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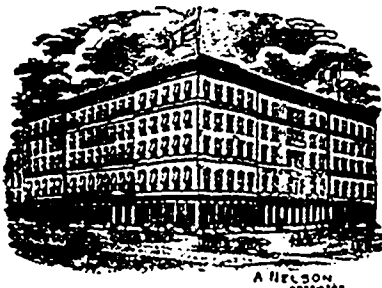
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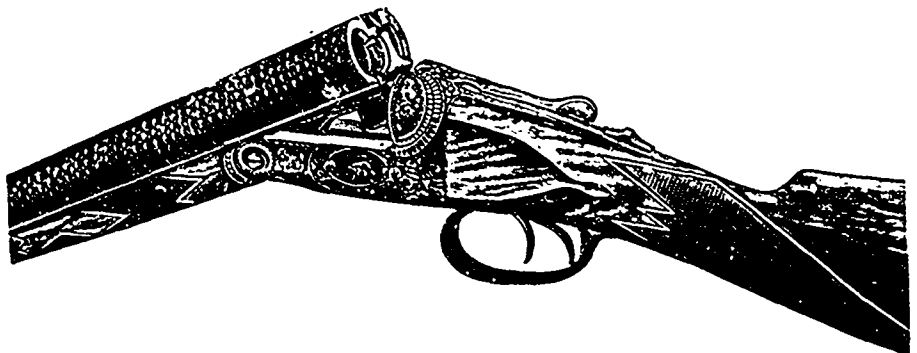
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SOME BRITISH COLUMBIAN FIELDS OF SPORT

KAMLOOPS DISTRICT.

Kamloops is an incorporated city, having a population of over 2,000. It is a divisional point on the main line of the Canadian Pacific Railway, and holds a commanding position, being the distributing point for a great part of the interior plateau region of British Columbia.

The districts which are tributary to Kamloops are those drained by the north and south branches of the Thompson River, Shuswap, Grand Prairie, Nicola Valley, Savona and the shores of the main Thompson River. This is mainly a rolling, bunch-grass country, through which are found many lakes and ponds, most of which are fringed with a heavy growth of rushes and tuiles, thus affording excellent feeding and breeding grounds for all species of waterfowl, from the swan to the teal. Each Spring and Fall great flocks of geese halt in their migrations and pass days and weeks in these waters.

The rolling bunch-grass covered hills of this district are dotted here and there with groves of pine, and it is in these thickets that the bears—grizzly, cinnamon and black—are found, together with mule deer and white-tail. For mountain sheep and goat the rugged portion of the range must be visited, such, for instance, as the North Thompson, above its junction with Blue River, 152 miles from Kamloops, or the country surrounding Adam's Lake, but if the hunting ground has been properly selected there will be found no lack of these most wary animals.

Kamloops is a mountain town, depending largely upon mining, hunting, fishing and ranching for its support, hence special attention is given to the selection of goods, implements and equipments, by the storekeepers, used in these pursuits and sports, so that it is a very good place to outfit for a hunt, no matter of what duration. As an all-round sporting place it is hard to beat, for there are a large number of Englishmen, some of them retired officers, who find hunting and fishing the best amusements of their leisure hours. There is also an excellent half-mile race course, and meetings are held twice every year; a polo and gymnastics club, and one each to look after the interests of baseball, football, lawn tennis and cricket, testify to the sportsmanlike spirit of the place, though these are not all, for there is a well-equipped gymnasium, and in 1901 a start was made by E. Brocklehurst, Esq., the owner of the Cottrick Farm, which is situated about three miles west of Kamloops, in the organization of a kennel of fox hounds, so that in future the "sport of kings" will be an additional attraction, and will doubtless draw many persons to Kamloops.

There are no foxes in this region, but there are many coyotes, and these small wolves afford excellent sport, indeed, so thoroughly is this recognized that a great many sportsmen have expressed their intention of leaving their homes in the coast cities every now and then for a burst over the hills of North Yale at the heels of the flying pack. It is Mr. Brocklehurst's intention to hunt two days a week.

SAVONA'S FERRY.

This place is twenty-five miles west of Kamloops, on the south bank of and near the foot of Kamloops Lake. It is a favorite fishing resort, as there is a well-appointed hotel there kept by Adam Ferguson. Moreover, it is on the main line of the C. P. R., and boasts of a post office and a general store. There is excellent hunting in the neighborhood, and the fishing in Kamloops Lake is undeniably good. At Savona boats may always be hired. The wildfowl and grouse shooting along the shores of the lake and in the thickets adjoining are above the average, and when the flight is on heavy bags of duck are made by the men who know where to look for them and how to hold their gun straight.

Kamloops Lake is twenty miles in length, with a width varying from two to four miles. It abounds in fish. One of the most famous points is Tranquille, eight miles west of Kamloops on the north side of the lake. Mrs. William Fortune provides excellent accommodation for visitors.

SHUSWAP.

In this district must also be included the south branch of the Thompson River. It is very accessible, as the main line of the C. P. R. traverses it, and there is a government road on each side of the river. Eighteen miles east of Kamloops is the flag station called Ducks, where there is a post office, hotel and store. This is a capital headquarters for wildfowl and grouse. Fifteen miles east of Ducks, and thirty-three from Kamloops, there is another little station, and another three miles further east, at the foot of the great Shuswap Lake, there is an excellent stopping place, conducted by Mr. James Ross, which has lately become a very favorite resort among Kamloops people.

The big Shuswap Lake may be considered the centre of a very fine sporting region. North of the lake hunters may, after a day's travel, pitch their camp in a fine caribou and deer range, and southward of the lake the deer shooting is equally good. It is fine sport trolling in this great lake for trout, almost equal in weight to a small salmon. Quite recently Mr. Ross has placed on this magnificent sheet of water a neat little gasoline launch. Small boats and canoes are always available, so that it is hardly

possible for the fisherman to fail to fill his creel should he visit Shuswap Lake.

Bears are quite numerous in the mountains north of the lake, and a good many Indian hunters have been mauled by them. The Indians are the only really well-informed guides to be had, and when hiring them it is best to use as intermediaries men whom they know and who know them well. Many sportsmen have made their arrangements through Mr. James Ross or Alexander MacBryan. When a pack train is to be taken all gear and camp outfit should be bought in Kamloops.

NICOLA DISTRICT.

The Nicola Valley has an area of more than sixty square miles, including all the country lying immediately south of Kamloops, as far as the foot of Nicola Lake. The valley is reached from Kamloops by a stage line running over a govern-

ment road, and making a weekly round trip. Kamloops is left on Monday morning and reached again by Friday evening. There are several places for public accommodation on the road. John Peterson, fifteen miles from Kamloops, will provide accommodation. This is a good point for duck shooting, Long Lake being close by. Thomas Bulman, at the head of Stump Lake, twenty-six miles out, also entertains sportsmen, and this is a favorite stop. The Rockford House, kept by Mr. Robert Scott, thirty-three miles out, is centrally located in the valley. Here horses and guides can be had, and it is a good headquarters from which to hunt an immense country in which there is any amount of sport to be had, both fishing and shooting. Information cheerfully furnished by the proprietor of the Rockford House.

being within ten miles of the famous Minnie Lake, famous for the goose and duck shooting it affords and for its fishing. A similar description would apply to nearly all the lakes of this district, a majority of them being breeding grounds for duck, which are usually to be found in large numbers. In addition to the duck shooting most of the lakes teem with fish, the most famous having been dubbed "Fish Lake." This sheet of water is about twenty miles south of Kamloops, and has always yielded a handsome return to fishing parties. Many Kamloops anglers visit it yearly, and spend weeks in camp under the shade of the pine and fir trees that line its shores. The nights are cool here during the hottest summer weather. There is a good wagon road from Kamloops to the lake.

In a district where there is such remarkably good all-round sport it is, perhaps, hardly necessary to particularize, but mention must be made of the Douglas Lake section, which includes



KAMLOOPS, B.C. (LOWER TOWN).

ment road, and making a weekly round trip. Kamloops is left on Monday morning and reached again by Friday evening. There are several places for public accommodation on the road. John Peterson, fifteen miles from Kamloops, will provide accommodation. This is a good point for duck shooting, Long Lake being close by. Thomas Bulman, at the head of Stump Lake, twenty-six miles out, also entertains sportsmen, and this is a favorite stop. The Rockford House, kept by Mr. Robert Scott, thirty-three miles out, is centrally located in the valley. Here horses and guides can be had, and it is a good headquarters from which to hunt an immense country in which there is any amount of sport to be had, both fishing and shooting. Information cheerfully furnished by the proprietor of the Rockford House.

The Quilehena Hotel, forty-five miles from Kamloops, is an excellent hostelry, and a most desirable point for sportsmen, it

all the lakes already mentioned. The whole district may be classed as a good hunting ground for small game. Guides may be obtained at Kamloops. In addition to the duck shooting, geese are shot in quantities, as in their southward migration they linger long around these lakes.

Big game keeps further south in the more wooded district, but the grizzly bear frequently make raids upon the ranchers' cattle. Deer shooting is good, but sportsmen must retain the services of good guides. In the Douglas Lake district there are no public places of accommodation, but sportsmen are always made welcome at the ranch. The best guides are the Indians and half-breeds.

The commonest species of duck are mallard, canvas back, teal, golden eye, widgeon and the big and little bluebills (scaup duck).

TO BE CONTINUED.

A DAY ON A TROUT STREAM.

By Walter Greaves.

When I was in New Brunswick, on sick leave, during the past summer, Robert Forgan, William, our driver, and I, drove to a stream about 7 miles from where we were staying, and enjoyed an afternoon's delightful trout fishing. Certainly we did enjoy ourselves, as the sport was excellent. Between 1 and 8.30 p.m. I landed 100 nice trout several of them running up to $\frac{3}{4}$ lb. Robert and William also made good catches. Every now and then I heard them call out, "I have one, and a beauty, too," etc., etc. This continued most of the afternoon, and when we came to count up at the end of the day we found we had 160 trout between us. Not one, however, was wasted. Most of them were bright, silvery sea-trout, just in from the salt water. How much more gamey they are than those that have spent some time in the warm fresh water pools! You can often tell the difference as soon as you see the rise.

I cannot imagine any more enjoyable sport than to be on a lovely trout stream, with a light rod and fine tackle, and the trout rising nicely. On the afternoon referred to, I took all my trout with the fly (I seldom, if ever, use bait), and found, on this particular stream, that a fly with grey seal-ear body, ribbed with oval silver twist, grey hackle with fine guinea-fowl over, tail of pin-tail, and wings of barred black and white snipe feathers, small jungle-cock chocks, and head of white ostrich, to be very killing. This is an attractive-looking fly and certainly proved so on the occasion referred to, and on one or two other trips to the same stream. The trout, in nearly every instance, passed my other two flies, and showed a marked preference for the "grey monkey," as I called it. Usually a red fly, or a fly with plenty of red in its dressing, is very attractive, but on this stream red did not seem to take. I consider that a well-marked pin-tail feather is very attractive to the trout, made up with almost any dressing. There is, however, only a few of the prime feathers on each duck. For the grizzly king and professor I prefer this feather to the grey mallard, although it may not be considered quite as correct a dressing for the flies named. Try the flies sometime side by side, dressed with both wings, (pin-tail and mallard) and see which you prefer. After all there is nothing like a practical test in order to satisfy oneself in such matters. Practical experience in regard to trout fishing is always preferable, I think, to what one can gather from books or articles on the subject. I must, however, admit that I have gained a very great deal of useful information from reading angling literature; but, when it really comes down to the actual work on the stream, there is nothing so convincing, and so educating, as can be gained through one's own experience in endeavoring to tempt the often shy trout to rise. I consider there is much to learn in this respect which cannot be conveyed in words. The same may be said in regard to teaching a person to cast a fly. He must have the practical experience. The chief fault with beginners, I find, is that they try to cast too long a line, causing it to get entangled and fall at their feet, and often resulting in the snapping off of many flies. If they would practice with a short line they would easily get into the swing of it, and learn to cast well much sooner, I believe.

I make all my own flies—salmon, trout and bass—and enjoy fishing with them far more than flies tied by a professional fly tyer, and I always imagine mine are more killing (imagination, perhaps). With regard to rods I generally use a 7-oz. 3-joint split bamboo 10 $\frac{1}{2}$ -ft. rod, made by T. Chubb, of Post Mills, Vt., and find it simply perfect for trout or bass. I have just finished a light 11-ft. rod in four joints, two of second-growth hickory

and two of lancewood. So far as I can judge at present it seems as though it would be a fine rod for stream trout fishing. I must not, however, say too much until I have put it to the actual test, as I did not copy any pattern, but simply guessed at the dimensions. It (like most of my rods) is without dowels. Ottawa.

*

A Wild Goose Dinner.

TO THE EDITOR OF ROD AND GUN:

There is just one distinctly wild goose public dinner in the world that is known of, and that is given annually by the ladies of the Methodist Church, Souris, Manitoba. These rare and wild birds are hatched and bred in the far north. As soon as fledged they come in great numbers to the broad wheat fields of Manitoba, and for protection choose some body of water for the night, from which they fly to feeding grounds and return twice a day. They always come from the north very poor, but feeding on the best wheat in the world for two weeks they are fat, and, in this condition as a tender, delicate, toothsome article of diet they outclass anything of the kind ever found on any bill of fare. They are highly valued, because of being very wild and hard to secure.

From this dinner all turkey and domestic fowl are barred, nothing but high-class northern-bred "honker" and "brant" wild geese are admitted.

For this year's dinner the ladies modestly asked for sixty, and the men of the town were to supply them. So with tent, ammunition and "grub" the men hied forth to the feeding grounds and the lake. Hunting late and early they returned after five days with 105 prime birds. Sixty were selected for the great dinner. These were plucked and dressed, and the whole lot sent to the baker, who placed them in his oven and roasted them in one batch. The dinner was held in Sowden Hall, on Nov. 19, 1901, and, as was expected, proved a phenomenal success.

Northern-bred honkers to the number of sixty were carved and presented in prime condition, and proved a delicacy to tempt the most refined taste.

To the ladies belong the credit of having perfectly prepared the birds and other good things that made a most tempting bill of fare.

At 5.30 preparations were complete for the reception of guests. The tables, draped in spotless linen, glittered with silver, sparkled with crystal, and groaned under the weight of good things. One hundred and eleven guests could be seated at once. By 6.30 every chair at the table was occupied. The seats at the sides were filled and all standing room taken and still crowds gathered in. The large hall proved altogether too small for what is distinctly the only wild goose public dinner in America.

The programme began at 9 o'clock, Rev. W. Bridgman occupying the chair. The orchestra rendered a fine selection. Rev. Messrs. Hewitt and Elliott and James Argue, M.P.P., delivered racy and happy speeches. Miss Grant sang a solo, as did also Mr. Deans and Mr. Brooks and Miss Fowler, Miss Moffat presiding at the piano. Miss McLaren gave a piano solo. Rev. Mr. Bowles delivered a neat and impressive address, which was thoroughly enjoyed. He showed that a preacher may occupy a metropolitan pulpit and still keep in touch with every phase of life in the commonwealth. Dinner and programme were both thoroughly enjoyed. The ladies took in \$213. By unanimous solicitation the citizens of Souris and surrounding country have requested that the wild goose dinner be made an annual event.

Souris, Manitoba.

WELLINGTON BRIDGMAN.

IN THE WILDS OF NORTHERN CANADA.

By M. H. Hoover.

Not content with the deep-water communication between the Atlantic and the Great Lakes which she now enjoys, Canada, unprogressive in many things, is planning to build a "short cut" route between Chicago and Boston, which shall make these two ports nearer for ships by 500 miles. The telegraphic dispatches have detailed the proposed canal, the survey for which has already been made, from the standpoint of the engineer and the shipper. The lover of nature, who has penetrated those wilds, sighs with regret as he reads them. The genius of gain who thrust the iron into the soul of the Adirondacks and the White Mountains, he learns sorrowfully, is sharpening his drills to penetrate the heart of silent and majestic northern Canada. The solitudes enveloping the chain of natural waterways extending from the Ottawa to Georgian Bay, enjoyed by the hardy voyageurs, the lonely Beauceage and Duquesne Indians, and the most venturesome tourists alone, are to be rudely intruded upon by the noisy messengers of commerce. Farewell, white violet and golden corydalis of the hillsides, soon to be soiled by the grime of ocean-going monsters! Good-bye trailing bearberry and bonny blue-flag, for a path is to be cut through thy untamed garden for the flaunting pennant of industry! Au revoir, kingly bull-moose, fleet-footed deer and lazy bruin, thrust back from thy native haunts by the tireless agents of the Wall Street bulls and bears!

Along the French River, Lake Nipissing, Trout Lake, Lake Nambosing, Lake Du Talon and the Mattawan River may now be found "God's Out-of-Doors," just about as he left it. All that is to be changed if this canal should become a fact.

At the end of a bewildering journey through the maze of ten thousand islands, in one of the innermost recesses of the French River region, is a camp consisting of two log cabins. Of the many wayward channels of this marvellous river which glide through the boundless tracts of trees or dash impatiently through rugged gorges, the glimmering expanse of water stretching out before our forest home, although as broad as the Hudson at Poughkeepsie, is nothing more than an inlet sent northward by the imperious French to meet the timid, rush-lined Wolsey. It is out of the route of the few straggling canoes of the bold adventurers who run some of the rapids and crawl around the rest on the way from the Ottawa to Georgian

Bay. From this camp to the nearest habitation of white men on Lake Nipissing is thirty miles, while to the French River settlement at the river's mouth is forty miles, as the great northern woodpecker flies—or rather more, on reflection, because of the many ups and downs of the "cock-of-the-woods."

Our destination is that distant camp, whose surrounding solitude is so wide, broad and deep, that unless a man "in the love of nature holds communion with her visible forms," he is apt to grow lonesome occasionally, even surrounded by his best beloved and most highly entertaining friends. Come with us on a jaunt, *au large*, before the engineers follow the path which the knight of the theodolite has blazed through "God's Out-of-Doors." Come to the far-away north where the river so dearly loves the moss-covered rocks, the red-berried shrubs and

cone-clad pines that he goes out of his way many miles at a thousand points to take them all into his fond embrace.

At Norton Bay, the queen of all Canadian lakes, Nipissing, is viewed with an admiration little short of worship on the part of the nature lover. The camping party, which for several years has spent a fortnight or more on the distant French, is disappointed to find that the one steamboat owned by the town which carried them thirty-five miles across the silvery Nipissing to the portage above the Chaudiere Falls, has been delayed on an expedition up the West Arm, seventy miles away. Later it transpired that the Queen had run short of fuel, and had to make Goose Island by sail to replenish her stock. Capt. Windsor, of Callandar, twelve miles south, quickly responded to a dispatch, and hastened to the town-held campers' rescue with his staunch little craft, the Van Woodland.



ON THE PORTAGE.

Twelve hours had been lost in the hospitable, but unsatisfying railroad centre. But for all this there was ample compensation in the moonlight journey, over a course always, heretofore, having been made in the daytime by the health seekers. The daylight trip discloses beauties of scenery sufficient to send the most phlegmatic into ecstasies, but the effects of Luna were almost startlingly apparent, for they set staid business and professional men singing the love songs of their youth:

"For there's nothing in the daylight
Half so dear to you and me."

The lights of the town were soon lost in the distance, glimmering faintly like belated planets on the hazy horizon's rim. Off the throbbing steamer's bow rushed twin streams of

liquid silver, which had drawn from the smooth surfaces just beyond the golden reflections of the stars. Mists of evening let down tantalizing curtains through which could be obtained but vague intimations of glorious visions among

“ fairy crowds
Of islands that together lie,
As quietly as spots of sky
Among the evening clouds.”

Presently, as if in respect to the queen of the heavens, the silky draperies of night were thrown aside, revealing to eager eyes a prospect of surpassing loveliness. The rocky promontories of Manitou Island stood forth in glistening array like a chain of fortresses against the dark background of trees, with here and there a solitary pine on the summits as giant sentinels.

Louis Beaucage, the Indian guide, interrupted: “Dat, long back, thousands moons, Great Spirit’s Land. Water all ’round, but white man get him too, by em by, too soon.”

And so, it would seem, the Manitou’s Island was not safe from the invader’s greed, for the white man had taken everything in sight, not sparing even a little path of rocky forest, in mid-lake, to the Red Man’s Deity. Under the spell of the evening there was no materialist in the party sufficiently hardened to query, “And what would the Manitou do with it?”

The witchery of an irrefragable silence soon rested upon all again. Even the merry captain was lost in the depth of the contemplative trance. From the brilliancy of the open water the boat swept majestically into the shadow of wooded islands. The soothing odors of the forests arose, grateful as the incense of “God’s first temples.” Overhanging boughs of spruce and balsam seemed, almost, within reach. Harmoniously the beautiful words of Faber associated themselves with the situation:

“ Old trees by night are like men in thought,
By poetry to silence wrought;
They stand so still and they look so wise,
With folded arms, and half-shut eyes,
More shadowy than the shade they cast
When the wan moonlight on the river passed.”

The last argosy of islands was soon left astern, and the converging shore-lines announced the near approach to the French River. The illusion as to there being merely shades of men aboard was soon dispelled when one hungry wayfarer spoke up: “Boys, it’s about time to hit those lunch baskets!” And it is remarkable how quickly everybody “came out of it.” There is nothing sentimental about the inner man, and the average mortal has experienced times when he would swap every metrical foot he ever saw for six square inches of tongue-sandwich. Quickly delicious black tea (and you’re the green one if you ask for any other kind in Canada) was boiling in the pot, which was made to bubble all the more briskly by a

rollicking, old-time chorus, “There’s Moonlight on the Lake.” Echo joined in the appropriate refrain, one bank repeating with its boulder lips:

“ Our boats the ripples break ”—
Then from the other shore:
“ The birds have gone to rest ”—
And from the distant headland more faintly:
“ For now there’s moonlight on the lake.”

Luna was low in the heavens, and the morning star had arisen to announce the approach of dawn, when the Van Woodland tied up to a natural dock consisting of a great shelving rock which dropped sheer off into twenty feet of water, not far from the portage which cuts around the big Chaudiere Falls. The cry of the startled loons and the yelp of the wolves far up on



NEAR LITTLE CHAUDIERE FALLS, FRENCH RIVER.

the mountain sides were soothing night-songs to the tired voyagers, who were soon dreaming of the things that mysterious country had in store on the morrow.

And despite the late retiring hour, a strange thing happened. All the tenderfeet were up in time to see the sun rise on the French River. And what a glorious reward was in store for the enterprising! The enchanting mystery of the moon-lit night was gone, but in its stead had come a daylight revelation even more beautiful. The panorama of nearby forest, receding ridges, and island-dotted river held everyone in almost reverential admiration. The delicate tints of dawn slowly gave way to the pronounced colors of sunrise in a cloudless sky, every rock, shrub, flower and tree shining resplendent in the reflected glory.

Overhead an eagle was soaring, wondering, apparently, at the intrusion upon his grand domain. A phalanx of ducks wheeled suddenly around the nearest headland, alighting with a splash almost within reach of a paddle before they discovered

that their feeding grounds had been preempted. A sharp-eyed hunter, the Sheriff, spied a deer on a sandy beach across the river, coming down for his morning drink. With glasses high in air the party drank to his majesty the buck. The stirring reed gave evidence that the hungry pike were hustling for their breakfast, and around the lily-pads the bass were leaping. The veteran anglers were restrained with difficulty from unpacking their tackle at once, when just outside a large rock in the natural harbor an immense mascalonge leaped in air. They were reminded that a quarter-mile of rough rocks, cruel hawthorn and sprawling bindweed on the portage was to be traversed with boats and baggage before beginning the twelve mile paddle down to camp.

Dr. VanDyke says in "Little Rivers": "These portages are among the troubleome delights of a journey in the wilderness. To the guides they mean hard work, for everything, including the boats, must be carried on their backs. But the sportsman carries nothing but his gun, his rod, and his photographic camera."

TO BE CONTINUED.

NORTH AMERICAN FISH AND GAME PROTECTIVE ASSOCIATION.

The annual meeting of the North American Fish and Game Protective Association at Burlington, Vt., on the 22nd and 23rd of January last, was thoroughly successful.

Those present were Messrs. Horace Bailey, S. T. Bastedo, Toronto, Deputy Commissioner of Fisheries for Ontario; Dr. Thomas C. Brainerd, of Montreal, Treasurer and ex-President of the Province of Quebec Association for the Protection of Fish and Game (Vice-President of the Association), J. E. Bentley, St. Albans, Vt.; Chas. F. Barhans, Warrensburgh, N. Y.; General F. G. Butterfield, Derby Line, Vt. (Vice-President of the Association); E. T. D. Chambers, Quebec (Secretary-Treasurer of the Association); C. E. E. Usher, Montreal; H. R. Charlton, Montreal; N. E. Cormier, Aylmer East, P.Q., Chief Game Warden of Ottawa and Pontiac; Dr. W. H. Drummond, of Montreal, author of "The Habitant," etc.; Hon. A. T. Dunn, Fredericton, N. B., Surveyor-General of New Brunswick (Vice-President of the Association); H. G. Elliott, Montreal; G. A. Farmer, Bank of Montreal, Montreal; Hon. Nelson W. Fisk, of Fisk, Vt.; Dr. John T. Finnie, Montreal, ex-President of the Province of Quebec Association for the Protection of Fish and Game; General William W. Henry, United States Consul at Quebec, President of the St. Bernard Fish and Game Club; F. S. Hodges, of Boston (Member of the Executive Committee); Andrew Irving, Gouverneur, N. Y.; L. Z. Jones, ex-M.P., Superintendent of Fish and Game for the Province of Quebec; L. B. Knight, St. John, N. B., Chief Game Commissioner of New Brunswick; J. S. McCollough, North Bennington, Vt.; John McGeary, Burlington, Vt.; W. H. Parker, Lac a la Pêche, P.Q.; and others.

President Titcomb, in his address of welcome, dwelt upon the need of such an Association, urging the necessity of personal work on the part of the members in order that the influence and growth of the Association might be made more satisfactory. He announced the resignation of Mr. L. Z. Jones, the late secretary-treasurer, owing to ill-health, he having appointed Mr. E. T. D. Chambers, also of Quebec, as successor.

The receipts of the Association during 1901 were \$385, of which amount all had been expended excepting a cash balance of \$69.87. The forty-three original members have been joined

by twenty-five new associates during the year, and when the election of new members was proceeded with the following gentlemen became members: Dr. W. Seward Webb, of Shelburne; General J. G. McCollough, of North Bennington, Vt.; Olin Merrill, H. Shanley, F. E. Burgess, Horace Bailey, Wm. B. McKillip, and W. A. Whiting, of Burlington, Vt.; F. A. Phelps, of Wilkesbarre, Pa.; J. E. Bentley, of St. Albans, Vt.; H. G. Elliott, and J. B. Sparrow, of Montreal; Waldo K. Chase, of Farrington, Conn.; and J. E. Walsh, of Ottawa.

It was decided to hold the next annual meeting in Ottawa. The following officers were elected:

President—Hon. F. R. Litchford, of Toronto.

Secretary and Treasurer—E. T. D. Chambers, of Quebec.

Vice-Presidents—H. O. Stanley, Dixfield, Me.; John Fottler, Jr., Boston, Mass.; R. E. Plumb, Detroit, Mich.; Hon. A. T. Dunn, Fredericton, N. B.; Nat. Wentworth, Hudson Centre, N. H.; C. H. Wilson, Glens Falls, N. Y.; G. A. McCallum, Dunnville, Ont.; T. C. Brainerd, Montreal, Que.; F. G. Butterfield, Derby Line, Vt.; C. S. Harrington, Halifax, N. S.

Executive Committee—F. S. Hodges, Boston, Mass.; Henry Russell, Detroit, Mich.; D. G. Smith, Chatham, N. B.; W. H. Shurtleff, Lancaster, N. H.; J. H. Seymour, New York; C. E. Clark, Augusta, Maine; J. W. Titcomb, St. Johnsbury, Vt.; S. T. Bastedo, Toronto, Ont.; C. E. E. Usher, Montreal, Que.

Membership Committee—E. T. D. Chambers, Quebec, Que.; W. H. Drummond, Montreal, Que.; Wm. W. Henry, Quebec, Que.

Auditing Committee—L. O. Armstrong, Montreal, Que.; W. J. Cleghorn, Quebec, Que.

The afternoon session of Wednesday, the 22nd inst., was devoted to the hearing and discussion of reports made by the executive of the different provinces and states represented.

Dr. Brainerd presented a report showing the excellent results which had followed the earnest efforts of the past year to secure improvements in the fish and game laws of the Province of Quebec, and to harmonize them with those of its neighbors, on the lines suggested by the North American Association. He pointed out that the chief difficulty in enforcing the fish and game laws arises from the government appointment of wardens as a sinecure for political services. His report continued: "Since the last meeting of the Association we have, in this part of Canada, gained the following points:

FIRST.—The permission for one person to kill two moose, three deer and two caribou has been changed to one moose, two deer and two caribou, and the addition allowed by special permit of five deer and five caribou has been cut down to three deer and three caribou.

SECOND.—A fine of five to twenty-five dollars is now imposed for allowing "dogs accustomed to hunt and pursue deer" to run at large, except between the 20th and 31st of October, and anyone is allowed to kill dogs so running. So far as it goes this is a clear gain.

THIRD.—Wild ducks are now protected between March 1st and September 15th, which, in this climate, practically covers spring shooting. An exception, however, is made by which "pied ducks or divers" may be killed up to April 15th and after September 1st, and hunters for sheldrakes are very apt to mistake red heads or black ducks therefor. The latter clause is of course intrinsically vicious, but it had to be accepted temporarily as a compromise.

FOURTH.—All cold storage warehouses are hereafter to be licensed. They are forbidden to receive game beyond fifteen

days after the close of the season; their premises are open for inspection at any time, and in case of doubt whether the laws have been observed the burden of proof rests upon the warehouse keeper.

FIFTH.—Authority is given the Lieutenant-Governor in Council to prohibit at any time the sale of any protected game for a period of not exceeding three years. Under this Act the sale of grouse has been prohibited until October 1st, 1902.

SIXTH.—The export of trout has been forbidden, from Ontario, Quebec, New Brunswick, Nova Scotia, and Prince Edward Island, except not over 25 pounds when shipped by a party who has killed the game for sport and when accompanied by the proper certificates.

SEVENTH.—Fishing with nets in the eastern portion of Lake St. Francis and in Lake St. Louis, including the waters of Chateauguay and Caughnawaga, has been prohibited until July 1st, 1902.

The last two important changes are due to the Dominion authorities, and not to the Provincial."

He also argued at some length in favor of a non-resident license to be imposed upon all sportsmen who shoot or fish away from the State or Province in which they reside.

"Vermont," said Mr. Titcomb, "has nothing new to report in the way of legislation, for there has been no session of the Legislature since the last meeting of the Association. There has been a delegation, however, of our people to Quebec, on the subject of the netting in Lake Champlain. We met the enemy, and we are their's.

New Brunswick was heard from. The Surveyor-General, Hon. Mr. Dunn, made a very encouraging report. "His Province," he said, "had enacted a law against spring shooting, except that for geese upon the North shore, where they were very plentiful, and where the natives were allowed to kill them for their own use. The spring killing of other game was prohibited, especially that of black duck, which was rapidly becoming quite scarce. The sale of partridges is forbidden, and the bag of game for each hunter is now limited to one moose, one caribou and two deer. Several hunters have stopped trapping and are now helping us, and as a result, the present increase in game is satisfactory.

Mr. Richards, of Boston, reported that for the last two years the sale of woodcock and of partridges had been prohibited in Massachusetts.

Quite a discussion arose over the question, suggested by the President, as to the evil of planting black bass in trout waters, Mr. Titcomb speaking of the harm that was being done in Vermont by the substitution of bass and other coarse fish into the natural trout waters of the State. Some years ago, he said, all the ponds of the State were trout waters. It was about fifteen or eighteen years ago that the black bass had swept over the land, and now almost all the ponds contained bass and the trout had largely disappeared, being almost exterminated, while it was impossible to get rid of the coarser fish. The bass ate up the bullheads and everything else, and then the food supply became exhausted, so that now the bass do not, as a rule, exceed a pound in weight. Their trout waters had been almost ruined. Other States had had the same experience. The Maine Commissioner had expressed his satisfaction that the subject was to be brought up. A New Hampshire Commissioner reported that the bass were chasing *alewives* and land-locked salmon out of Lake Sunapee, though it was thought for awhile that the fish would retain its own side of the lake. But the bass were winning in those waters, and it was certainly not the survival of the fittest. He urged that bass should be

placed with other coarse fish in waters that were unsuited for trout.

Mr. Bastedo said that in Ontario they had transplanted ten thousand bass last year, and that in only one instance had the fish been planted in trout waters. Even in that case the waters had become exhausted of their trout. Some of the exhausted waters of Muskoka were now swarming with bass up to five pounds in weight, and it was found that there was quite a demand among tourists for bass fishing.

Mr. Ussher favored the planting of bass in suitable waters, where they would be no menace to the existence of trout or other game fish. The bass afforded sport to the angler when trout were not rising to his flies.

Mr. Irving spoke from his own experience of the result of the withdrawal of the bounty on wolves in the Province of Quebec. A few years ago these pests had almost entirely disappeared from the Province of Quebec, but after the withdrawal of the bounty there had been an immediate increase, and now their howlings could be heard nightly in the neighborhood of the preserve in which he was interested. Last year they had destroyed seventy sheep and two young moose in that neighborhood, besides a number of young cattle. These statements were confirmed by Dr. Finnie, of Montreal, who said that the howls of the wolves were heard as soon as the sun went down, and that they were not only destroying game in the Province of Quebec, but were a serious menace to farmers as well.

Mr. Tinsley declared that the bounties worked well in Ontario, where two years ago they were increased from ten to fifteen dollars. The result was that the wolves had been almost exterminated in the territory covered by the law, while deer were on the increase and rapidly extending northwards. The Association reaffirmed its resolution of last year urging the offering of bounties for wolves in the Province of Quebec.

An interesting discussion arose upon the subject of forest protection against fire, Mr. Ussher pointing out that laxity in this matter by one province or state, at a point at all near its border, was a menace to the safety of the timber lands of adjoining states or provinces. The fearful effects of forest fires upon the fish and game reserves of a country were referred to by Mr. Titcomb, while Mr. Smith remarked that such fires commonly originated from the carelessness of settlers in clearing their lands.

During the proceedings of the second day, two very interesting papers were read and discussed, one on the pike-perch, by Mr. C. H. Wilson, and the other on the so-called "red trout" of Canada, which is presumably the *Salvelinus marstonii* (Garman). Members of the Association, and others who may join it, will receive the volume of Transactions of the Association, in which both of these valuable papers are to be printed. Mr. Titcomb's paper was illustrated by colored plates of the fish in question, made for the new report of the New York State Forest, Fish and Game Commission.

Mr. Wilson's paper on the pike-perch dealt with its habits, its importance as food, with the difficulties attending its artificial propagation, and the measure of success attained in it. He spoke in particular of the practice of catching the fish in Lake Champlain during the season of reproduction.

This paper caused a spirited discussion, Mr. N. W. Fisk being the first speaker. He said that the majority of sportsmen in Vermont were in favor of having netting stopped in Missisquoi Bay. He remarked that if Quebec would cease to issue licenses that Vermont would be obliged to stop.

Mr. Jocas said that he thought that the needed legislation could be secured in Quebec if delegations from Vermont and New York should visit the legislators there and show that the people of those States wished to have the matter remedied. He said that only 18 licenses were issued last year in Quebec and that only three of those were used by Canadians, the others being taken advantage of by residents of Vermont.

On motion of Mr. Wilson, Mr. I. Z. Jocas was elected an honorary member with full privileges of membership.

A hearty vote of thanks was also tendered to Mr. Titeomb for his valuable and efficient services in the chair, and the meeting adjourned.

At night the members of the Association were entertained at the Van Ness Hotel by the Vermont Fish and Game League. Three hundred guests sat down.

[Additional space will be given to a report of this important meeting in our next issue. Ed.]

*

Mr. John W. Titeomb, of St. Johnsbury, Vt., State Fish and Game Commissioner, President of the Vermont Fish and Game League, and retiring President of the North American Fish and Game Protective Association, has been appointed Chief of the United States Division of Fish Culture of the Federal Fisheries Commission at Washington, in place of Mr. Ravenel, resigned, and leaves Vermont for Washington about the middle of February. Mr. Titeomb is one of the leading authorities of the day upon all matters pertaining to the science of fish culture, and his many friends will rejoice at his well-merited promotion to a larger sphere of public usefulness.

The Ojibway Calendar.

Mr. C. C. Farr, of Haverbury, sends us a very timely contribution with regard to the names of the months as known to the Ojibways. Of course when he wrote he had not seen what was printed in our February issue. He says the Indians in his part of the world designate the months by the following names:

- January—Keenooosie kisis—Pike month.
- February—Akakajj kisis—Ground hog month.
- March—Nikik kisis—Otter month.
- April—Waskato kisis—? (Perhaps something a) out longer daylight).
- May—Wabikoni kisis—Flower month.
- June—Oteimini kisis—Strawberry month.
- July—Niskwemini kisis—Raspberry month.
- August—Tatakakomini kisis—Blackberry month.
- September—Kakakoni kisis—Means: summer over, cold commencing).
- October—Namekosi kisis—Trout month.
- November—Atikemik kisis—Whitefish month.
- December—Yitepipon kisis—(Means, perhaps, real winter).

*

A sportsman has written to the Quebec *Chronicle* stating that during a recent caribou hunt in Temiscouata County, P.Q., he found moose on the increase and caribou and deer quite up to the average. He feared, however, that this happy state of affairs would not continue, as the knowledge of this abundance of game has become pretty general, and pot hunters have left for that region in numbers. We sincerely hope that the Quebec Government will see to it that all this valuable game is not sacrificed to the greed of the crust hunter.

KENNEL DEPARTMENT

Conducted by D. Taylor

The committee of the Montreal Canine Association, which met on the 10th February, decided to hold a bench show at the Arena on the 15th, 16th and 17th of May next. There will be a full classification of the various breeds, with good money specials and valuable cups, medals, etc. In order to provide against the heavy expenditure incidental to running such a show as is contemplated, it was resolved to institute a guarantee fund in addition to the funds already at the call of the Association, which, in the event of a deficiency, would be drawn upon *pro rata*. Those present promptly responded to the suggestion and, led off by the president, Mr. D. W. Ogilvie, subscribed to the extent of \$275. This was felt to be a good beginning, and little doubt is entertained that from \$500 to \$800 will be pledged when all the membership is heard from. With the object also of increasing the funds it was resolved to hold a "tombola," the prizes in which will be thoroughbred pedigreed dogs of various breeds, kindly donated by well-known breeders. At the same meeting a very important decision was arrived at, namely, to hold the show under American Kennel Club rules instead of C. K. C. This decision will probably give rise to adverse comment among western fanciers, and we may say it was not arrived at without some misgivings on the part of a few of those present, who, however, were convinced that those in favor had the best of the argument from a business point of view. The trouble is that while the C. K. C. recognize American wins toward making a champion of record, the A. K. C. do not accord the same value to Canadian wins, and it is well known that it is almost impossible to get American breeders to exhibit on this side of the line from this very fact. Among the purely sporting class on the other side a win is considered of more value than a money prize, and through this feeling it is believed a number of the most prominent owners can be induced to send their dogs, an eventuality which may in some measure offset the lukewarmness and, perhaps, opposition, to be expected from members of the C. K. C.

Mr. Jos. A. Laurir, Vice-President of the C. K. C., as mover of the motion has placed his resignation in the hands of the secretary of the club.

Field and Fancy (New York) referring to the above decision of the M. C. A., says:

"The long expected has happened and it behooves the American exhibitors and the American Kennel Club to take advantage of the opportunity thus presented and eventually have one governing body for North America. The first break from the Canadian Kennel Club jurisdiction will undoubtedly be followed by others, provided United States exhibitors demonstrate that they appreciate the throwing open of more shows at which wins will count as additions to what the dogs get south of the line.

The opportunity for the American Kennel Club to show its appreciation of the Montreal club's action, and encourage other clubs to enroll themselves with the A. K. C., is to get better and more convenient regulations and procedure for the easy return of dogs into the States. . . . What may be done in

this direction is within the province of the American Kennel Club to find out, and it would be only a proper return to the Montreal Club which is its first member from Canada.

"We trust that the Canadian Kennel Club officials and members will not jump to the conclusion that we are opposed to their association because it is Canadian. Not at all. In dog matters America means the United States and Canada. Canada is a division, and we hold that it should be a division with executive powers, under one common set of laws for the entire country. It has no standing outside of its own division of America, being recognized by no national body, not even by the English Kennel Club, which recognizes only the A. K. C. Neither is it recognized for custom house purposes. It is local because it has made itself so, whereas there is every reason why it should become part of the American Kennel Club, with delegated powers such as are accorded to the Pacific coast."

The annual show of the Westminster Kennel Club, the most important fixture on the North American continent, opened in Madison Square Gardens, N. Y., on Feb. 19, continuing four days. Compared with 1901, which was a record year as far as entries and prize money went, the present year's show excelled it in almost every feature. There were nearly 250 more entries, while the prize money and specials greatly exceeded that of 1901, the amount put up for competition this year aggregating \$12,000. There was a considerable falling off of exhibits in some of the breeds this year compared with last, while there was an enormous increase in others. This in some measure is to be accounted for through the varying taste of the public, but more, perhaps, from the tendency of professional fanciers to periodically "boom" certain breeds, from interested motives, and is scarcely reliable data on which to gauge a popularity, which, after all, may be only ephemeral. It is, however, pleasing to note that most of what may be called the standard breeds of both sporting and non-sporting dogs continue to hold their own. Among the breeds which show the greatest increases in entries are: Greyhounds, 35 to 29 in 1901; pointers, 118 to 108; Irish setters, 50 to 39; collies, 151 to 116; old English sheep dogs, 43 to 7; bull dogs, 159 to 67; bull terriers, 125 to 99; Airedale terriers, 53 to 29; Boston terriers, 215 to 167; beagles, 136 to 116; fox terriers, 160 to 148; Welsh terriers, 20 to 15; Skye terriers, 14 to 6. There was also a marked increase in the number of toy dog entries.

We are pleased to notice among the list of judges at the forthcoming Chicago show the name of a Canadian, Mr. H. B. Hungerford, formerly of Belleville, Ont. Mr. Hungerford's specialty is the collie, in which he is a firm believer. While resident in Ontario he, in conjunction with Mr. McAllister, of Peterborough, imported several good ones, the best of the lot probably being Laurel Laddie, who met with an untimely end not so long ago. Mr. Hungerford will judge his favorite breed, along with Old English sheep dogs, and from his reputation as a collie fancier will no doubt attract a large entry.

It is believed the C. K. C. will take action regarding the death of the deerhound, Scamp, at the Philadelphia show. Through the neglect of the officials he was not removed from his crate until the closing day, when he was accidentally discovered. He had been without food or water all of that time, and died from the effects. Scamp was owned by Mr. V. H. G. Pickering, Minnedosa, Man., and was valued at \$500.

The Western Canada Kennel Club's bench show, at Winnipeg, Man., will be held March 20-22. Mr. A. H. M. Clark is secretary.

Mr. W. O. Roy's Wislaw May has presented him with a litter of six fine puppies. They are divided as to sex. The sire is Wellesbourne Hope, the Buffalo winner.

Mrs. A. Belasco arrived back in town, lately, accompanied by her handsome St. Bernard, Prince, who is looking remarkably well after his sojourn in the States. At the last show he competed (Chatham), although not in the best of condition, he got one first and reserve in winners. We understand that Prince is to be placed at stud for a short time here, and that he is booked for Atlantic City the latter part of March, which will be his home for the spring and summer.

The Montreal Collie Club will hold a show of collies on March 8th. Dr. Wesley Mills has kindly consented to judge. The classification provides for puppies under three, six, nine and twelve months, sex divided; dogs or bitches that have never won a prize at any show; novice dogs or bitches; open dogs; open bitches; winners, dogs; do., bitches, best in show; best litter (puppies only to count), and a selling class the limit of which is \$25.

Mr. W. H. Tallis, of Grand Mere, Que., has a nice litter of bulldogs by Dubbo from a bitch that came out in whelp to this dog.

Mr. Geo. Douglas, of Woodstock, Ont., has sold Robin Hood, the red cocker winner at Philadelphia and elsewhere, to Miss Eleanor Macdonell, of Kingston, the owner of the well-known parti-color Braeside Blue Jacket.

Mr. Laurin has sold his interest in the Clonmel Kennels to his partner, Mr. Oscar Dufresne, who will continue the breeding of Irish terriers.

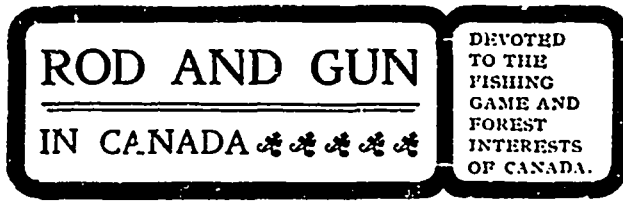
Dr. W. H. Drummond lately visited Father O'Gorman's kennels at Gananoque, and made him an offer for the Irish terrier Bullet Proof, but the reverend gentleman declined to part with him for a money consideration.

The Limefield Fox Terrier Kennels, of this city, have sold a good bitch puppy by Banker ex Limefield Vixen to Mr. Irving C. Ackerman, of San Francisco.

The Ottawa Kennel Club will hold a show on April 7-9. The committee are hustling to make the affair a success and are looking for the support of the Canadian fancy to help making it so by sending in entries.

A gentleman in the city has made what he believes to be a veritable find in the shape of a St. Bernard. It is claimed that he is a litter brother to Baden Powell and to Mayor of Watford, the latter owned by Mr. W. Johnston, and winner at New York the other day. Baden Powell is also a heavy winner, having been first at Buffalo, New York (Ladies' K. A.), Rhode Island, Hamilton, and third to his brother at New York. The new find is of good size, standing about 36 inches at the shoulder and possesses great bone. He has a solid orange body, perfect white markings, with dark head, and when licked into shape will not be unworthy company for his famous brothers.

Among the dogs entered at the Westminster Kennel Club's show at New York were Mr. Geo. Caverhill's Skye terriers; Mr. D. W. Ogilvie's fox terrier, Bank Note; Mr. Joseph Reid's collie, King Edward VII.; Mr. W. Ormiston Roy's sable and white collie, Coila Victor, and his tricolor, Coila Howdie. Messrs. Coulson & Ward also sent Irish setters and the Montreal Hunt a full kennel of foxhounds. The latter were in charge of Huntsman Nichols and competed for the special prize offered for the best kennel.



PUBLISHED MONTHLY

SUBSCRIPTION RATES:
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M. H. HOOVER,
 Union-Sun Co., Lockport, N.Y.

The Chicago Sportsman's Show, opened on the 3rd of February, was a great success. The attendance was very large. One of the finest exhibits was that made by the Canadian Pacific Railway, which filled its 1,200 feet of space with a comprehensive display of pictures, oil paintings and those striking photographs which alone would serve to make the Canadian Pacific scenery world-famous. There was an abundance of skins, heads and other trophies of big game to be seen, and a very good working collection of maps and descriptive literature.

Mr. L. O. Armstrong was in charge of the exhibit, a thoroughly representative Canadian one, and was instrumental in taking to Chicago the dramatized version of "Hiawatha." The Hiawatha troupe included William Kaboosea, Geo. Linklater, White Fish, Ont.; Hugh Irvine, Desbarat, Ont.; Joe Banngoosek, Tom Obtossoway, George Kaboosea, Tom Kaboosea, Bukwujimimi, Henry Bukwujimimi, Albert Wabunsa, Sam Wabunosa, Aleck Wabunosa, Shawano, Tom Shingwank, Wm. Kaboosea, Garden River, Ont.

A western correspondent informs us that the pack of hounds owned in Crystal City, Manitoba, has been very successful during the past two seasons, having accounted for over 100 wolves. The method of hunting is said to be rather peculiar, and the pack somewhat of a scratch one. Three times each week the huntsmen sally forth to make life wretched for the coyotes. "Each farmer who comes to town reports any wolf

that he may have seen. In a few minutes horses are hitched up to a buggy or cutter, — a few are mounted on their quads. If the snow is deep the hounds are put into a huge box which is placed on a wagon on bob-sleighs. The dogs are covered up with blankets. Mr. Coyote never shows any fear of a team, but the sight of a dog starts him off full gallop! When within forty yards the blankets are thrown off, the pack jumps out and away after the hunted one." As the pack is composed of animals of different breeds, the ambition of the English fox hunter—a pack which could be covered when in full cry by a carpet—is not attainable, but each hound, or rather each dog, does his best, and the leanest and longest-legged lead, while the fat, chunky dog labors along in the rear. Funds derived from the wolf bounty and sale of skins enable the Crystal City Hunt Club to hold an annual gathering, which is a red letter day in the life of each jolly sportsman.

Our readers will be glad to learn that the beautiful Canadian National Park, at Banff, is to be added to largely. Its size, heretofore, has been 26 x 30 miles. Now it is to be made of triangular shape. The distance from the southern extremity to the most northerly latitude being 100 miles, and along the northern boundary, running due west from the same point, also 100 miles. The hypotenuse of the triangle will be the watershed of the Rocky Mountains, which has a northwesterly course in general, although it is full of minor irregularities, of course. Several passes exist in the range, a few, such as White Man's Pass, Simpson Pass, and Howe's Pass, being already known. Mt. Forbes, a very lofty peak, is on the line dividing the park from British Columbia. In addition to this park the British Columbia government will form a Yoho Valley reserve, which will include all the magnificent scenery of that wonderful region.

Mr. Howard Douglas is superintendent of the park. Dating from its inception the amount spent upon it has been \$2,000,000, though the annual expenditure is now said to be but \$1,200 a year, while the revenue is placed at \$5,000.

The Crown Lands Department of New Brunswick has recently issued a new edition of *Gun and Rod in New Brunswick*. All interested in the sporting attractions of that Province should procure a copy of this very useful little manual, which is to be had upon application to the Crown Lands Department.

Introduced Mongolian pheasants have succeeded admirably in British Columbia, but it seems that the poacher is hard at work thinning their numbers, and this is what the *Westminster Columbian* has to say upon the subject:

"Under the Game Act it is unlawful to sell either pheasants or ruffed grouse, but it is a well-known fact that very little difficulty need be experienced in buying a brace or two any time after the season opens. Indians go from house to house offering grouse for sale, some market gardeners supply them to customers, and even on the city market it is possible to buy the birds, on the sly, of course, and under the guise of 'picked chicken.' All these things are going on under the eyes of the authorities, but they take no notice of them. The Act, as matters stand, is practically a dead letter, though there is no good reason why such should be the case, for one or two judicious prosecutions would serve to give all habitual law-breakers a very wholesome dread of the consequences."

A Tourist Association has been formed at Victoria. It has not come a day too soon. Those who know the unrivalled attractions of Canada's western Province have always regretted that an out-of-place modesty, or a particularly aggravated attack of "coast languor," has prevented the inhabitants of the balmy Pacific Province from making known to the world the happy results which a sportsman, or even a mere tourist, will reap by a visit to British Columbia. The inaugurators of the Tourist Association are the most influential officials and merchants of the coast cities, and we shall be much disappointed if they do not achieve great things.

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We have received, through the courtesy of Mr. A. Knechtel, State Forester of the State of New York, a copy of the fifth annual report of the Commissioner of Fisheries, Game and Forests. It is, as its predecessors have always been, a model to which other commissioners may look with longing eyes, yet with little hope of being able to duplicate. It is rather a sad reflection, that with all our magnificent game and fish resources, Canada has yet produced nothing in the way of a government report to compare with this. Yet we could have no better advertisement. It may hardly be doubted that were Canada to issue year by year a report of equal excellence to that published by the State of New York, we should reap a very large return through the increased tourist travel which would result.

Mr. Denton's fish pictures are up to their usual high standard, and in this volume is figured our own beautiful red trout. Mr. Ridgway's birds are also very good, and wonderfully true to nature. The report is thoroughly illustrated by the work of these artists, and by numerous half-tones of photographs and wash drawings. We hope to be able to discuss this report at greater length in some future issue.

*

On the eve of going to press it is not possible to describe the Boston Sportsman's Show of 1902 as it should be described; suffice it to say that on the opening day 7,000 persons visited Mechanics' Building.

A very interesting specimen is on view in the Canadian Pacific Company's log cabin. It is the head of a buck which was killed by wolves near Mattawa. Just as the wolves had hamstringed the deer a lumber boss happened to come along and the pack withdrew to a safe distance while he cut off the head, returning, however, as soon as he had left, and a few hours later only a few of the big bones remained.

The Boston Sportsman's Show opened on Feb. 22nd. In many respects it is more likely to appeal to the sportsman than any other show we have seen. The collection of live game animals, game birds and waterfowl is undoubtedly the best ever brought together in this country. It has been supposed that the ruffed grouse will not live in confinement, but here we have several dozen of these usually timid birds, not only in good health but, apparently, utterly indifferent to the people and the music of the bands. The entire credit of this wonderful feat is due to Mr. C. W. Dimick, the Vice-President and General Manager of the Association, who, personally, tamed these birds and taught them to feed in captivity by tempting them with such delicate dainties as Hungarian ants' eggs.

*

We publish in the present issue a portion of a paper upon the sporting resources of the Kamloops district, British Columbia. We believe that this is the first serious attempt at making known to the world the attraction of a district which

is second to none for all round sport. We hope to be able to follow this article with others describing the different districts of Canada's wonderful Pacific Province, and her unlimited game preserves in the North West Territories.

It is more difficult to get hold of accounts of western sport than it is to gather those relating to shooting and fishing in the east; the plainsman and the mountain man is each too busy to have much time or inclination to use the pen, nevertheless, *ROD AND GUN* has many staunch friends from Winnipeg to the Pacific, and they have kindly promised to send in stories which while absolutely true will no doubt make the mouths of eastern sportsmen water at the feast of good things their brethren in the west enjoy.

*

Professor Knight, of Queen's University, Kingston, has been experimenting upon the effects of sawdust and polluted water on fish. He came to the rather unexpected conclusion that sawdust does not injure adult fish, though it may be fatal to eggs, and by interfering with the development of aquatic life, diminish the food supply. His experiments, however, were with sawdust in clean running water. It is quite possible that sawdust rotting at the bottom of a stream may be very fatal to fish. Personally we believe it is. The professor further found that waste water leaving pulp mills has no bad effect upon fish if diluted with ten times its volume of clean water. The waste liquid from gas works is very poisonous, one part in two hundred proving fatal; and the refuse from nail works, containing, as it does, hydrochloric acid and iron, will kill when diluted to one part in every thousand.

*

The American Ornithologist Union has issued a list of what are generally known as game birds. It comprises: The Anatidae, commonly known as swans, geese, brant, river and sea ducks; the Rallidae, commonly known as rails, coots, mud hens and gallinules; the Limicolar, commonly known as shore birds, plovers, surf birds, snipe, woodcock, sandpipers, tattlers and curlews; the Gallinae, commonly known as wild turkeys, grouse, prairie chickens, pheasants, partridges and quails, and the species of Icteridae, commonly known as marsh blackbirds and reed birds or rice birds.

*

This year's experience shows that the Manitoba open season on ducks begins two weeks too early. September 15th is quite early enough, as the young ducks are in the flapper stage at the end of August.

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AMATEUR PHOTOGRAPHY

Conducted by Hubert McBean Johnstone

RELATIVE VALUES IN EXPOSURE WORK.

Perhaps the greatest difficulty that the amateur photographer will encounter, is that fact that he is ignorant of the relative values of the various factors in negative making. He does not know how one light compares with another; how one stop and another agree; how a certain plate of one manufacturer will correspond with the same speed of another, or what the difference is between the various developers on the market. What is more, the text books issued for the beginner, will not help him out and he is left to flounder by himself hopelessly in the dark.

Let us look at the first of these troubles, i.e., the comparative strengths of lights. The worker who has been accustomed to making his pictures entirely by daylight and then takes it into his head some day to try a gas light exposure, finds himself absolutely without means of judging what exposure is necessary. He can experiment but that takes time and costs plates, and at best is a more or less unsatisfactory method. Then for the benefit of such workers, I have compiled the following table, showing the comparative strengths of the various illuminations by which it is possible to make photographs. It is as follows:

Sunlight,	1	Electric light (arc)	3
Diffused daylight,	60	Magnesium ribbon,	277
Oxyhydrogen light, S.040		Common gas flame,	16,080

Knowing the proper exposure to give with the stop and plate he is employing, under conditions where the source of illumination is bright sunlight, it is the acme of simplicity to figure out the correct exposure with any of the other illuminations given from the figures therein supplied.

Next comes the question of what stop to employ and how the exposure must differ between f 8 and f 64. The question is frequently put, "Is it to be eight times as long in one case as in the other?" The answer is no. It is not. But first to a clear understanding of what is meant by the f value of the lens opening, let us look at the following simple and oft-repeated explanation. Suppose you are attempting to find the f value of your stop. Focus the camera without any stop on an object 50 ft. distant; then measure the distance from the ground glass to the place where the diaphragm is to be placed, and the result is what is commonly referred to as the "equivalent focal length of the lens"; next measuring the diameter of one of your stops, divide that diameter into the focal length. If the result be 32, then the f value of the stop is f 32, or by the Universal System, U.S. 128. Now, supposing, in order that you may be able to calculate the relative values of the stops, you look at another table which I have compiled, showing the relation one stop bears to another as far as exposure is concerned. It is as follows:

f 5.6, or U.S. 2,	requires an exposure of	$\frac{1}{4}$ sec.
f 8, " 4,	" " "	$\frac{1}{2}$ "
f 11, " 8,	" " "	$\frac{1}{4}$ "
f 16, " 16,	" " "	$\frac{1}{8}$ "
f 22, " 32,	" " "	$\frac{1}{16}$ "
f 32, " 64,	" " "	$\frac{1}{32}$ "
f 45, " 128,	" " "	$\frac{1}{64}$ "
f 64, " 256,	" " "	$\frac{1}{128}$ "

You will see that the Universal System is the easier by far to manipulate. With it it becomes merely a matter of multiplication to find what exposure you desire to give with any particular stop. When using the f system, I find that the easiest way is to carry with one a copy of the preceding table, when its figuring will become very easy.

Perhaps next to the fact that plate makers throughout the world have never agreed upon certain standard sizes to make their plates, their most deplorable fault is that there are hardly any two manufacturers putting out plates of any three speeds whose relative values are similar. This forms one of the most serious questions that the amateur has to encounter in changing from one brand to another. He has been using the medium speed of one maker and resolves to change to the corresponding speed of another. He gives it the same exposure, and on developing it finds that it is hopelessly overtimed. To learn accurately where he stands he is forced to go through a series of experiments just as when he first started to take photographs. Of course the reason of all this difference is that there are no two factories using the same ingredients in mixing their emulsions, or when they do use the same they use it in vastly differing proportions. It is almost impossible to learn from manufacturers what they use to coat their plates, but one writer gives the following figures:

	Sulph. Soda	Sal Soda	Pyro
Stanley.....	18	18	3
Hammer.....	12	6	1½
American.....	24	12	2½

These figures represent grains to the ounce. It will be seen that the Sulphite of Soda varies all the way from 24 to 12 grains to the ounce; the Sal Soda from 18 to 6; the Pyro from 1½ to 3. And the writer has only referred to three brands! How is it possible to think all brands the same? One of the exposure meters on the market has worked out the way that they think plates ought to be graded, and after trying it on a great many occasions I have come to the conclusion that their figures are correct and am consequently going to give them here. I am also giving the proportion of exposure required by each. It is as follows:

Class 1—Cramer Crown; Seed 27; Hammer Red Label; Eastman Red Seal and Film; New York P.D. Co. Record; Lovell Extra Rapid.

Class 2—Cramer Banner and Instantaneous Isochromatic; Seed 26x; Hammer Blue Label; Eclipse; Stanley 50.

Class 3—Seed 26; Carbutt Orthochromatic 27.

Class 4—Eastman Yellow Seal; Carbutt Special 25.

Class 5—Cramer Medium Isochromatic; ½ Cramer, Seed and Hammer Non-Halation; Hammer Fast; New York D.P. Co. New Havard.

Class 6—Seed 23; Hammer Slow; New York D.P. Co. Crescent; Carbutt Orthochromatic.

Class 7—Cramer Slow Isochromatic.

Class 8—Carbutt B. 16.

The relation each class bears to the others in exposure is:

Class 1.....	1 second.
" 2.....	1½ "
" 3.....	1¼ "
" 4.....	2 "
" 5.....	2½ "
" 6.....	4 "
" 7.....	12 "
" 8.....	21 "

Now that we have gone over all this, let us compare the difference between two exposures, one made under the most

favorable conditions and the other made under the most unfavorable. For the first we will say that we have bright sunlight, Diaphragm U.S. 2, and a Cramer Crown plate (class 1). We are working about noon on a June day. The exposure ought to be for a landscape about $\frac{1}{10}$ of a sec. But see it from another point of view. We still have bright sunlight but are using Diaphragm U.S. 256 and a Carbutt B. 16 plate (class S). The exposure at once changes to 6 seconds, or just 2,400 times as long. Between these two there is a whole scale to be run, depending, of course, upon the plate and the stop. Supposing, that instead of bright sunlight you are using gaslight, what a difference there is. With the fastest plate and the largest opening the exposure is 40! secs., and with the slowest plate and smallest opening it will be 26 hours and 18 minutes! This seems preposterous, but figure it out for yourself and you will find that, like the exposures in bright sunlight, the one is just 2,400 times as long as the other. I am not supposing for an instant, you understand, that anyone would lack so much common sense as to make any 26!-hour exposures. I am merely trying to attract your attention to the importance of relative values.

*

About the Tripod.

It is worthy of note that not one amateur in five sets up his tripod correctly unless someone has shown him how. Instead they stand with two of the legs to the front and then straddle the third to focus. This is the wrong way. Suppose that you try it just *vice versa* and put one support to the front so that you may stand *between* the two back ones and make a study of the ground glass in comfort and without any danger of jarring the instrument after everything is ready to make the exposure. Easiest thing in the world you know to spoil a razor-edged definition by just the tiniest, little kick. Then, too, this method has another advantage. By the old way, when you want to lower the front of the camera (not lower the front board) you have to take hold of the two legs and let it down by spreading them apart at no small trouble to yourself in getting the top level again. If you have one leg in front it is the simplest thing in the world to merely loosen the screw of the lower section and let it slip up into the second one. This cannot possibly shift the level of the instrument. If by any chance it should get off the square all you have to do is to grasp the two legs that are right beside your hands, if indeed you are not resting them on them when you focus, and move them this way or that until it is straight. Or, simpler still, if the two legs be at the back, the top may be leveled by loosing the screw in one and either raising or lowering that side as the case may necessitate.

Another difficulty that has to be gotten around is the standing of the tripod on a smooth floor or a piece of very rough and uneven ground. The latter is the easier as it is only necessary to study the adjustment of the legs. Occasionally, however, one runs up against a floor that is as smooth as glass with neither crack nor crevice in which to locate the lower end of the leg. If there is one crack there is sure not to be another within yards. Sometimes it is possible to take chunks of rubber and stick them on the spikes, but very frequently this will fail to hold. Cork is also sometimes used, but it is not any better than the rubber—in fact, not so good. Take then a bit of string and after setting the tripod up in position, tie it from leg to leg about half way down. Then when it is moved to the slippery floor there is no room for a spreading and no possible chance of a slip. There are several small devices that are sold to attach to the legs in somewhat this manner, and though

made of metal so as to keep the affair perfectly rigid, are so seldom required as to make it hardly worth while to throw away money on one.

In working in a high wind, as, for instance, in photographing clouds or any subject where the weather is apt to be gusty and jar the camera, some means are necessary to keep it steady. The remedy is so simple that it is a wonder that it is not more often used. Tie a bit of string between the screw in the top and a stake firmly driven in the ground; then raise the instrument until it is drawn taut and jar is next to impossible. Or you may tie it to anything that has sufficient weight to hold it down tight. A heavy stone or a small log will answer first rate.

Of the tremendous power that lies within the grasp of the operator through the tripod in the rendering of distance by raising or lowering, it is, I think, necessary to say but little. Six inches lower may accentuate the foreground so as to entirely alter the aspect of the scene being depicted.

There are many other uses to which the worker of an ingenious turn of mind may easily and advantageously put his tripod. Like anything else it only requires a little thought and figuring to devise methods of manipulating it in different cases as the circumstances may necessitate.

*

The Scrap Bag.

SOME PRINTING PROCESSES.—The fact that most amateurs use the one printing process for all negatives is responsible for their not getting uniformly good results. Assuming that we have a series of negatives, from the thinnest and weakest to the densest and hardest, we may grade the different processes as follows:—

- Collodio-chloride—thin negatives.
- Gelatino-chloride—thin negatives with much detail.
- Cold-development platinum, CC—weak, soft negatives inclining to thinness.
- Gaslight development papers—rather thin negatives developed through with some contrast.
- Sepia or hot-developed platinum—medium negatives, neither weak nor hard, inclining to strength.
- Bromide for daylight printing—quite strong negatives.
- Pigment processes—about the same but not very dense anywhere.
- Albumen—quite strong, brilliant negatives without fog.
- Plain salted paper, weak bath—medium strong to very hard negative.

DEVELOPERS. SOLIO PAPER.—The development of Solio paper when the prints are insufficiently printed is thoroughly practicable if the paper be fresh and carefully handled. After development they must be well washed, care being taken that they are kept under water or the developer will continue to act strongly on the exposed parts, or oxidize and produce dirty-looking spots. After this washing tone in the following:

Ammonium Sulphocyanide.....	15 grs.
Gold.....	1½ "
Water (distilled)	15 ozs.

Then wash for five minutes and fix as usual.

CHANGING BLUE TO BROWN PRINTS.—To change the color of a blue print to a brown immerse the print in a caustic soda solution, composed of five ounces of water and a piece of caustic soda about the size of a pea, until the color changes to a yellow. After washing the print for about four or five minutes, place it in a bath consisting of about a teaspoonful of tannic acid in eight ounces of water. The longer it is allowed to remain in this bath the darker will the brown tint it has assumed become.

FLOWER STUDIES WITH A CAMERA.—I have recently received a number of flower photographs from a Mississippi amateur which have called to my mind the advisability of the present little paragraph. The pictures I have reference to are simply the natural flowers of the field posed against a plain background—light or dark as they may require—and then photographed with a color screen and an orthochromatic plate. The result shows all the most delicate half-tones and detail in the shadows that exist in the original, and to one who has never tried it—even though he may not have the slightest inclination to study botany—are a positive revelation. What must they mean to a botanist! Workers who have never tried it or seen it tried will do well, as soon as the now coming spring arrives, to get out and make some such studies of still-life. And that makes me think, What have you made during the past few months, while we have been snowed up? I have written to those amateurs with whom I am acquainted asking them if they will not send me what they consider their best print. But I don't know you all. I wish you all would send me prints occasionally. It encourages me, if nothing else, for then I know that you are interested.

DEVELOPING PLATES.
—Referring to the developing of plates, Mr. Bayard E. Sparham, a Smith's Falls reader of *ROD AND GUN IN CANADA*, sends us the following: "I am aware," he says, "that almost all the directions that are written say that by looking through a plate at the light, it can be ascertained whether the details are sufficiently out and whether the density of the high lights is great enough or not. While we are told all this, we are also informed that plates are so sensitive to light that even the subdued illumination of one's dark-room lamp is dangerous if the plate be exposed too near it. I have found it uncertain in examining a plate in that way. Sometimes the details do not show, though they can be seen by examining the face of the plate; especially in snow scenes is it difficult to arrive at any definite conclusions in that way. Then as to density: I have never yet been able to determine by this method, with any degree of certainty, when it is done. My lamp has a ruby and an orange glass. How close to the flame should the plate be held, and is it by means of the flame itself or only the light of the ruby-lamp that the density is examined? The plan I have adopted is to use these methods of determining the stage of development, but still continuing it until the unexposed edges of the plate begin to turn grey. Can you give me any more light on the subject?"

I do not think that any directions will say that the plate must not be exposed to the ruby light. I am inclined to believe that Mr. Sparham must be in error on that point. Directions

do, however, advise care, and recommend that the plate be kept as much in the dark as possible unless it is being examined. Then it may be held right up against the ruby glass, if necessary, but only for a short time. You must bear in mind that the faster a plate is, the more sensitive it will be. Special care is necessary in the case of orthochromatic plates. On no account should an unfixed plate be held up to the flame of an ordinary lamp without a ruby glass in front of it. Nor can I say that I like the scheme of judging the development by looking at the edges of the plate. I don't believe in it. The only way to correctly judge development is by looking through it. The prints, however, that Mr. Sparham encloses are excellent, and no matter how wrong his theory of development may be, his results certainly do not show it.

RED SPOTS ON ARISTO PAPER.—In many places where the water has in it a great deal of mineral or lime, red spots will make their appearance on Aristo paper. In trouble of this

kind, add to the first wash water 2 oz. of a saturated solution of Sal Soda to the gallon, and handle the prints in this wash for about five minutes. It will do very little good in any but the first water. The Sal Soda has the effect of cutting loose the free silver and getting rid of it quickly.

WETTING A LANTERN SHEET.—There is no advantage in having a lantern sheet wet unless it is to be used as a transparent screen, with the audience on one side and the lantern on the other. In this case the wetting of the sheet increases its translucency and

is therefore an advantage. Otherwise it makes the screen less opaque and is therefore a disadvantage. As the slides are seen by the light which the screen reflects to the spectator, the more transparent the screen is the less light it reflects and the duller, therefore, is the picture. Under these circumstances you will easily see that it is an advantage to have the screen dry for ordinary use.

AVOIDING GRAIN IN COPYING.—The "grain" in copying is simply the shadow cast by the texture of the paper, and it can be overcome by the simple expedient of giving a longer exposure. This is always possible, provided it be accompanied by careful development.

CLOUD NEGATIVES.—March is the month to get out after your cloud negatives—rather I might say, March and April. It is during these two months that, after heavy storms, they are likely to be most plentiful and assume their most fantastic forms. Focus upon the extreme distance in order that you may have the proper degree of sharpness, and make the exposure with a rapid shutter and a medium stop, say, f/22, using



A LAZY MORNING BY SHUSWAP LAKE.

a slow plate. Supposing you are using a Carbutt B. 16 plate, which is the slowest made. This ought to call for an exposure of about 1 sec. at noon during these two months. An orthochromatic plate should be used, and a color screen is an improvement, though of course with this latter, the exposure will be considerably longer. Development should be light and ought to be stopped just as soon as the detail is sufficiently out not to be lost in the fixing. Care is necessary not to overdo it in the dark room.

"HEMPERLEY'S" FIXING-BATH FORMULA.—Hemperley's fixing bath formula is a good one, and for the benefit of one worker who wrote me a short time ago, I am giving it here. It is as follows.—Take 32 oz. of sulphite of soda, hydrometer test 60 degrees, and add to this very slowly 1 oz. of sulphuric acid; then 8 oz. of solution of chrome alum, hydrometer test 60 degrees, then add the whole to 2 gal. of saturated solution of hyposulphite of soda, and it is ready for use. Leave the negatives in the bath a little longer than is required for fixing. As the permanency of the negative depends upon this, it is important. Also use a grooved box to fix in. A flat tray is apt to cause spots and dirt.

THE 1902 AMERICAN ANNUAL.—Messrs. Scovill and Adams' yearly publication, the American Annual of Photography, is on the market. Mr. Woodbury has gotten together a very fine collection of matter for the 1902 issue, and is also to be congratulated upon the excellence of his pictures. Among other interesting articles, he has one on "Photography in China," by Mr. Isaac Taylor Headland, which, in view of Mr. Headland's being a recognized authority upon Chinese matters and an enthusiastic amateur photographer as well, is especially attractive. Altogether Mr. Woodbury's work this year bears evidence of much careful thought and plenty of hard labor, for he has succeeded in producing a volume that is not only a pleasant companion for idle hours but that is also full of practical, technical information.

WHICH DEVELOPER.—Different developing agents give widely different results,—a fact which ought to be borne in mind when one is in the habit of using several kinds. For instance, pyrogallie acid in combination with carbonate of sodium or carbonate of potassium will produce strong, vigorous negatives, while on the other hand, cikonegen and metol will give soft, delicate results. Hydrochinone added to either of the two latter will give greater contrast or more strength. Of course with any of them, quick development means a lack of half tones and more contrast.

STAINS ON THE FINGERS.—There is, perhaps, nothing more annoying to one than to find the fingers coated up with stains just at a critical moment when he has an engagement to go somewhere and wants to look at his best. I give here methods of removing a few of the commonest. Development stains will yield easily to the action of a little lemon juice. To remove nitrate of silver discolorations prepare a solution of water, 100 c.c.; chloride of lime, 25 grams.; sulphate of soda, 50 grams., and apply with a tooth brush. Nitric acid stains may be removed by applying a solution of permanganate of potash and then washing freely. Perhaps the most difficult stain to remove is that of amidol. You might try citric acid. Washing the stained parts in a 10 per cent. solution of oxalic acid will remove pyro troubles.

A CRACKED NEGATIVE.—It is quite possible to make a good print from a cracked negative, if the film is not broken, and no

one who looks at the result will be a bit the wiser. To do it, first place in the printing frame a piece of porcelain or ground glass with the rough side outward. Then put in the negative and paper on top in the usual way, and when it is all ready to put in the light to print, over the whole thing lay several layers of tissue paper or of that paper that comes wrapped around the various sensitized papers. Being waxed it is excellent. Do not put the frame in bright sunlight. While this will take quite a bit longer to print than ordinarily, the result is well worth while.

LUMINOUS LABELS.—Labels made with the ink described below are capable of being read in the dark room. The writing has the appearance of fire. It is as follows.

Phosphorus, - - - ½ dram
Oil of Cinnamon, - - ¼ oz.

Mix in a vial and after corking tightly heat it slowly until it is well mixed. It may be applied with a pen. It is best to put it on the label after it has been pasted on the bottle.

RAPID WASHING OF NEGATIVES.—Sometime when it is desirable to wash your negatives rapidly you might try the following bath. Put them for a short time in this bath:

Acetate of Lead - 90 grams.
Water - - - 500 c.c.

This solution keeps well. Let it stand for some time and then further dilute 90 cubic centimeters of the solution with 1000 c.c. of water and use this dilute solution as a washing bath.

MR. F. HOLLAND DAY.—A short time ago I had the pleasure of spending half a day in the studio of Mr. F. Holland Day of Boston, and being shown, by the artist himself, the work he has accomplished in the past ten years or so. Mr. Day is a most pleasing man to talk to, and at the same time most interesting. He is one of the leaders in what he himself refers to as the "advanced movement" of photography and it is in no small degree owing to him that the new school has attained the prominence that it possesses to-day in America. The third American to be invited to join the Linked Ring of London, Eng., which is practically the Royal Academy of Photography, his fame is international. For one thing in particular are his pictures interesting, namely, the fact that hardly one of them possesses a single strong high light. The highest tones in his pictures correspond to about the middle tone of the average worker, and altogether it cannot be said that the effects that he produces by this means are unpleasing. Mr. Day is, however, a consistent supporter (perhaps leader) of the fuzzytype school, though here it can hardly be said that his work so appeals to one. All round, however, judging his productions from every standpoint and looking at the main chance rather than at details, his work is a living example of photography's pictorial possibilities, and as such is worthy of consideration.

It is proposed to make the season for big game in New Brunswick begin on September 1st, instead of September 15th. Somebody ought to call the attention of the Ontario game officials to this. If it passes it means that New Brunswick will get all the gilt-edged hunters, and that Ontario will get left, unless it decides to make a common-sense open season each year.

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The Russian government, it is reported, has not found the same success in experimenting with dogs to be used in actual warfare as has the German. Possibly patience and intelligent treatment were lacking.

GOOSE SHOOTING IN THE NORTH-WEST.

In the current number of the *Badminton Magazine*, Senator Kirchhoffer, who entertained the Duke of Cornwall and York during his visit to Manitoba, describes the pleasures of wild goose shooting on the plains of the North-West. It seems that some of the Duke's party should have tasted the joys of this sport but for an accident beyond the control of the Senator.

"The royal shooting party comprised fifteen guns, and seeing that my own place would only accommodate eight, I arranged that as their special trains sped eastward on the Canadian Pacific Railway some of the sportsmen should be dropped off at other points, where friends of mine would attend to their wants. Thus, two were to step off and shoot geese at Moosejaw, two were to shoot ducks at Qu'Appelle lakes, and three to go snipe-shooting on marshes near Winnipeg, while the Prince of Wales and the remainder of the party were under my own personal care at York Lodge. Unfortunately there accompanied them on the train an inspector of the North-West Mounted Police, who assured them that in such fine weather as then prevailed they would not get a shot at geese at all. Naturally impressed by such a statement, the two gentlemen who had been told off for that sport preferred to come on and join their comrades who were to slay the ducks at Qu'Appelle, where they had most excellent sport and made a large bag. But I did not hear of their alteration in my programme until we met the rest of the party at the station. Then I learned it with sincere regret, as all the indications had pointed to a most successful wild geese chase. An old English gamekeeper had been out for a week locating the flights, the farms where they were feeding had been protected from shooters, and pits had been dug in the most favorable spots, so there would have been nothing to do but drive on to the stubble and put out the decoys. Duck-shooting, as I explained to our friends, they could get all over the world, but such a flight of geese as is to be seen on these plains of Assiniboia is, as far as my experience goes, unique, and they had missed a great and thrilling experience."

Naturally Senator Kirchhoffer was loth to let the preparations go entirely for naught, and remarked to the Duke that he would take advantage of them himself later on. "If you do," replied His Royal Highness, "be sure and telegraph me the result." The way to go about the sport is thus described by the Senator:—

"The first point is to locate the fields where some large body of birds have made a feeding ground. When this is ascertained do not disturb them, but allow them to leave of their own accord. Then get your pits dug, put out your decoys, and be ready for them at daybreak. With eager eyes you watch for the first streak of dawn. Long before you see them you hear the metallic but not unmusical 'honk, honk,' that tells the birds are on the wing. Then a thin line appears on the horizon, wavering, changing, rising and falling. It is followed by a second, and still another, until the whole sky is full of them. Now is the thrilling moment. Are they coming in your direction? Sometimes a change of wind or having been shot at on that line the previous evening, will cause them to alter their flight, and you may have the mortification of seeing them stream past a mile or two to the east or west of your location; but generally, when proper care has been observed, some flocks will come your way. They see your decoys and head straight for them, lowering towards the earth as they come. There is a momentary hesitation, as something

arouses their suspicion, but an answering note or two from your goose-call steadies their nerves, and they hover and prepare to alight. Steady! Keep down! Surely they are near enough now? No; let them come in till they drop their legs. Now! and as you raise your head, with one mighty sweep of their wings the huge birds spring upward. It is too late. Their breasts are bared to the shot, and two heavy thuds tell that the 10-bore has done its work. Still keep down, for another flock is hard at their heels. Wary as he is, when once he has made up his mind as to the point he desires to reach, it takes a good deal to cause your grey goose to deflect from his course; and so the fun goes on for the better part of an hour, sometimes fast and furious, at others slacking and almost ceasing, till the flight is over. Then you gather your slain, the man drives out with the waggon to bring them in, and you to breakfast."

The net result of Senator Kirchhoffer's shoot over the plains around Moosejaw was a bag of 118 geese, and on his telegraphing the news to the Duke at Halifax he received the following gracious reply: "So glad to hear you had such good sport. I wish I could have been with you.—George." No doubt there are members of the royal party who are even now regretting that they did not avail themselves of the opportunity when it was offered.

The following highly important Order in Council has been passed:

Whereas there has been reported a decrease in the supply of fish in the Eastern Townships, due to improvident fishing,—

The Governor General in Council, in virtue of the provisions of section 16 of The Fisheries Act, chapter 95 of the Revised Statutes of Canada, is pleased to make and does hereby make the following Fishery Regulation for the Counties, in the Province of Quebec, hereinafter mentioned.

"Fishing with nets of any kind in the lakes and tributary streams of Missisquoi, Shefford, Brome, Drummond, Richmond, Wolfe, Sherbrooke, Stanstead, Compton, Megantic and Beauce, in the Province of Quebec, is prohibited.

"And no night lines used in the above prohibited districts "to have more than 100 hooks each."

These regulations should prevent the excessive destruction of fish life which has taken place in the waters affected. ROD AND GUN has given space on more than one occasion to a discussion of this important subject, and we congratulate ourselves, as well as the many good sportsmen living in the Eastern Townships, that the Federal Government has regulated the fishing in that part of the Province of Quebec.

✱

A four-day show, under the auspices of the Duquesne Kennel Club, will be held at Pittsburg, commencing March 5. There are 202 classes, the prizes being the same throughout, viz., for puppy and novice, \$5 and \$3; for limit and open, \$10, \$5, \$3. There are also a splendid lot of specials, including several cups valued at from \$50 to \$75. The judging staff is a strong one, and includes Major J. M. Taylor, Mr. Muss Arnolt, Mr. W. T. Payne, Mr. A. Albright, jr., and Mr. Jas. Mortimer.

✱

The prefect of police of Paris recently bought five Newfoundland dogs to add to the number already owned and used as auxiliaries to the river police. The dogs are used to save persons from drowning and are also useful in discovering offenders in their hiding places on the wharves.

FORESTRY

"Rod and Gun" is the official organ of the Canadian Forestry Association. The Editors will welcome contributions on topics relating to Forestry.

Edited by the Officers of the Canadian Forestry Association.

BRITISH FORESTRY

A very suggestive article, by Herbert Maxwell, M.P., appeared in the October number of the Nineteenth Century under the title of "The Sad Plight of British Forestry." Reference to the report made in 1887 by Sir John Lubbock's Select Committee of the House of Commons shows that that Committee pronounced British woodland management to be capable of material improvement and reported themselves as satisfied that a considerable proportion of the foreign timber imported might be grown at home under a more skilful system. These imports at that time were reckoned at the value of £16,000,000, exclusive of forest products other than timber to the value of £14,000,000. This value had increased to upwards of £21,000,000 in 1899, whereof £5,000,000 was paid for rough-hewn logs and £16,000,000 for sawn timber. The latter import consisted nearly

entirely of pine and fir from the Baltic, Scandinavia and Canada, and Mr. Maxwell adds, "there exists no physical reason why every foot of this should not have been grown on British soil had it been the will of our people to do so." The Select Committee estimated the waste lands in Great Britain and Ireland at 16,000,000 acres. A considerable proportion yields a good revenue for sporting purposes, but much of it is put to practically no use whatever.

The general situation in regard to the timber of the world is that the visible supply is decreasing while the demands are constantly increasing, particularly in Britain, America and Germany, with the result that the recent advance in prices will not only be maintained but will increase. If present forecasts are correct the demand must overtake the supply before many years have passed, but with the slow maturing of timber crops it is necessary to make provision far in advance of the need.

In view of this approaching crisis, Mr. Maxwell asks the question, "What provision is being made to meet it?"

The woodland of the United Kingdom extends to a little over three million acres. These three million acres would not suffice, even if they had been under the most skilful management for the past one hundred years, for the present requirements of the British timber market. In fact, it is estimated that at least three times that area would be required, or even twelve millions, to supply what would be required when plantations now formed would be available. But the situation is even worse than this would indicate, for the general quality of the timber grown on the three million acres is even more discouraging than the deficiency in extent. On only a few estates in Scotland is the forest properly managed. The average English landowner knows nothing of economic forestry; he has a desire for game and pride in great trees and can see nothing beyond. As an example of this, Mr. Maxwell quotes the following instance of the treatment of an oak grove on an estate in the Midlands:—

"These oaks have been grown well and sufficiently close to draw them up to a great height, thus taking full advantage

of the good soil and propitious shelter; they averaged about 80 ft. in height, with noble, clean stems, some 40 or 50 ft. without a branch, and seemed to be about 200 years old. Assuming that the wood consisted of about 50 acres, there could not have been less than 9,000 or 10,000 cubic ft. of sound oak timber per acre (according to the reduced British measurement of square-of-quarter



E. BROCKLEHURST, Esq., M.F.H., KAMLOOPS, B.C.

er girths) when this oak crop reached maturity fifty years ago. At 1s. per foot, this represents a value of £22,500 or £25,000. The greater part of this value has been sacrificed in the supposed interest of the landscape. Ten or fifteen years ago the oaks were suddenly and severely thinned, by way of improving the beauty of the wood; and the admission of light has brought up a strong growth of ash and beech saplings, with other undergrowth, among which have been planted a number of what are usually classed as ornamental *coniferae*, but which, in such a scene, are simply so many eyesores. So far from the beauty of this fine woodland being enhanced by what has been done, it has been ruined. My host pointed out with much concern that the oaks were failing. His forester, had he known the rudiments of his business, when he was directed to change the close oak wood into an open one, should have warned his employer that the

trees left standing were bound to fail. The inevitable result of suddenly isolating an oak which has been grown to middle age or maturity in close highwood is that an eruption of twigs and branchlets springs from the trunk and from the branches below the crown; the tree becomes 'stag-headed,' and the timber is greatly spoilt. That is exactly what has happened in the wood I am describing. These oaks have passed their best; they could not have improved even had they been let alone; treated as they have been, they are past praying for, and the rest of their existence must be a long-drawn process of decay, diversified with random and morbid growth."

Turning to the State woodlands, the situation is not in any better condition. The forests of Belgium cover an area of 1,750,000 acres and yield a return of £1,000,000 sterling a year. Under equally careful and skilful management the existing 3,000,000 acres of British woodland should yield £7,000,000. But the New Forest, containing 63,000 acres, on account of the sentiment in favor of the vested rights in grazing, etc., is left largely as poor pasture, there being only 17,600 acres of thriving wood. In very few of the other State forests—even in those like the 25,000 acres of the Forest of Dean, where wood is grown and cut to supply the market—do the returns meet the expenditure, let alone paying the rent of the land. There is no net income, but a deficit.

Mr. Maxwell urges the importance of a proper management of the State forest, first, in order to establish a standard of management; second, to set up a regular trade in home timber; and third, for the social effect of establishing a healthy industry like forestry in a thinly-populated region. To put the matter in a practical shape, Mr. Maxwell submits the following calculation:

"Suppose that Parliament could be persuaded to vote a sum of £10,000 a year for the purchase and planting of suitable land. There are tens of thousands of acres now offered for sale in Scotland, producing an annual rent of not more than two shillings an acre as sheep pasture, of indifferent or no merit as grouse ground, but very suitable for growing timber. Thirty years' purchase—a liberal price, as times go—would secure 1,000 such acres for £3,000. Planting this at 3 feet by 3—probably the most profitable distance on level ground, although many planters save expense by placing the trees 4 feet apart) will require 4,840,000 trees for the 1,000 acres (it will take one-third or one-half less on sloping ground), and will cost about £6 an acre—£6,000. Here we have an immediate initial outlay of £9,000, supposing the whole area to be planted at once; but it might be found expedient to spread the planting over five or even ten years, so as to secure a successional period of maturity, if the same kind of trees are used on the whole of the ground. The balance of the £10,000 voted, £1,000, invested at 3 per cent., would pay the annual tool bill, in addition to which an annual charge must be reckoned upon:

Head forester.....	£120
Four woodmen at £60.....	240
Repairs and buildings.	100
<hr/>	
Total.....	£460

or say £500 a year. Shall we be able to meet this charge, receive interest on the capital sunk, and find our capital in hand at the end of the century? We ought to do so, if the statistics of commercially managed woods on the Continent are trustworthy, for we intend to manage this forest on stringently economic principles, not planting oak here to please somebody's fancy, nor fir there because it will look romantic.

"For the first ten years no return can be expected from the plantation; therefore the capital of £9,000 originally sunk will have increased in that time at 4 per cent. compound interest to £13,322 3s. 6d. In order to receive 4 per cent. upon this money, and to defray the annual expense of £500, we must make a net profit of £1,033 a year off our 1,000 acres. Between ten and fifteen years' thinnings will be worth little except for fencing purposes, and cannot be reckoned on as doing more than covering the expense of cutting and removal. From fifteen years onwards the income will steadily increase, beginning with pit-props, for which there is an almost insatiable demand in this country, proceeding to the medium-sized trees removed, in judicious thinning, until the period of commercial maturity, which in the case of Scots fir and larch should be at about eighty years, when the regular falls will begin.

"Taking prices at the improbably low figure of 6d. a foot, 1,000 acres, yielding an annual average of 75 cubic feet per acre, will give a gross return of £1,875 5s., or £1 17s. 6d. an acre from land which, as sheep pasture, yielded a rent of two shillings an acre, or £100 for 1,000 acres. The average balance-sheet would appear as follows, subject to a slight additional charge for insurance.

EXPENDITURE.		RECEIPTS.	
	£ s.		£ s.
Interest at 4 per cent. on capital	£13,322 3s. 6d.	Sale of 75 cubic feet per acre at 6d. on 1,000 acres.....	1,875 5
Average annual expenses.....	500 0		
Net profit.....	842 7		
	<hr/>		<hr/>
	£1,875 5		£1,875 5

"If no more than £10,000 were voted annually for the next fifty years the State would have made a progressive investment of half a million—about the cost of *four days' war against the Boers*—and earned a gross revenue of £93,750, supposing the price of timber fifty years hence at no more than 6d. a foot. The experiment would seem to be worth trying."

*

FORESTRY BULLETINS

Anyone interested in forestry in any of its phases will find much interesting and useful information in the bulletins which are issued from time to time by the Bureau of Forestry of the United States. It was the intention to call attention to these bulletins as received by us through the kindness of the Bureau, but as this has not been done with regularity we wish briefly to mention those that have reached us during the past year:—

"The Forest Nursery," by Geo. B. Sudworth, Dendrologist of the Bureau, gives in a concise form the information in regard to the collection of tree seeds and the propagation of seedlings which enquiries made of the Bureau from time to time show to be required by farmers and others interested in tree planting. The aim is to supply the needs of those who have had little or no experience, and with this object in view definite instructions are given as to the time and means of collecting seeds, the proper methods of storing, testing vitality, identification, etc., the preparing of seed beds and setting out and care of seedlings, wintering and transplanting. The illustrations add much to the usefulness of the report, as does also the systematic list of useful timber trees suitable for planting, which occupies the last four pages.

"Practical Forestry in the Southern Appalachians," by Overton W. Price, Superintendent of Working Plans, is a re-

print from the Year Book of the Department of Agriculture for 1900. A description is given of the forest and the methods of lumbering followed up to the present time which, both as practised by farmers and lumbermen, have done much needless harm to the trees, while the fires, over which there is little control, are responsible for the destruction of much more. For cut-over land, now covered by a second growth of oak and pine chiefly, improvement cuttings to remove undesirable species and to promote a denser and healthier growth are suggested. Such cuttings have been found by experiments at Biltmore to involve no financial loss if properly managed. The procedure for dealing with the virgin forest is outlined in the two following suggestions:—

(1) Remove all diseased, over ripe, or otherwise faulty trees of a merchantable size, where there is already sufficient young growth upon the ground to protect the soil and to serve as a basis for a second crop of timber.

(2) So direct the cuttings that the reproduction of the timber trees may be encouraged in opposition to that of the less valuable kinds.

"Forest Extension in the Middle West," also a reprint from the Year Book, is by William L. Hall, Assistant Superintendent of Tree Planting. It is first pointed out that the two facts which are clear in regard to tree planting in the West in the past are.—First, that there is a general aimlessness and lack of system in both planting and management; second, there is but a small percentage of thrifty plantations. The aims to be served by the plantations, the conditions of growth, the relative usefulness and value of different species have not been understood. The rise of value consequent upon the diminution of the supply in the Mississippi Valley is illustrated by fence posts, which are now selling at ten to twenty cents instead of eight to twelve cents, the price ruling ten years ago. Telegraph and telephone poles are worth fifty per cent. more than twenty years ago, and railway ties twenty-five per cent. more. These increases have made growing profitable, and the subject is therefore deserving of study and attention. The different species suitable for planting are mentioned with some detail, and though many of them are not fitted for the Canadian West, there are many items of useful information that will be found of great interest by all who are considering the problem of forest extension.

"A Forest Working Plan for Township 40 in the New York State Forest Preserve," by Ralph S. Hosmer and Eugene S. Bruce, gives a detailed description of the plans adopted for managing this forest tract. The main purpose is to outline a method of management under which the merchantable timber may be cut in such a manner that successive crops may be obtained and the condition of the forest constantly improved. The total area of the tract is about 25,660 acres of rocky and mountainous land. An examination of the trees was made, and from the information thus obtained a calculation of the production was made, and from these data the method of cutting was decided upon. The species to be lumbered at present are pine, spruce and balsam. This pamphlet will be found of great value by those who are engaged in practical lumbering.

There have also recently come to hand "Notes on the Red Cedar," by Charles Mohr, Ph. D., and "Tree Planting on Rural School Grounds," by Wm. L. Hall, which will be noticed more at length at a later date. The latter pamphlet is specially valuable for those interested in the celebration of Arbor Day and the beautifying of school grounds.

The third annual meeting of the Canadian Forestry Association will be held at Ottawa on the 6th and 7th March. The following is the programme so far as arranged at the time of going to press: "Eastern Forest Trees grown at Victoria, B. C., from seed imported from the East," by His Honor Sir Henri Joly de Lotbinière; "Forestry in Ontario," by Thos. Southworth, Director of Forestry for Ontario; "The Management of Wood Lots," by W. N. Hutt; "The Growth of Forest Trees," by Professor E. C. Jeffrey, of the University of Toronto; "The Making of the West," by Professor John Macoun; "The Contribution of the Experimental Farms to Forestry," by Dr. Wm. Saunders; "Tree Planting on the Prairies," by Norman M. Ross, Assistant Superintendent of Forestry for the Dominion; "The Forest Fires of 1901," prepared by instruction of the Association; "Forestry in Prince Edward Island," by Rev. A. E. Burke, of Alberton. Circulars will be sent to all the members giving full particulars.

*

The Canadian Forestry Association extends its heartiest congratulations to its Vice-President for the Province of New Brunswick, who is now His Honor J. B. Snowball, Lieutenant-Governor of that province. His Honor has taken a great interest in the work of the Forestry Association, and his presence at the annual meeting will be much missed. His high position may, however, give larger opportunities for advancing forestry interests, and we feel convinced that full advantage will be taken of them. This is not the first time that a member of the Forestry Association has been so honored, as the respected President, Sir Henry Joly de Lotbinière, was some time ago appointed to a similar high office in our far western province, British Columbia. The Canadian Forestry Association cannot but feel honored in the honor thus done to its officers, and while it is to be regretted that it will not be possible for them to take such an active part in the work of the Association at Ottawa, the presence of energetic members in such influential positions means much for the future of the Association and—we may add—of the Dominion.

*

Rev. Dean Paget, of Calgary, whom we are glad to welcome as a member of the Canadian Forestry Association, writes us that on the grounds of the rectory, which has recently been erected on virgin prairie, he has had a plantation of trees set out. The ground was ploughed, manured and planted thickly in front and on the sides with poplars, cottonwood and spruce alternately. The rule which has been followed in Calgary is that spruce must be planted in the spring, but as an experiment they were set out in this case early in November. We hope to be able to furnish information as to the results of this experiment when the plantation is sufficiently advanced.

*

Question Drawer.

D. JAMES, THORSHILL, ONE.—1. On October, 1899, and again in October, 1901, I planted in clay soil, well drained and rich, about 100-shell bark hickory nuts. Not one grew. Can you suggest a cause? 2. In the fall of 1900 I planted a variety of nuts and seeds supplied from Gueph. None grew. Can you suggest a cause? 3. I have a 1/2 acre of about 1 1/2 acres of good clay loam, cannot use it for grain; also a swamp of about 1/2 acre. How should I prepare it to grow a crop of trees? What would be a most suitable and profitable kind? 4. How many cubic feet per year per acre should a well wooded deciduous bush grow?

ANSWERS TO QUESTIONS 1 AND 2.—It would be impossible, knowing none of the conditions, to assign any particular reason as the cause of your failure. Any one or more of the following may have had something to do with it :

1. The seed may have been poor, that is, the kernels dried or worm-eaten, thus having no vitality. 2. The seed may have been planted too deeply in the soil ; on an average a seed should be covered to a depth of not more than two or three times its own diameter. 3. After planting, squirrels or mice may have carried off or eaten the seeds and nuts. This is one of the chief dangers to be guarded against where nuts are planted. 4. The soil may not have been sufficiently moist to cause the hard shell of the hickory to disintegrate sufficiently to allow the kernel to sprout. Seeds often lie in the ground for one or two seasons without germinating if conditions of soil, moisture, etc., are unfavorable.

ANSWER TO QUESTION 3.—PREPARATION OF HILLSIDE.—The chief object in any preparation of soil for tree planting is first, to remove any soil covering such as sod, weed, scrub, etc., which might prevent young trees from growing, and second, to loosen the ground as deeply as possible in order to assist the young seedlings to make rapid foot growth during the first few years after planting. If the plot of land mentioned is at present in sod, it should be ploughed in the early summer about four inches deep and again in the fall as deeply as possible, at the same time using a sub-soil plough. The ground should be left rough over winter. If the hillside is so steep that there is danger from washing, strips of sod two to three feet wide at intervals of about fifteen feet might be left running parallel with the contour lines of the slope. In any case the furrows should follow the contours.

PREPARATION OF SWAMP.—If the land is soaked with stagnant water it must be drained to a certain extent, as trees require a certain amount of air at the roots. Perhaps the best method of planting is what is commonly known as "mound planting." This consists of planting young seedlings on mounds of earth thrown up above the general level of the surface, either by digging holes or trenches.

VARIETIES TO PLANT.—This depends on, first, the sort of produce it is wished to obtain, whether fuel, fencing or other material, and second, the local conditions affecting tree growth. For instance, the hill may slope either north, south, east or west. The north and east slopes are most favorable to tree growth, as they are always moister, and here such trees as sugar maple, walnut, hickory, etc., may be planted. For a small plot perhaps sugar maple would be as good as anything. It is a rapid grower, produces good fuel, and after a few years sugar may be tapped. On dry, south slopes conifers, such as white, red or Scotch pine or larch, will generally prove more successful than broad leaf varieties. In the swamp or wet lands, ash, elm, willow, cedar, and other trees which grow naturally under such conditions, should be selected. Some forms of tree willow make very rapid growth and are easily propagated from cuttings.

ANSWER TO QUESTION 4.—It is absolutely impossible to answer this question with any degree of accuracy, as conditions of growth in this country have as yet received but very little attention. In order to determine the exact annual increment for any given species, it is necessary to make careful measurements, year after year, on the same plot of ground. Different classes of soil and differences in climate still further complicate the work.

The following figures are taken from the yield tables compiled in Germany by Baur, and apply to a beech forest :

Age	BEST SOIL		FOREST SOIL	
	Cub. ft. of wood-growing stock	Cub. ft. for thinnings	Cub. ft. of wood-growing stock	Cub. ft. for thinnings
20	1143	170	355	99
40	5121	397	1462	170
60	5992	539	1817	241
80	3236	497	3124	227
100	10238	304	5345	156
120	12942	255

These figures may give some idea as to the growth of a fully-stocked broad leaf forest, but they cannot be taken as applying accurately to Canadian forests, as the rate of growth is so dependent upon local conditions.

N. M. Ross.

Answers to Correspondents.

L. C. ROBERTS—The best bass lakes we know of in Northern Ontario are Lady Evelyn, Diamond, Obabika and Temagaming, but there are many others in that region which are probably as good. You must not forget, however, that the waters wherein black bass are found form a very small percentage of the whole fishing area of the northern part of the province of Ontario. The apparently capricious distribution of the various species of fish is yet a puzzle to the foremost ichthyologists. For instance, there is very excellent bass fishing in the Montreal River for a few miles above its junction with the Mattawabika, but higher up, according to Mr. Farr, a trustworthy authority, there is none. The two fish of almost universal distribution are pike and pike perch, usually called doré, in many of the larger lakes the lake trout is found, in a few of them the small and large mouthed bass exist, and in a very few streams and lakes, which the coarser species have been prevented from reaching owing to falls or a series of rapids, there is fishing for the brook trout. We do not believe there are mascalonge in any of the waters of northern Ontario or Quebec, but in the present state of our knowledge it would be rash to say that they do not exist. The pike run heavy and are very game and determined fighters, hence they have often been dubbed mascalonge.

ESQUIRE—No doubt as an old fisherman you have learned the wisdom of taking all such stories with a grain of salt. The catch in question may or may not have been made, but in any case it was a very unsportsmanlike proceeding, as the lake trout were then on their spawning grounds.

Fishing in Te-gou-sie-wabie.

TO THE EDITOR OF ROD AND GUN :

I was glad to see the correction in last month's issue to my statement that there was no trout fishing in Te-gou-sie-wabie. I can explain easily how I formed this erroneous conclusion : Owing to John's broken English I understood him to say that there were speckled trout in the lake, and I, therefore, only fished the shallower bays, whereas had I been after lake trout, or "salmon trout" as Mr. LeHeup calls them, I should have trolled in the very deepest water I could find, because in hot weather in August I do not think that Mr. LeHeup or anybody else would find them where he took them later, during the spawning season. As every fisherman knows, the lake trout leave the deeps in the fall, and during October are found in quite shallow water, as they spawn on the reefs and around rocky islands and shores.

I forgot to say that the Indian boy caught any number of small perch, but I don't count that kind of fishing.

Montreal, P.Q.

St. Croix.

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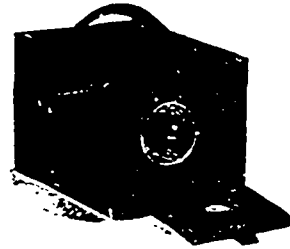
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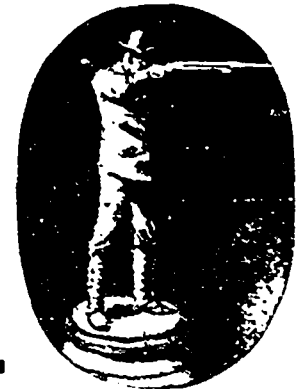
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