship among players to which he attributes want of slill in the game. An appreciative memoir of the late Colonel Join Anstruther Thomson is prefaced by a photograph which possesses peculiar interest. It was taken as we learn from the memoir, at a meet of the Dartmoor Ilounds in April last, and is the last portrait that was ever taken of Col. Anstruther Thomson in the hunting field. It shows him on an immensely poweriul weight carrier, with Mrs. Thomson and their youngest daughter; and regarding the upright seat and alert look of the late M. F. H. it is difficult to believe that this is the portrait of a man of eighty-six. Earl Fitzwilliam, Master of two packs ol frx hounds, polo player, turfite and shooting man, furnishes Baily with a worthy subject for the usual portrait and biographical sketch.

The General Superintendent of Forests, of the Province of Quebec, Mr. Norman McQuaig, has, according to the Ottawa Citizen, stated that the hunling seasons of Ontario and Quebec should be made unifirm. One cannot read such a statement without a shiver, as it seems to forboci? further tinkering with the unfortunate game laws. The ink is hardly dry with which they, re printed before they are changed. In the older countries they manage these things much better; there, from generation to generation, the opening and
closing dates remam unchanged. !lere, there is every excuse for a man breaking the laws tirough inadvertence, as these are changed so frequently. The Quebec law is by no means perfect, but it is better than the Ontario law, which is highly imperfect. Our idea is that, from one end of the Dominion to the other, big game should be in season from September 1st to Januaiy 1st, but that the bag should be restricted to one, or at most, two, males of each spec-ies. Does and fawns should be protected at all times. In the meantime while our worthy legislators are doing their annual tinkering, the hardy backwoodsman is killing without regard to seasor: or sex.

It is difficult at this late day to plan anything strictly out of the common and original, especially in a book dealing with sport. Dr. Henry Yorke, author of "Days with our Upland Game.Birds," and "Days with our Waterfowl," has, however, tackled "Our Ducks," from a novel standpoint. His descriptions of the different birds sought by the wild fowl shooter are clear, concise, and bear evidence of having been written by a man who knows what it is to squint along the rib of a double harrel. The most novel parts of the book, however, are undoubtedly chapters eleven to nineteen, wherein the author deals with the foods, habits, enemies and flights of the different birds that go to make up the wildfowl hosts of North America. By an :ngenious system of lettering he gives accurate information of the food of each species; then he enumerates the difierent grasses and the

## NORTH AND SOUTH.

The name of Jacger is known everywhere as standing for purity and excellence in the goods that bear it. In Canada it is absolutely necessary to wear clothing which is adapted to great extremes, and this can only be secured by wearing pure wool throughout. The body being clother in porous animal fibre only, the skin is able to breathe and get rid of superflous water and fat, which, under unsanitary clothing such as linen and cotton, it would not exhale, and the retention of which is a incruent cause of many supposed chronic
disorders of the respiratory and digestave organs, rheumatism. lumbago, etc. Under the Jaeger covering, the flesh becomes literally hardened, acquiring greater specific weight, and the body is far better fitted to. resist the attacks of disease.
The greater varicty of goods shown l.y Dr. Jaeger's Company, 2206 St. Catherine St., Montreal, should be seen to be appreciated. Their illustrated catalogue (No. 1), however, gives some idea as to the various !ines and will be sent by them free on application.
Dr. Jaeger's treatise on "Health Culture," a handsome cloth-bound book of 200 pages can also be had for the asking.
aquatic plants that constitute the cover in which the different birds are usually found; he also, by means of letters, again, appended to the birds' names, shows their breed ing ranges, and, to make his book the more complete, he gives a full list of the enemies against which ducks have to contend. This little manual is issued by the American Ficld Publishing Co., Chicago, and the price is $\$ 1.50$.

Mr. George White-Fraser, of the Jommion Metcorological Department has recently returned from the Stikine. He was engaged upon the International Boundary in the Coast range, between the right bank of the Stikine and the Atlin country. He found game extraordinarily abundant; to use his own expression, "hears were almost as thick as 'blackberries," and mountain goat were often seen. More than one member of the party had an exciting adventure with a grizaly. The country through which the Stikine flows is a wonderful game region, and it seems to be fully as good as it was when the writer of this paragraph was there five years ago.

- A noted German sportsman, Baron Von Plessen, who first visited British Columbia on the advice of the Editor of this magazine, has been shooting tinis autumn about eighty miles from Tilegraph, the

The Glen Tana kenaels are the champion kennels of the Pacific Coast. Mr. T. S. Griffith, of Spokane, Washington, is the proprictor. He writes:
"We make a specialty of breeding the best working strains for sheepmen and sell at reasonable prices. Our collies give satisfaction to flockmasters everywhere.
"Our show collies made a clean sweep of the Pacific Coast shows, winning sixtyeight first prizes, eighteen seconds, three thirds and special cups for best collie bitch and best collie dog in seven shows. Aiso making our great brood bitch, Bu-Peep, a champion.
"We have five imported stud dog.
"If you have a bitch to breed send loer to us and breed to the best.
"Terms, $\$ 15.00$ to $\$ 25.00$.
"We offer fifteen high-class brood butches at bargain prices to make room for young stock"
head of mavigation on the Stikine. He en joyed most excellent sport, shooting beas sheep, goat, caribou, moose and deer. Th, sheep are Ovis Simni, specimens of which are as yet rare in the museums of theworld, and the Provincial collection al Victoria, of which Mr. F. Kermode is nou curator, having succeeded to the position left varant by the late Mr. John Fanmin. is to be congratulated on having through the courtesy of Baron Von Plessen secured a f. : ram of this little known northern sper is.

The following interesting letter has been received by Rod and (Gun:

As the hunting season for moose and red deer is about over I thought an account on the sport in this section might interest some of your readers. On Lake Timiskaming a large number of hunters have tried their luck and have, as a rule, been very successful. Some very fine heads have been shipped from this section, the largest hating a spread of 60 inches. In the White River and Abitibi country several good heads have been secured, and quite a few caribou have been killed, also a number of bear, one of whicll was a very large one, and was killed by a gentleman from Indianapolis, Ind. This place is reached by a branch of the Canadian Pacific Railway from Nattawa, and, without doubt, is the hest country for moose in Canada. Easy of access, first class guides, make the trip a very enjoyable one which only needs to br known to become very popular. The bears

At Toronto Junction Gun Club, Mr Thos. Duff won live bird championship Messrs. G. Ii. McGill, C. Turp, and Thos. Dyoff, all tied with straight scores in the target events. They all shot Lefever elritor guns. Mr. McGill was one of tine 13.1 men who last year won the two man chatipionship of Canada, Both champions shat Leiever guns. Mr. P. Wakefield, shootugs his Leiever gun, won silver trophy for the high gun in a series of shoots extendulif over three years. Send for Lepever Ar:as Co., new 1905 illustrated catalogue describing their famous system of borelly and contaiming valuable hints on loadm: and shooting. Don't experiment, buy a l.ufever. Leiever Arms Co., Syracuse, N. ${ }^{\text {. }}$
have gone in for the winter, and the moose have left the ponds and beaver marshes for the hardwood ridges and are getting ready to yard up for the winter. Killing out of season, I am glad to say, is not prev !ent. in this section, and the law is fairly well observed. The most of the lands on the Quebec side are under lease but Ontario is open to all and contains thousands of square miles of the best hunting territory.
W. H. LEA VITTI.

Bellevue House, Timiskaming.
In England they generally speak of brealiing a dog; in the States of training onand as the American dogs are undoubtedly more perfect in their worlk than English pointers and setters, owing to the increase of driving in the British Isles, and the consequent decrease of opportunities for teaching the pointing alog, we like the American term the better. The whole American system of training the hunting dog for the field and for field trials, is admirably described in a recent book by Mr. B. Waters, from the Forest and Stream press, New York. We fancy that some of the old school of dog breakers will hardly understand the system that Mr. Waters advocates, but it is undeniable that the old fashioned dog breaker never turned out the periect animals that compete in the field trials of tolay. Mr. Waters recommends that the puppy be allowed to romp and chase in his heart's content, excepting that he would have him checked when he pays too much attention to chickens or sheep, and until the puppy is ten months or a year old, he would have him taught little excepting such simple commands as "heel," "hold up," "toho," "come in," and "go on." His great reliance is evidently the spiked collar, hut while there can be no doubt as to the value of this occasionally wather epreas implement, from our own experience we should say that the best way to teach a ding to come in at a gallop and right up to his handler, is our own somewhat primilive but effective method. During the pur-py-hood stage we carry a small tin tox filled with chopped pieces of liver, or some wheh delicacy, and call the dog in frequently, rewarding him each time with a fragment from the box. It is astonishing how rapidly a puppy will learn to come in and claim his reward. No doubt, however, in
the case of very headstrong dogs a spiked collar is valuable. A check cord attached to an ordinary collar is quite severe enough however, in our judgment, for a dog that is at all nervous or easily cowed, and many of the very lest field dogs must be included in this category, Mr. Waters is of the opinion that meat is the natural food of the dog, and he is right. Dogs were not intended by nature to live upon mush, and the sooner this is realized by dog owners, the better. We cordially recommend this book to those who are looking for instructions in the art of "Training the Hunting Dog."

In this country and in the linited States, more especially in the United States, the laws regulating the transportation of e:plosives are most stringent. The offecial attitude seems to be one of distrust, and at the same time one that shows a by no means profound knowledge of the action of powder when exploded in cartridges. Practically, the same precautions are insisted upon in the case of a few tiny, . 22 calibre cartridges, as are required in the shipment of dynamite, nitro-glycerine, and gunpowder in bulk. The classification of such different explosives under the same heading is, however, unwise and undoubtedy throws a burden upon the shipper that he should not be called upon to bear.
During the present year U. S. Senator Elkins introduced a bill, which gave rise to an investigation by the officials of the Chicago Fire Department, as to the danger

Anglers everywhere nave agreed thit ond of the most fruitful causes of lost fish, is the occasional rotten spot which comes even to the best line after reasonable lise. The only sensible way to avoid this distressing result is to take the lines off the reel after each fishing trip and thoroughly dry them, bu the difficulty in finding suitable methods of drying the line has interfered with this important practice. But C. A. Laughton, of Litchfield, Minn., an old veteran sportsman, has invented a linedryer, known as "The Angler's Friend," a very ingenous and practical device, which overcomes all this difficulty and would make a Christmas present that any sportsman would appreciate.
to firemen through the storing of chemicals, explosives and combustibles of all kinds in city buildings. It was thought that the firemen would not venture to go into a burning building where such things were stored. To demonstrate that this fear was not justified, the leading ammunition makers of the country made a public test in Chicago, at which the officials of the Fire Department, Fire Insurance, Underwriters and others were present. A quantity of metallic cartridges and shotgun shells were burned in a fierce fire. The cartridges exploded one by one, as the flames reached them, but there was no general explosion, nor were any bullers or shot thrown out with violence. The experts conducting the trial remained within 1.wenty feet of the fire without being injured.
Further tests have been made by the Winchester Repeating Arms Co., which show that transportation companies run no more risk in transporting loaded cartridges than they would in carrying any ordinary, unexplosive freight. Cases of ammunition were dropped fifteen feet, so that they flew into pieces; trip hammers struck them blows that destroyed the woodwork and shortened the cartridges fully half an inch; and, finally, a gas blowpipe was allowed to play upon a case of shells loaded with smokeless
powder, until it was consumed and yet no damage was done to any of the bystanders, notwithstanding that the official conducting the test stood with one hand resting upon the case of cartridges.

The present issue of Rod and Gun in Canada will be the last as the official organ of the Canadian Forestry Association. After a pleasant connection of four years it has been decided, mutually, to discontinue the official partnership, though the Canadian Forestry Association will ever have the esteem and cordial co-eperation of this magazine, and we are assured that our kindly feelings are reciprocated by the officers and members of the Association.
All sportsmen are, in a sense, foresters; they 1 . dow that the fate of many species of game depends upon the shelter, or absence of the great woodlands covering such enormous areas in the Dominion, and they, naturally, take a lively interest in the protection of these forests, but few have a desire to go into the technical side of forestry, nor to make a life study of it. Consequently many of the papers we have puislished as the official organ of the Forestry Association, were of little if any interest to the bulk of our readers. The growth of the circulation of Rod and Gun has been so great that it was decided that the

We call the attention of our readers to the Iver Johnson Revolver Grip, herewith illustrated, a very recent invention that has met with spontancous favor and a de-

mand which keeps the immense Iver Johnson armories on the jump to satisfy the immediate reguirements of the trade.
Heretofore, to ohtain a strong grip on a revolver, it has been necessary to design
the weapon with a long sweep of the handle with its disadvantages of weight and cumbersomeness. The Iver Johnson Revolver Grip is not only light, but detachable and its use, therefore, is optional with the user. There are oscasions where circumstances demand unusual accuracy and when one's life almost depends on an unfailing and absolute grip on his revolver. Having in mind this contingency, and also the very common occurrence of a revolver being knocked from the hands of the holder, or being wrenched from the hands by superior strength, at the very moment it is most required for defence, the invenior conceived the idea of the Iteer Johuson Revolver Grip.

The manufacturers, the Iver Johnson's arms \& Cycle Works of Fitchburg. Mass., will be pleased to furnish further particulars to any one who may be sufficiently interested to aldrees them on the subject.
wishes of the majocity could no longer be subordinated to the tastes of the minority. The Canadian Forestry Association, on its side, wished, and quite naturally, for an organ in which more space might be devoted to the abstruse calculations and to the detailed descriptions of the latest experiments in forestry, subjects for which no room could be found in a magazine whose aim and object is to give just the information that the big game hunter, the wing shot, the fisherman, and the explorer ask for. So the time has come for a separation. Next year Rod and Gun will be able to sive more space to subjects that are strictly within its purview.

Mr. F. C. Selous, who made his reputation as a big game hunter in South Africa, and has since visited every continent in search of big game and excitement, was interviewed the other day in Winnipeg on his way back to England. He said :
"I am going home for the winter," said the famous sportsman to the Free Press. 'There is still chance for much sport in Canada, but there was no possibility of remaining longer in the North'unless I was to remain there until next season. I lingered as long as it was possible in the northern :.oods, but at last was compelled to come away. I went up a number of tributaries of the Yukon for many miles, chiefly with Indian guides, partly to see the country, of which so much has been said, and partly on hunting expeditions. It is said that there is a possibility of the diminution of the gold supply of the lukion, but it seems impossible that there will soon be any duminution of the game. The country will always be attractite to the adventurous traveller and the hunter, and will always possess a great fascination for sportsmen. One feels as far from the haunts of man on the upper Yukon as in any portion of the world. The silence of the primeval forest still exists unbroken by any human sound. The game is sufficiently plentiful so that there is no object in shooting it, except what may be necessary for food.
"I think of going home to Emgland for the winter, and I sometimes fancy I have dont my last hunting. All I wish to do unw is to go quietly home and rest. I saw very littie of the northwestern part of Can-
ada exerpt the Yukon, but I saw chough to show me how very large the Dommon is, and I and grad to learn that it is in a condition of so great prosperity.'
Editor "Rod and Gun".
The Canadiaia Camp, the principal sportsmen's club in America, composed of prominent sportsmen in Canada and the States, meets twice each year to enjoy feasting on game of their own killing and to hear the stories oi the hunt.
Their second semi-annual dimer was held at St. Denis Hotel, New York City, on Nov. 16th, and was largely attended. So interesting was this occasion that the specches lasted well into the morning.
The menu was attractive and the dimer was deliciously prepared and satisfactorily servel. The principal game was black bear from the Adirondacks, wild swan from Florida, wild goose from Canada. Englisil pheasant from New Jersey, redhead duck from Maine, opossum from Connecticut, rail birds from Maryland and hare from Wyommg. The bear was roasted whole.
Last winter they served alligator at the amnual dimer and next February more surprises are promised.
The Camp has some six hundred members, who are scattered all over the United States and Canada.
Only members attend the semi-annual dinners, but at the annual dimer, which is leld during the Sportsmen's Show in New York, those who have not met the requirements for membership (haviug camped in Camada) are invited.
It is a fine sight to see from two to three hundred of these gnod fellows enioying a dimner together. We all know how enjoyable a camp dimer in the woods is with six or ten, but to think of hundreds oi this class of men and women sitting around one table piled high with trophics of the hunt, makes our mouths water and our hearts quicken with the thoughts of life in the woods.
One of the claims of this Camp is that it requires ne law to govern its members and there are no initiation fees or dues. You naturally enough ask the question: "How: in the world do you run the Club ?" The president can best answer this.
"с. с. с."

Quatsino Sound is siluated in the northern part of Vancouver Island, and at the present moment is one of the best places to outfit for the elk of that district. It is reached by the C. P. R. steamer "Tees," as well as all other steamers belonging to the same Company, running to northern ports. A post office has recently been eslablished there, and there is a fairly comfortable hotel at Hardie Bay.
Quatsino Sound has many resources not yet developed in the way of fish, minerals, and forest wealtin. A factory is located un the Sound where clams are canned after being ground. They are used for soups and as such are in great demand in a number of big Eastern cities. Salmon and herring are found in great quantities, as are also haddock and cod.
During the autumn and winter big flocks of wild geese and ducks irequent the marshes. As illustrating the plentifulness of this Mr. Best states that he shot one from his tent door. Rainbow trout is abundant, and can be fourd on Marble creck and Victoria and Alice lakes. One of these, caught by Mr. Best, was 28 inches long, and proved of very fine flavor. Catching them arfords the best oi sport.

Near Winter Harbor there are a great many bears, also mink. Evidences of beaver, too, were found, some of the streans being dammed. Deer are very abundant and aflord about the only iresh meat that the farmers get. Elk are also found in Quatsino in the spring and winter. A fine one was secured by Mr. Best while engaged in examining some timber limits. For a lime he was able to supply the whole set.tlement with elk meat. Many of the animals are killed for their teeth alone. A party of hunters from Boston, Mass., who visited quatsino during the past season found three carcasses in the forest which had been killed for the tecth only. To prevent this thing from occurring and for the protection of the elk the Provincial Government should pass a law prolubiting indiscriminate slaughter. One Indian at Quatsino Sound boasted of having killed five for the tecih, and if this continwes the animals will become extinct in a short time.

The great. lone, northern land consti-
tuting the Mackenzie and Yukon territories contains game in great quantities, as will be found by those who have the hardihood and persistence to seek it. According to the Dawson City World, one need not go so very far, as distances go in the Yukon. from the metropolis of Canada's northern territory, in order to find big game in abundance. It seems that the first wild game to reach the Dawson City market was brought in on the night of October $20 t h$, frem the head of Sixty-mile, the consignment consisting of twenty-five mountain sheep and two caribou. The party came down the river in a small boat, running in the ice most of the distance between Cgilvic and the city.
"We reft town September 3rd," said one of the sportsmen, 'and after striking the Sixty-mile poled up the latter stream about 200 miles, until we reached tine heart of the Alaska range. It took us fifteen days to get to the hunting grounds, the rewurn being made much quicker, and it was fortunate for us we left when we did, as the ice chased us pretty lively on the way down. Another day or two and we might have been frozen, with no possible way of getting our meat out, having no dogs or sleds, and not being prepared for a winter trip.
"Game in the section where we hunted, is quite plentiful, but it is hard to get, and, once hilled, is harder to get out. The mountain ranges are very precipitous in places and some of the peats appear to be covered with perpetual snow. Tise sheep run in large bands and generally choose their feeding grounds in places least accessible to human beings. Some of their most beaten trails are along the edges of cliffs, barely wide enough to afford a footing, with a yawning chasm pernaps a thousand feet deep on one side and a blank wall on the other.
"We brought no heads in with us, excepting one caribou. The sheep heads we did not bother with, as there were none suificiently large to make them of any special value. That is a tremendously wild. rugged country, full of lofty peaks, deep ravines and solitude so dense it could be cut with a knifa."

An Anglo-Indian fisherman, Col. Geo.

Ranking, has written to the Fishing Gazette, giving a useful formula for coniautung the weight of a fish after measusiat*. We have used a good many of these formulas but found they were by no means unfailingly accurate. Next season we hope to experiment with Col. Ranking's formula. His letter is as follows:
"In your issue of Aug. 20, at page 133, third column, there occurs a paragrapin relative to the capture of a monster trou: in New Zealand, weight, 53lh., length, 3 ft. $11 \frac{1}{2}$ in., girth, $29 \mathrm{in} .$, and your (I presume) remark is that 'Assuming that the length and weight were accurately taten, this fish is considerably heavier-say, some fitteen per cent.-than a well-conditioned salmon of same length. The weight by our table oi salmon lengths, etc., is $46 \mathrm{lb} . \mathrm{A}$ a matter of curiosity I caiculated out the weight of this fish in accordance with the formula well known to mahseer fishers in India, with the following result :-
"The formula runs, as you perhaps are well aware-

$$
\begin{aligned}
& \left(\mathrm{L}+\frac{\dot{L}}{3}\right) \times \mathrm{G}: \\
& -\frac{1000}{100}-\cdot W:(\text { in pounds })
\end{aligned}
$$

Where $L$ is the length from snout to tail (a line joining the extremities of the tail fin is tine point to which the length is taken), and Gr is the biggest girth, both in inches.
"Applying this to the trout in question we have-

$$
\begin{gathered}
145+\frac{15.81 \times 841}{1000}=\text { Wcight } \\
\frac{633 \times 811}{1000}=53335 \mathrm{~h} .
\end{gathered}
$$

"On page 146, again, in 'Dragnet's' 'Jottings,' last paragraph, it is slated that a salmon 58 lb . in weight, 4 ft . din. in length, and 2 ft . 5 in . in girth, was caught at Rochhall.
"Again applying the above formula we set

$$
\left(52+\frac{173) \times 841}{1000}=57.8 \mathrm{lb}\right.
$$

as the weight of the fish.
From these two instances it would alppear that the formula given applies perfectly to salmon and trout, as indeed one would expect from such perfectly symetrical fish."

Uol. Ranking thinks that for pike tine formula should be

$$
\frac{\left(\mathrm{L}+\frac{\mathrm{L}}{2}\right) \times \mathrm{G}:}{100}=\text { Weight in } \mathrm{lbs} .
$$

The editor of the Fishing Ga\%ette asked an English mathematician to try and simplify the formula for salmon and trout and in consequence received the following:
"To find the approximate weight of salmon or trout in pounds avoirdupois, multiply the length by the square of the girth (both in inches) and divide the product by 750."

To make this quite clear I will take the 531 b . New Zealand trout and work out the weight from the given lengtin, $47 \frac{1}{2} \mathrm{in}$., and girth, 29in. To get the square of the girth we multiply 29 by itself:-


It will be seen the result works out less than four ounces over 531b., or by Jackson's arithmetic and mentally :-

$$
\begin{aligned}
\pm 7 \frac{1}{7} \times(29)= & =471 \times 1 \frac{1}{2} \text { nearly } \\
& =5316 . \div \text { as before. }
\end{aligned}
$$

The J. Stevens Arms \& Tool Co. has brought out a rifle cleaning ror, of twist-
ibers. They have also added a line of Govcrnment cleaners in .23, .25, . $30, .38$, and
ced copper wire, with a brass wire tip, instead of bristles, in .22, .32, and . 38 cal-
. 4 d caliburs, and will furnish to order special sizes up to . 50 caliber.

## Lost in the North Woods.

We were hunting deer in La Minerve Township in Oet. 1901. The following menu was discussed:
Corby's Purity or Buchanan's black and White
Soup an pois, au natural.
Trout chowder with cabbbage.
Deer brains, with fixings a la Burns. Rye on the side.
Stuffed roast venison a la Bruneau, Sauce a la souvenir
Partridge splits, fresh frum the coals. Olives, Tomatoes, Potatoes, Pickles. .
Baked apples avec sirop d'arable.
Doughnuts and cookies a la Clara.
Apple pie, with cream or sirop d'arable, a votre gout.
No speeches-too full for utterance.
After resting from our arducus labors, conversation was resumed when the question was asked by some one, "What is the best thing to take with you in case of getting lost." Some one said, "Plenty of ammunition." Another said, "A compass," another, "A guide."

When it came to my turn I said: "The very best thing you can take is plenty of matches-and a pocketful of 'Pharaoh' cigars," to which I added for advice, "Should you get lost, don't wander reund, don't get excited, and don't lose your head. Go to the highest nearby point, and if from there you can't locate yourself, then make a fire, find abobirch tree with loose bark, set fire to it so the flames will run to the top, gather your evergreen boughs and build a shack and stay there until your companions look you up.
While waiting, if after dark, fire a shot occasionally, and console yourself with a 'Pharaoh' cigar.

The nert day three of our party, with a guide and a norse, went back betwren lac des Isles and Lac L'Ecuyerre to bring out two deer we had killed the day before. The whole bunch of us were in rendervous ${ }^{5}$.
$5 \mathrm{p} . \mathrm{m}$. on Lac L'Ecuyerre, where a boat would meet the above three and bring them across to a shack, where we were all io sleep that night so as to hunt on the west side early the next morning.
Aiter they got one deer up the mountain behind Staples' Clearing, Burns told Boul-ton- and his fifteen-year-old boy to go straight over the other mountain, on the line I had formed the day before. Follow it down to the old wood road on the edge of the mountain and wait for them there, as they would make a detour with the horse. Boulton followed directions all right but uniortunately crossed the old wood road, kept right on down till he struck Lac L'Ecuyerre wood road in the swail, and got lost. Burns and the guide hunted for them the rest of the afternoon.
Our guide reached the rendezvous a titl!e late, just dusk, fired a shot, which was answered by a shot. He went into the woods and called but getting no answer, fired another, which was answered, nut apparently from some distance, which led him to think that the other boys had struck the Archambault Road and gone back to camp. It was then so dark that he could not proceed further into the woods.
The rest of us put in a miserable night in the damp shack, made our hunt the next day and returned to camp about 5 p . m., when we learned that Boulton and Son were lost.
Burns and the guide came in shortly aiter, having spent the whole day unsuccessfully looking for them. We sent out another guide with Jackson to build a bonfire on the mountain behind Staples, and another on the mountain south of there and keep them burning all night.
Supplied tinem with plenty of ammunition to shoot oh occasionally.
The next day Lefebvre went out to search for them and at Dubois learned that
they frad heard shooting and calling the uight before, but the men being absent, Mirs. Dubois was afraid to leave the house. She had blown her horn and received faint answers from a certain direction, which Leiebvre followed, and eventually found Boulton and son in a pretty exhausted condition.

It appears that after they had followed the wrong wood road into the swail, they realized that they were astray and tried to retrace their steps, but got badly mixed. They then followed my directions but could not locate themselves from the mountain. They built a fire and the first night got soaked with rain and sleet. The next day they kept the fire up and built a shelter
of हivergreen 'boughs' and got things 'more comiortable for the second night. Boulton, Sr., blazed trails and tried to find his way out, but was afraid to leave the boy alone very long. His hands were much blistered and cracked from the fire and cold, eyes very red from the smoke and nearly famished from hunger.
After they had something to eat Mr. Boulton said: "Well, Mr. Payne, what do you suppose I had for supper last night?"
"I suppose you shot a partridge," I said, "but it musi have been pretty poor eating without salt."
"No sir," he said, "All I had for supper was a 'Pharaoh' cigar, and I never enjoyed a cigar so much before in my life."

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## CONTENTS <br> December, 1904



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

The Official Organ of the Canadian Forestry Association.
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