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FOREST, LAKE AND RIVER VOLUME ONE
The Atlantic Salmon. *Salmo salar*

Painted with the especial purpose of showing, not only the silvery sheen, but also the glowing coloring alone seen late in September and October.
The Atlantic Salmon

Painted with the special purpose of spawning not only the salmon species, but also the salmon color. These scenes take place in September and October.
FOREST, LAKE AND RIVER
The Fishes of New England & Eastern Canada

By
FRANK M. JOHNSON

VOLUME ONE

BOSTON • PRINTED FOR SUBSCRIBERS • MDCCCCCI
A Toast

GENTLEMEN

"TO MY FELLOW SPORTSMEN"
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CONTAINED IN THE

PORTFOLIO

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PREFACE

"Carpe diem, quam minimum credula postero"

It may be well at the beginning to set forth the motive which inspired the present work, in which I have endeavored to depict by pen and brush the ineffable charm of Nature and the beauty which she everywhere bestows with lavish hand.

From boyhood an ardent lover of the treasures of glade and woodland, I have, in the all-too-short intervals allowed between attention to more prosaic duties, devoted myself to the capture and study of the finny specimens of life existing beneath the surface of fresh-water lakes and streams, and of those found in old Ocean, whose mysterious alchemy adds to his denizens increase of strength, power, and size, and that marvellous brilliancy which is ever to be found within the realm of Neptune.

My efforts have been directed towards gathering all the information possible to obtain regarding the fishes that inhabit the fresh and brackish waters of New England and Eastern Canada, and to present in book form to my fellow-anglers, in the most
attractive way, the results of my labor and research.

In addition to this, it has been my endeavor to awaken an interest in the transplanted charrs or the trouts, which, in the near future, may be expected to inhabit many of our lakes and streams to which they are well adapted, and where they will, doubtless, add variety to the sport of angling, owing to the excellence of their game-like characteristics. The large reproductions of the oil paintings which accompany this work will, if closely examined, show clearly the marked differences of these charrs, while in the monographs, the details are discussed minutely.

It is impossible to guard absolutely against certain differences of opinion which are apt to arise among my readers and fellow-sportsmen. Fish that are typical of the territory covered, have been chosen for the purpose of illustrating, and it is obviously impossible that such selection should be made so that the coloration would appeal to every rodsman as exactly correct, for this factor is dependent upon many varying circumstances. This is peculiarly true of such species, for instance, as the trouts.

If, in the hearts of those who read these pages, I can re-awaken old, but never-to-be-forgotten
PREFACE

memories, and again suggest the thrill that accompanies the whirring song of the reel, if the perfume of the forest can be made almost actual in the imagination, and for the moment all cares, worries, and disappointments be cast aside, I shall rest content. It has been my aim to lead you back to the rushing river, the liquid murmuring and crystal flashing of the mountain brook, or the peaceful surface of lake and pond stirred into undulating ripples by the sweet, soft summer breeze. If the perusal of these pages takes you in spirit back to the days when you lived close to Nature, my aim will be fulfilled.

It is my hope that some of the suggestions set forth in these pages may meet with full approval, and also be of actual service to the reader, and that interest and pleasure will be his in the perusal. Thus is my modest craft, built with that delightful labor that physics pain, launched upon its voyage, in the hope that it will receive a hearty welcome from sportsmen and nature-lovers in many a port as yet uncharted in the author's mind.

ACKNOWLEDGMENTS

It has been my good fortune to have associated with me in this undertaking Mr. A. D. Turner,
of New York. Mr. Turner is not only an enthusiastic sportsman, but an artist who, in order to obtain the true effects of color, light, and shade, has often braved the dangers of flood and field, and lived within the wilderness for his art’s sake alone. Like myself, he has noted much in detail that might escape a casual observer. His illustrations of fish that adorn this work were taken direct from nature, and the sketches in black and white from his pencil were made for this work alone. To him I owe much for his skill, willingness, and patient labor. The reader will at once perceive how much of the interest of this book is due to the labors of so rare and exquisite an artist.

To Mr. S. E. Bickford, of Newport, New Hampshire, I am under many obligations for his assistance in furthering the illustrative portion of this work, for securing perfect living specimens of fish selected for the oil paintings, and for his valuable studies in pastel.

Valuable aid was extended to me by Mr. William C. Harris, of the "American Angler," in the preparation of the monographs, the classification of the fishes, the arrangement of the articles, and for other useful suggestions. My thanks are also due him for the introduction.

To the United States Commissioner of Fish
PREFACE

and Fisheries and his aids at Washington, and to the Fish Commissioners of New England States and Canada, I am greatly indebted for placing at my disposal valuable literary data and for facilitating careful and minute study of fish in the various hatcheries.

From Dr. James A. Henshall, Superintendent of the United States Fish Commission Station at Bozeman, Montana, I have received much encouragement from the inception of the work; and during its preparation I have had the advantage of his long experience and his deep knowledge of the subjects treated.

Mr. E. T. D. Chambers, of Quebec, kindly consented to cover the field embracing the fishes of Eastern Canada, and Mr. G. M. Fairchild, Jr., of Cap Rouge, Quebec, has favored me with the benefit of his experience.

The author is under deep and continued obligation to many kind friends and fellow-anglers who have aided him greatly in the production of the work. To the following gentlemen, among others, he wishes to express his earnest appreciation: Mr. Eugene McCarthy, of Syracuse; Mr. Archibald Mitchell, of Norwich, Connecticut; Mr. Charles Frederick Stansbury, of New York; Mr. C. E. Roberts, of Boston; Mr. Edward xxi
PREFACE

Everett, of Boston; Mr. George H. Burtis, of Worcester; Mr. E. S. Osgood, of New York; Mr. George McAleer, of Worcester; Mr. H. L. Jillson, of Worcester; Mr. Albert French, of Calais, Maine; Dr. John D. Quackenbos, of New York; Reverend J. C. Bodwell, of Lyndonville, Vermont; Mr. Charles F. Orvis, of Manchester, New Hampshire; Mr. George W. Van Siclen, of New York; Mr. Benjamin L. Whelpley, of Boston; Dr. Heber Bishop, of Boston; Mr. Charles H. Taylor, Jr., of Boston; Mr. William D. Orcutt, of Cambridge; Mr. William A. Chase, of Holyoke, Massachusetts; Mr. George Van Felson, Quebec; Mr. A. H. Thayer, of Dublin, New Hampshire; and The Garo Studio, of Boston.

A. H. Johnson.
INTRODUCTION

ANGLING has become a force in literature beyond that of all other outdoor recreations. About thirty-five hundred editions, and reprints of nearly twenty-five hundred distinct works on the "art recreative," have been issued, and the bibliophile of this class of literature may be said to riot in the literary wealth at his command. We cannot wonder at his enthusiasm and prodigality of expenditure in gathering the book lore of the art he loves so well. It not only bears the mark of great antiquity, but, with the great advance in typography during the last century, the volumes on this subject are marvels of beauty in mechanical execution, and rich in practical value and interest, for the scientific demands for artistic skill in luring keep pace with the growing scarcity of game fish near the centres of civilization.

Anglers, particularly those who delight in the higher branches of the art, seek for books on their favorite sport with an eagerness surpassing that of an ordinary collector of general literature. A
teacher of angling, be he practical or philosophical, gets closer to his readers than an author of a book on any other subject. He communes with them! He is looked upon, not only as a Mentor, but as a delightful companion and friend.

We cannot wonder at this result, for there is something subtle in the charm of a good book on angling, the influence of which is felt by all who read it, although some there be who never handled a rod or lured a fin. No man can creel a trout on a mountain stream without feeling the elevating influence of his environment; for winsome nature is, all the while, at his heart’s door with such a gentle and persistent knocking that the best part of him is opened to her for all the days of his summer outing, and even after that is ended, he comes back to bricks and mortar a better man, with broader sympathies for his fellows. If he chances at such a time to write a book, not a line in it will be callous in its humanity, and its covers will brim with faith, hope, and charity for all men.

These somewhat desultory notes are suggested by the sumptuous volume now before me,—“Forest, Lake, and River.” Certainly none such has ever been given to the Craft, and, as I look upon the gorgeous, but chastely artistic beauty of
INTRODUCTION

its covers, hesitation is natural in exploring further, lest the contents may not prove worthy of the elegant garb they have been given. Such fears were groundless.

This work of art and of practical value supplies a need of New England anglers and of the fraternity at large, in that every rod-fish of the northeastern coast, and those of the inland waters of that section, have been gathered en masse, then classified and arranged for the first time in ichthyic literature, that the angler-naturalist, or the less-informed angling tyro, as well as those who are past masters of the art, can be instructed as to the habits, habitats, modes of capture, the best lures, the most serviceable tackle, and last, not least, even the varied and sometimes strangely developed idiosyncrasies of each of the fishes that make their homes in the waters of New England and Eastern Canada, so far as the western limits of the Province of Ontario extends. This information, doubly valuable to the observant and knowledge-seeking angler, is supplemented on nearly every page with object lessons, Kindergarten studies, as it were, in the black and white etchings, anatomically correct and true to life in every detail of form, including the more minute ones of the exact number of rays and spines in the construction of the fins, the trend
of the lateral line, the placement, number, and relative size of the scales and other minor but important characteristics.

And, all through these practical teachings, the author has infused a touch, a breathing, as it were, of the elevating influences of life along the streams and in the depths of the forest. He has handed down to us, through the centuries, the pure spirit of Walton, in that our Old Master tells us in words never to be forgotten by his scholars:

"And the birds in the adjoining grove seemed to have a friendly contention with an echo whose dead voice seemed to live in a hollow tree near the brow of that primrose hill. There I sat viewing the silver stream glide silently toward their centre, the tumultuous sea, yet sometimes opposed by rock or pebbles that broke and turned them into foam. As I sat there, these and other thoughts had so fully possessed my soul with content that I thought, as the poet has so happily expressed it:—

"'I was for the time lifted above earth
And possessed joys not promised at my birth.'"

It has been my privilege to view the original oils from which the replicas of the large lithograph plates were made. These reproductions
INTRODUCTION

testify to the marvellous progress that has been effected in color work. When laid side by side with Kilburn’s fishes, lithographed over a quarter of a century ago, the art seems to have reached perfection in softness of tone and mellow diffusion of colors, which fade and gleam in the live fish with kaleidoscopic rapidity. The talented author, Mr. A. D. Turner, who painted the oils, has wisely avoided Kilburn’s error, who, in exactness of copying the minute external anatomy of a fish, failed to even suggest one in the enjoyment of life or in the throes of death.

I believe that “Forest, Lake, and River” will now, and in the years to come, be a marvel of beauty and skill to the angling fraternity, a high landmark in book work, and a testimonial to its author’s artistic nature and practical appreciation of the needs of his brother anglers when in pursuit of their favorite pastime.

New York, February, 1902.

Wm. C. Harris
Figure of a Fish showing the location of parts named to facilitate in descriptions.

- 1. Snout
- 2. Jaw
- 3. Premaxilla
- 4. Maxilla
- 5. Frontal
- 6. Mandible
- 7. Dentary
- 8. Pterygoid
- 9. Palatine
- 10. Vomer
- 11. Quadrant of canals
- 12. Distance from snout to vertebral column
- 13. Vertebral column
- 14. Occlusal surface
- 15. Upper jaw or maxilla
- 16. Lower jaw or mandible
- 17. Supraoccipital
Figure of a Fish showing the location of parts usually referred to in descriptions

1. Dorsal fin.  
2. Adipose fin.  
5. Pectoral fin.  
6. Ventral fin.  
7. Lower jaw, or mandible.  
8. Upper jaw, or maxillary.  
9a. Supplemental maxillary.  
11. Caudal peduncle.  
12. Lateral line.  
13. Series of crosswise scales usually counted.  
15. Eye.  
16. Head.  
17. Depth.  
18. Base of caudal.  
19. Distance from snout to nape or occiput.
(1) Cisco or Lake Herring. *Argyrosomus artedi*

(2) Rocky Mountain Whitefish. *Coregonus williamsonii*
The salmon family, *Salmonidae*, consists of fourteen genera and subgenera and seventy species and subspecies. These include the whitefishes, the ciscoes or lake herrings, the "inconnu" of Arctic America (an intermediate form between the whitefish and the trout), the sea-salmons of the Pacific and the Atlantic coasts and streams, the salmon-trouts, the charr-trouts, and the Great Lake trouts, all of which have the characteristic fatty or adipose small second dorsal fin situated on their backs near the tail fin. All the above species, except the commercial or common whitefish, are noted for their activity and game qualities, particularly one of the whitefishes, — the species known as the "Rocky Mountain whitefish" or "mountain herring," which rises greedily to the artificial fly and fights viciously.

Many species, notably the salmons of the Pacific (five species) and the Atlantic form (one species), invariably go down to the ocean after spawning, and those known as trouts on the Pacific slope also do so when access to salt water is at hand. Our
New England brook trout (*fontinalis*), when living in the lower portion of the fresh water streams that flow into the estuaries of the Atlantic, also seek temporary homes in the salt water, where they increase rapidly in weight, and lose, somewhat, the velvety glow of their skins, and their red spots become indistinct or entirely disappear.

The species known as the "sea trout" is anatomically identical with *fontinalis*, but passes the greater period of its life in the ocean or its estuaries, very often becoming nearly bright silver in coloration. In Massachusetts these fish are called "salters," under which name they are treated at length in another chapter.

Two species of salmons (the ouananiche and Sebago forms) are landlocked, that is, do not descend to the sea after spawning or at any other time. The first named of these is more generally known as the "winninish" or "wannanish," and is, without doubt, the most game, for its size, of the fishes belonging to the salmon family; it reaches a maximum weight of eight pounds, with an average of two and one-half pounds. There are no structural differences between the ouananiche of the Lake St. John section and the landlocked salmon of other waters, except in size, the latter growing to a weight of twenty-five to thirty pounds. Under
THE SALMONS

the caption of "The Sea Salmon and its Landlocked Congener," these fishes are described more fully on other pages of this volume.

The only Pacific salmon that has been transplanted to New England waters is the species known popularly as the "quinnat salmon"; it bears, however, many other vernacular names, such as king salmon, Columbia salmon, Sacramento salmon, chinook salmon, saw-kwey or sauk-eye, etc. The color of the flesh is red and rich, particularly in the early spring when fresh run from the sea; and it is the largest of salmons, individual fish having been taken weighing seventy to one hundred pounds. These qualities render it highly prized as a commercial fish, and with this in view, the National and State Fish Commissions planted the species in the various rivers of the New England and Middle States, but with no success. A few of the quinnats returned for a year or two to the waters into which they were originally introduced, and then gradually lessened in numbers, and finally disappeared.

Of the whitefishes (Coregonus), there are six genera and subgenera and twenty-one species and subspecies. Of these, including the ciscoes so-called, there are only eight varietal forms found in New England waters and those of Eastern Canada, the
Great Lakes containing most of them. They are classified as follows:

The Richardson whitefish (Coregonus richardsonii) is considered a doubtful species, being probably identical with other species of the Arctic region, where it is found. The present name and classification of this fish is only provisional.

The pilot-fish, menominee whitefish, shad-waiter, and round whitefish (Coregonus quadrilateralis, the specific name from the Latin "four-sided," from its somewhat peculiar shape) inhabits the lakes of New England and the Great Lakes. It may be recognized by its long head, compressed and bluntly pointed snout, small adipose fin, and by the dark bluish color of the body above the lateral line and the silvery hue below. It is very abundant in its native waters, which are deep and of low temperature.

The common whitefish (Coregonus clupeiformis, the specific name from the Latin clupea, "a shad or herring") is found in the Great Lakes and neighboring waters, and very rarely ascends streams. It may be distinguished from its congeners by its elevated body, comparatively small head, and blunt snout, which is somewhat "obliquely truncated," — that is, lopped, maimed, or cut off, — by its dusky lower fins, olivaceous coloration above the lateral line, and white, but not silvery, color below. This
species does not take the bait, living on small crustacea or other minute foods on the bottom; instances, however, have been known when they have been taken on hook and line with very small natural lures, doubtless, by accident, when the fish have been feeding, by suction, as it were, on the bottom of the lake.

There is another whitefish living in New England and in the Great Lake waters, which is abundant in cold, clear lakes and in streams of low temperature and of considerable size. It is technically called Coregonus labradoricus, and popularly known as the Sault whitefish, Musquaw River whitefish, and the whiting of Lake Winnipiseogee. It has a small mouth, short lower jaw, a projecting snout, and on the tongue will be found three series of small teeth. The coloration is bluish black above, silvery below, and on the edges of the scales small dark spots are distinctly seen.

Of the ciscoes (Argyrosomus, from two Greek words signifying "silver" and "body") there are one genus and twelve specific and subspecific forms, of which, however, only five inhabit the Great Lakes, and none, so far authenticated, have been found in the waters of New England. Those of the Great Lakes are:

The moon-eye cisco or the kieye of Lake
Michigan (Argyrosomus hoyi, the specific title being after Dr. Hoy, an able naturalist of Wisconsin) is very closely allied anatomically to the whitefish. It has a compressed body, an elevated back, and a snout somewhat truncated and similar in form to the muzzle of the common whitefish. The coloration, however, is much brighter than that of the whitefish named, a light iridescent blue appearing above, and on the sides and lower part of the body, a rich bright silvery glow is seen, not merely white, as in the common whitefish; the cheeks are also silvery in coloration. The male fish is more highly colored than the female, the iridescent blue on the back being more radiant.

The other four forms of the ciscoes all live in the Great Lakes and in waters inclosed in their basin. They are:

The cisco, lake herring, Michigan herring, popularly so called, is ichthyologically known as Argyrosomus artedi, the specific name after that of Petrus Artedi, the recognized father of systematic ichthyology. This fish is very abundant in its indigenous habitats, and very often visits shallow waters. It has a high fin on its back, the rays of which shorten abruptly posteriorly; the coloration of the body is bluish black, sometimes greenish
above and silvery below, with dark specks on the scales. It is closely allied to, but larger than the celebrated cisco of Lake Geneva, Wisconsin, which comes to the surface during the latter part of May and the early days of June, feeding voraciously on the May fly which at that period appears in myriads on the water and shores of Lake Geneva.

The long-jaw or bloater cisco (*Argyrosomus prognathus*, the latter name being from two Greek words meaning "forward" and "jaw") lives in the deep waters of the Great Lakes and probably in other adjacent localities. It may be differentiated from the other ciscoes by the bright golden reflection on a small area back of the eye, and by the distinct, but light, longitudinal stripes (formed by the minute specks on the edges of the scales) along the entire length of the body.

Another inhabitant of the Great Lakes, notably Lake Michigan, is the bluefin or blackfin cisco, the *Argyrosomus nigripinnis* of the books, the specific appellation being from the Latin and signifying "black" and "fin," and by the blue-black coloration of all of its fins it may be distinguished from its fellows of the cisco class.

The tullibee or mongrel whitefish (*Argyrosomus tullibee*, the specific title being an Indian name for the fish) is a handsome and well-marked species,
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growing to a length of eighteen inches or more, with a deep, short body much compressed like that of the shad, a large mouth and a projecting lower jaw. The coloration is bluish above and whitish on the sides of the body. It inhabits the Great Lakes and the waters to the northward of them.
THE SEA-SALMON

AND ITS LANDLOCKED CONGENDER
THE SEA SALMON
Salmo salar
The Sea Salmon. *Salmo salar*
THE SEA–SALMON
AND ITS LANDLOCKED CONGER

SALMO SALAR, the leaper, so-called from the Latin, salio, "to leap," may be identified by its elongate, clipper built, symmetrical and slightly rounded body, by the eleven rays in its dorsal fin and nine in the anal. The scales are comparatively large, being more so on the posterior part of the body. The coloration in the adult is brownish above, with silvery sides, and many black spots on the sides of the head, on body, and on fins, with red patches along the sides of the body in the male fish. Young specimens, called "parrs," have about eleven dusky transverse bars, besides black spots and red patches on the body. The coloration, however, varies very much with food, age, and condition of the fish, the black spots in the adult being often X-shaped or XX-shaped.

The range of the eastern sea salmon in American waters is confined to the North Atlantic,
ascending all suitable waters north of Cape Cod to Hudson Bay; it has been said that they were abundant in the Hudson River, and also as being an occasional visitor to the Delaware, both of which statements are, however, open to question; certainly indigenous salmon (*Salmo salar*) have not been taken from or seen in either river since the first day of the last century,—a period of nearly one hundred and two years. The salmon of Northern Europe is identical in structure and habits with the *Salmo salar* of American waters, but the salmon (*Oncorhynchus*) of the Pacific coast (five species) are distinct in form, but not greatly in habits, from the eastern species. One striking peculiarity exists, however, in that many of the Pacific fish die after spawning; whereas none, if any, of the Atlantic do so, returning to the sea after the reproductive act, slab-sided, debilitated, and hook-jawed, but rapidly recovering when in salt water.

The salmon ascends North American rivers in May and June, and the greater portion of them, perhaps all, in the opinion of many ichthyologists and observant anglers, return to the sea in the same month of the following year. John Mowatt of Canada, who was a reliable and unusually intelligent angler, now deceased, made a study for
years of the Atlantic salmon, particularly those of the Restigouche River. He claims authoritatively, that counting from the laying of the ova, the grilse, which average in weight from three to six pounds, return to the rivers in three years, weighing from three to four pounds; at five years of age, they return, weighing from ten to sixteen pounds; at seven years, they weigh from sixteen to twenty pounds; at nine, from twenty-two to twenty-eight pounds; and at eleven, from twenty-eight to thirty-five pounds.

Salmon deposit their eggs on coarse gravel in rapid waters as far up to the sources as the depth of the water permits, the temperature falling from 44° Fahrenheit. The egg is fertilized at the moment of deposit, and the independent life of the salmon begins at once to develop; but the extreme cold of the water retards its development, and it does not burst its shell until spring.

In the rivers of New England it is probable that nearly all the eggs naturally deposited do not mature until April or early in May. In about six weeks after birth, the fingerling puts on a mottled coat with more or less darkish cross-bars, and is known as a "parr," which is at first only about an inch in length. In two years, it reaches six or eight inches, and its red spots and dark bars have given
place to a silvery coat like the adult salmon. In this stage it is known as a "smolt," and goes to the sea, where it rapidly increases in size. It returns from the sea when it has attained a weight of two to six pounds, and is then called a "grilse"; these are taken by anglers in Canadian waters, in proportion of three to one of the adult salmon; in the American rivers, particularly in the Penobscot and Kennebec waters, this condition is said to be reversed.

Much difference of opinion prevails among those who have observed the habits of the salmon. In Scotland, many years ago, it seemed to be established that a portion, at least, of the young salmon put on the silvery coat and went to sea at the age of one year; but that others of the same brood did not do so until two years old. American observations, however, tend strongly to the habits of the smolt as given above.

The next stage of the salmon is that of the adult, four or five years having passed since its birth. This estimate of age is based upon extended observations by the Commission of Fisheries of Maine as to the return of salmon to the Merrimac River, with the following qualification by the United States Fish Commission: "Whether the same rule holds good in other New England rivers cannot as yet be
THE SEA-SALMON

established, owing to inefficient data, but the presumption is in favor of that conclusion."

Salmon from twenty-nine to thirty-one inches in length generally weigh, including the eggs, from nine to twelve pounds, and yield six thousand to eight thousand seven hundred eggs, and an occasional fish of thirty-five to forty inches will yield sixteen thousand to twenty thousand eggs.

The salmon seems to be gifted with much intelligence, which is more particularly brought into prominence when danger signals are abroad. They have been known, when congregated in the upper pools, to get frightened by poachers with net or spear, to immediately run down the stream fully thirty miles at night, not stopping until they reached pools so deep that they could not be taken with the appliances of the poacher. They seemed to know that if they went higher up the stream their doom was sealed.

When coming in schools, entering the estuary from the sea, they have been seen with an old leader at the head and the rest forming a triangle about two and a half feet below the surface, and, on calm days, guided by the old patriarch, the school has been seen around the fishermen's nets, never approaching them within ten or twelve yards.
Again, what resources are developed by any other fish to escape from the steel in its jaws or tongue! The leap, the frantic shake of its body, the wild surge, and the suck and the desperate sweep down stream, with the tired rodster in full pursuit, and, perhaps, without reward.

There are two species or varietal forms of the landlocked salmon: one native in Sebago Lake (Maine) and northward, and introduced in various parts of the country. It is known as *Salmo salar sebago*, or landlocked salmon. The other form is confined in its habitat to Lake St. John, its tributaries, and the Saguenay River, but is in its full fighting vigor in the upheaving and tumbling waters of the Grand Discharge, the outlet of Lake St. John. Scientifically it is known as the *Salmo salar ouananiche* (the latter, an Indian name meaning “little salmon”), and among anglers as the “wannanish” or “winninish,” names that are phonetic of the Indian pronunciation of ouananiche.

The Sebago species attains a weight of about twenty-five pounds, and enters streams as the ouananiche is in the habit of doing, particularly to spawn. Both of the above-named species were formerly regarded as distinct from the sea-going form, *Salmo salar*, but as no specific anatomical variations occur from those of the sea salmon, the
THE SEA-SALMON

landlocked form are now looked upon as merely subspecies of the latter. It has been well observed that the absence of the sea-going instinct is, doubtless, at the bottom of most of the variations from the normal type of the sea-going form which the landlocked salmon exhibits. They have a lower tone of color, less striking sexual marks, and different habits of feeding, and the parr markings or dark bands are said to be never completely obliterated from the sides of the landlocked as they are in the sea-going salmon.

It has been a matter of much discussion as to the primitive habitat of the sea-going salmon and its landlocked congener. Was the first fish landlocked or an anadromous fish, and during the glacial period was the surface of the earth so changed that land became water or vice versa, and the salmon confined or set free by these physical changes? These are matters interesting to ponder over, but never to be decided, so far as the landlocked salmon is affected. We all know how readily many fish accommodate themselves to a widely different habitat in character, food, nature of water and general environment. Even the striped bass, a fish essentially of the salt and brackish waters, has been found thrifty, fat, and game in a small lake near the Hudson River, but with no
outlet of any kind. The fish weighed twenty pounds, and had evidently been placed in the lake by a fisherman who had caught it, when small, in the Hudson River years before it was taken from the lake.

The maximum extent of growth of the ouananiche appears to be about eight pounds, and it is perhaps only equalled in game qualities by the lady or bony fish of southern salt waters, which, from the moment it feels the restraint of capture, leaps from the water and seems to be dancing on its tail until landed. Certainly no fish of fresh water is the equal of the ouananiche, which is pronounced "whon-an-ishe" by the Montagnais Indians of the Lake St. John region.

The ouananiche has no important structural peculiarities by which it may be known on sight from the landlocked salmon of other waters, although those of the Metabetchunan River (an inlet) and the Grande Décharge (the outlet) of Lake St. John are said to have heavier and longer upper jaws than the Sebago fish, and the longest ray of the dorsal fin is slightly shorter, and the adipose fin also shorter in the last named fish than in the ouananiche. It is also said that the tail of the latter is slightly more forked than the former fish. All these differences may, however, be entirely due
THE SEA-SALMON

to the difference in size of individual fish compared, and do not justify specific classification.

The landlocked salmon of Sebago Lake is smaller than the sea-salmon, but its flesh is fat and rich and of a very delicate flavor. In game qualities it is, for its size, quite the peer of the larger salmon.

The average number of eggs produced by the females is about four thousand, and the young are vigorous and more rapid in growth than any other species of the salmon family.
"YET here the gamy salmon seek a home"
THE SALMON OF THE POOL

This wealth of whirling water, falling sheer,
Turns into fairy lace its fierce white foam;
The rushing music doth appal the ear;
Yet here the gamy salmon seek a home,
Where the bright river's bank by sentries drear,
By tall, dark pines, is watched through glow and gloam.

How 'mid the seething crash the wavelets bright
Smile up! The eddies seem endowed with life;
The currents, trembling in their torrent might,
Plunge seaward for a grapple of keen strife
With the in-rolling tide; which now the light
Of Morning floods with radiance rich and rife.

But, where the old mill's arm extends, more deep
The river grows and slackens to a pool:
And there brave warriors lurk in shining sleep,
Knights of the river, confident and cool
And safe; until they wake with prideful leap
To take the lure which doth their cunning fool.

Then starts the old, old war 'twixt strength and skill;
One fights for freedom and his life to save;
The other glories in his power to kill;
But neither in the fight would favor crave,
Game to the last, when caught, when dying, still
The salmon of the pool remains a warrior brave.
PLEASURE in life is, perhaps, most keen when success has crowned a first endeavor. One is then dealing with what is unknown, and nervous excitement is always a prominent factor. Especially is this true in the world of sports. As we thus gain in efficiency with practice, experience, and stronger conclusions, are we not the losers in that intensity of the first found joy of victory?

In angling as we graduate from the cruder methods of boyhood, we almost unconsciously depend upon more delicate manipulation for the stimulation demanded to sustain the wavering interest. The first trout lured by the fluttering artificial fly—certainly the capture—brought its reward just at a time when the hook, worm, and sapling rod were in a certain sense powerless to evoke the childish enthusiasm of the olden days.

An early morning hour in May before the sun had gained strength to warm the atmosphere. A
roaring, impetuous mass of waters, their strength made more powerful by the melting snows of early spring, pouring in unbroken might over the dam, strong and unyielding as, meeting the river bed, it quivered for the instant into silver froстings of foam, then rushed madly on towards the sea, breaking into swift currents, crashing where its power was stayed by the timber and stone, which directed its course while protecting the mill from its encroaching activity; yet at certain points enabling restricted portions of the restive flood to subside into the semblance of pools.

Skirting close to the mill side of this river, a spot was gained where an anchor held my small craft, the pool being quite a little distance below. In such a place, amid the roar of wind and angry currents, did I attempt, under the guidance of one skilled in the art, to make my cast.

Little by little a longer line was tried, and then over the pool the fly danced. Suddenly there came a rise; I felt my heart thumping far faster than usual, knew I was told to strike slowly, attempted to heed my instructions, and felt the tug of the strong warrior, clad in his shining silver armor, as he rushed far away into the strength of the stream and then leaped grandly into the air. A strong impulse urged me to reel in and bring him nearer;
but the wise one was quietly telling me to point the rod towards him and give him enough slack, and to-day, while engaged in retrospection, I feel that I was fortunate in following the commands given. No sooner did he again reach the water, than away he rushed; but my hand was growing steady, my brain less excited, and I coolly kept gentle control. Another wonderful leap was made; but this time I was ready, and knew what to do. So did the fight go on. Each time did I make a little gain by getting him still closer to the boat. Perhaps the strongest impulse to conquer that came over me, was the anxiety to end the struggle abruptly and capture the fish before the time was ripe to do so. Again and again he made magnificent rushes, such as would have earned glory and applause for an athlete of the days of the gladiators. Even with waning strength would he attempt another fling out of his element, in what proved for him only a delusive hope of escaping, for I was now growing alert and careful, and there seemed to be no tired nerve or muscle in my body. Weaker became his battling; I could discern the flash of his body as the strength of rod and line told severely, turning him on his side. The boat was cast adrift, and was pushed well in towards the shore. Here the depth was
trifling, and I scrambled overboard, slowly and gently bringing him into shallow water. My companion was waiting ready with the gaff, and when success seemed to be mine, and I saw the iron in a wondrous and skilful manner strike deep into him and he was lifted well up on the sands, I could have yelled my joy. My first salmon had been taken.

True, indeed, it was, without doubt, that alone I should have lost the fish; but the constant reminders of just what to do, and my endeavor to follow out these suggestions, inspired me with ability to win.

As I now look back upon it, this first fish seems to me to have been absolutely the finest, the most beautiful, the grandest salmon that had in all probability ever been captured. One thing am I sure of,—I was never so thrilled, never so warm and comfortable, never so happy, never so proud!

Years have elapsed since then, and good fortune has been mine, but never can it become my lot to be so thoroughly satisfied, so supremely delighted as I was on that cold May morning when I knew and realized that I had actually struck, played, and taken my first salmon.
SALMON FISHING

SALMON fishing has become an expensive luxury of late years not only in Canada, but also in Great Britain, Ireland, and Norway. Two of the most famous salmon rivers in Canada, not more than thirty years ago, were leased for one hundred thousand dollars each, per year. If the best pools on either of these rivers were offered for sale to-day, in fee simple, they would fetch fifty thousand dollars each, or more, to say nothing of the present value of the entire river. These pools, of course, represent the very cream of the fishing. On all salmon rivers there are long stretches of almost useless water, on which it hardly pays to spend time in angling. These, even, are leased now-a-days, at good prices, and a few fish are occasionally taken early in the season when the water is high and the fish are running up stream. Such reaches of water cannot, in any sense, be called pools; they are simply waterways through which the salmon pass in making their way up river, the pools being the natural stopping places.
in which the fish rest for a few days or, perhaps, a week. The length of their stay in these pools is probably regulated by the condition of the water and the distance each fish has to travel before it reaches its final destination, which, in the opinion of the writer, is the gravel from which it emerged from the egg itself. There appears to be no other way to account for the fact that salmon spawn on the grounds only a few miles above tide-head, up to almost the very source of the rivers.

Nearly all reaches of water on which there is a possible chance to kill a salmon with a fly are now either owned in fee simple, or leased to anglers. The competition among anglers for good salmon water, of recent years, has been intense, and, in consequence, prices have reached a high level. While the anglers for salmon are increasing year by year, there is only just so much good fishing water to be had, and the prospect now is for an advance rather than a decline in the price of salmon pools.

The physical benefit accruing from this out-of-door exercise is looked upon as of as much value from one point of view as the rising and killing of the fish is from another; hence, as a body-building sport, salmon fishing is winning favor among professional gentlemen and men of means of sedentary
habits. There is recreation in the sport, and that which keeps the body sound and the mind active. It is a sport worthy of the attention of the best and brightest men of the age, and to its attraction they are yearly yielding.

It was my fortune, or misfortune, to fish on a salmon river every day but Sunday for three weeks one season without getting a rise. Many people might regard this as a foolish waste of time, — unrewarded persistence where there would have been sense shown by an abandonment of the endeavor. This is because they have no idea of the fascination of that state of increasing hope in which the salmon is expected to rise every moment, as the fish are always of a size and sufficient mettle to warrant the utmost patience and any amount of waiting. Canoeing on a beautiful stream of water is enjoyable of itself in the salmon fishing season; the casting and recasting of the fly is good exercise and beneficial practice. The skill which is acquired in casting at such times as this, counts the more for success when the salmon do appear in the river and rise to the fly, and after being hooked make a game fight for their lives, which to the angler is the most fascinating and exciting part of the sport.

And what a wonderful and artistic creation a salmon fly is! No insect that ever lived has called
to itself so much variety of feathers from birds inhabiting all parts of the earth, as well as silk floss and gold and silver tinsel. I am sometimes asked, "What is your favorite fly?" The answer is, "The 'Jock Scott.'" It was first tried in 1845, and it has held its prestige against the talents of all fly tiers for over half a century. And how is "Jock Scott" constructed? you ask. I will give you the formula:

**Tag:** Silver twist and light yellow silk.

**Tail:** A topping from the golden pheasant, and a red feather from the breast of the Indian crow, finished over with turns of herl, dyed black, from the ostrich.

**Body:** In two equal sections, the first light yellow silk floss ribbed with fine silver tinsel; above and below are placed two or three yellow feathers from the breast of the toucan, extending slightly beyond the butt, and followed with four turns of black herl. The upper half of the body, black silk floss with a black hackle wound round it and ribbed with silver tinsel of two kinds,—flat and twisted.

**Throat:** Gallina.

**Wings:** Two strips of black turkey with white tips; two strips of bustard and gray mallard, with strands of golden pheasant's tail, peacock
sword-feathers, red macaw, blue and yellow dyed swan, with two strips of brown mallard and a topping above.


Following is what Major John P. Traherne says of the famous fly in the Badminton Library:

"No one will dispute that 'Jock Scott,' when dressed correctly, is the most remarkable of all our standard patterns and therefore entitled to the precedence it has been accorded. It is probably the best known fly that swims in the three kingdoms and it would hardly be an exaggeration to say that this splendid specimen of artificial entomology has won an almost superstitious veneration amongst salmon anglers. Whether used in rushing streams or rapids, or in still, sluggish oily pools, its appearance seems to be equally attractive and its success assured."

Next to the fly itself, the most interesting part of the salmon fisherman's outfit is his leader, which is made of gut taken from the silk-ducts of the silk-worm. Only a short strand is secured from each silk-worm, and, hence, the leader must be knotted, each length representing the contribution from a single worm. It takes from fifteen to eighteen strands of silk-worm-gut to make a leader
from nine to twelve feet in length, and considerable experience and skill is required to tie the leader successfully. This gut is brittle when dry, but becomes soft and pliable after being in the water for half an hour or longer. A good salmon leader will bear a strain of ten pounds, and an extra good one, properly tied, will show a tensile strength of twelve pounds without breaking. But contrary to the belief of many anglers, it will not bear as much strain after being thoroughly softened with water as it will when dry. A softened leader is more elastic than a dry one, but the strands when under strain cut into each other at the knots, and usually break there. The very best salmon leaders are always more or less scarce, and often hard to get. The annual report of the silk-worm-gut product always states that "the heavy grades of salmon gut are short," at least the writer has never seen it reported to be plentiful. Nine-feet leaders made from what is known as Imperial Hebra gut cost from three dollars to five dollars each.

The very uncertainty of salmon fishing adds fascination to the sport. No two seasons are ever alike. One year the water will be low. The fish have no set time to come up from the sea. They come when they are ready, and no one ever knows beforehand when that will be. It has been said
that salmon fishing comes but once a year, and the season is short. But it does not come every year, for in some seasons it is a complete failure, and the angler has his long journey, loss of time, and no inconsiderable expense for nothing. But a true sportsman never gets discouraged; he returns to fish his water next year with more courage than ever, and a little bad luck only adds zest to the sport when it comes his way again. A fisherman will sometimes have a run of good luck in landing for a time every fish that takes his fly, then he may have a series of mishaps and lose a number consecutively. Only to-day I received a letter from a friend who is fishing on a noted salmon river in Canada. This is what he says, in part:

Yesterday I had the conceit taken out of me. You will remember saying to me before I left, I would not kill all the fish that took the fly. Well, I hooked four salmon yesterday, lost three, but killed a small fish of eight and one-half pounds. I lost a large fish after playing him for thirty minutes; he was almost ready to gaff, but he made another run and turned over; the line slackened and the fly came home. I felt sure of killing the fish, but it is never a certainty until the salmon is gaffed and clubbed.

There is no greater uncertainty than salmon fishing, looking at it from beginning to end; but
when one is fortunate enough to arrive on the river and find the conditions all favorable and plenty of fish, there is no better or more fascinating sport.

The salmon is a noble fish, and his ways are peculiar to himself. When he rises to a fly, he usually makes the water boil, and at times makes a great splash. The impulse of the inexperienced salmon angler is to strike, the same as in trout fishing; but this is about the worst thing he can do. When the salmon misses the fly, which it frequently does in swift water, the fly should be left right where it is, as it is a salmon habit to return and try to take it again. They will sometimes return a second and a third time, and eventually get well hooked. This is considered an artistic point in salmon fishing. It answers that oft-repeated question of the amateur, "What do you do when a salmon rises to your fly?" He finds that an experienced fisherman keeps calm and lets his fly quietly float an inch or so below the surface, with the rod held still or nearly so. This is not such an easy thing to do as it seems to be on paper, as the situation is an exciting one, and the temptation is to do the wrong thing. The man who is experienced in trout fishing is likely to make his first bad break at this time. It requires trained nerves and a level head to restrain the natural im-
pulse, and wait. The inclination is to strike as in trout fishing. The wily trout must be hooked before he spits out the fly, or he is lost; but the salmon comes up dignifiedly, and deliberately takes the fly and goes down, really hooking himself. This is where the real sport begins.

Then the fisherman lifts his rod and puts a good strain on the fish, and it should be kept on until the salmon is gaffed. The exceptions to this rule are when the salmon jumps on a short line, then the rod should be lowered and the line slackened when the fish returns to the water, to prevent a sudden snap and, perhaps, a broken leader. When the salmon is running toward a dangerous place which means his loss if he reaches it, a slack line will usually cause him to stop; because when the strain is taken off, the salmon gets the notion that he is free and ceases to run. The angler then has an opportunity to study what move to make next. It is better to do this and take chances on a slack line, than to have a salmon go over the falls where he cannot be followed, and escape with a broken leader. The salmon is occasionally cautious in his ventures. Sometimes it is most deliberate in its manner, and must be waited for and teased to take the fly. A very good illustration of this was furnished by a dear and much lamented friend. We fished to-
FOREST, LAKE, AND RIVER

gether with two other friends on the Grand Cascapedia River in July, 1891.

One day, Mr. J—— was fishing in the famous pool known as "Salmon Hole." (This is where the late R. G. Dunn killed the record fish some years ago, which weighed fifty-four pounds.) A salmon rose close to his fly, but not at it. The fish kept coming to the surface at intervals of from about a half to three-quarters of an hour. He spent the afternoon fishing for that salmon, and was rewarded at the end of four hours, when the fish rose to his fly, and he succeeded in killing it. The fish weighed twenty-five and one-half pounds, and put up a splendid fight, and this was afterwards looked upon as a piece of fine work by those who knew of it. There are not many anglers who have patience enough to spend so much time over a salmon under such circumstances.

The writer has fished for trout from boyhood upwards; but salmon fishing came later in life. He has cast the fly on some of the best rivers in Canada and Scotland, and has passed many seasons of late years on the Penobscot River in Maine, with some successes and many failures. With the exception of the St. Croix, the Penobscot is about the only river in New England from which salmon are taken with a fly; but of late years it has almost
been ruined by excessive net fishing. All anglers accumulate experiences, but theories early founded are frequently dashed to pieces. If any salmon fisherman of long experience should write upon "What I don't know about salmon," he would find the field ample and matter enough to fill a large volume.
SALMON

SUGGESTIONS

THERE are so many good bits of information that in reality cannot be taught save by actual practical instruction, that when I asked my good friend and teacher, Mr. Albert French, the game and fish warden at Calais, Maine, to tell me the secret of his success with gaff and rod, he naturally replied that the art of killing salmon with rod and gaff could not be learned from books. But, for the benefit of my readers, with his consent, perhaps the attempt to describe certain phases of fishing lore may be of value and interest. Mr. French’s experience of twenty years has been chiefly confined to the pools on the St. Croix River at Calais, the upper limits of which for part of the day are flooded by tide-water that meets the barrier of a dam.

Writers on salmon fishing disagree widely on tackle and methods, partially because the environ-
ments and habits of salmon vary, and the points of view must accord with conditions existing on the rivers fished. Success on the water mentioned, depends largely upon the knowledge of the ground and currents, and also of the characteristics, instincts, and movements of the fish coming fresh from the sea.

The equipment required will not be described, as that is a question for experts to discuss. With them opinions vary, as the size and resistance of salmon are by no means the same in all waters. Veteran sportsmen have individual preferences and conceits as to the length, weight, material, and construction of the rod; the make of reel; the dressing of an artificial fly; the length and texture of line; the kind of leader, and the shape and size of gaff. The novice will be safe, however, in purchasing an outfit recommended by any responsible dealer. Presuming then that such a one, before reaching the St. Croix to essay his first salmon, has acquired, by brief practice on snow, lawn, or water, sufficient skill in casting with a two-handed rod, let him try his luck in some pool, after he has been coached on a few points that have met with acceptance from the many rodsmen who have killed salmon successfully.
SALMON SUGGESTIONS

The first thing to learn is the proper motion of the fly against the current, which is far different from that employed in whipping for trout or bass. These fish rise for food; but the anadromous salmon eats nothing substantial or discernible after leaving salt water, but seizes the lure from curiosity or in sport. Even the natural fly, which it so often leaps to kill, is noticed a moment later floating on the water. It is important, therefore, to render the artificial fly attractive in a special manner which has been found to be alluring to this fish. The fly is kept more or less submerged, and a peculiar motion against or across the current imparted to it by regular impulses given to the rod; this manipulation is soon learned with the aid of a tutor. Next, with patience and hope, let the novice essay to cast in eddies and rifts that appear promising.

When the salmon concludes to inspect or take a fly, he rarely does so before making his presence known to an intelligent rodsman engaged in casting. It may be different when other methods are resorted to, such as paying out and reeling in a great length of line. The fish may show first his form above water, or may merely swirl the surface. In either event it is not advisable to make at once another cast over the place where the break was
observed; the flies should be dropped for a minute or more in another direction. This helps to change the salmon's eager curiosity to anger and fierceness, and the next time he comes you are more likely to hook him. After a few casts, if the fish is reluctant to return to the charge, it is best to reel in and change the fly; this ruse will often bring success at the next cast.

A critical moment arrives with the strike. Very little pressure beyond that yielded by the weight of the fish is required to imbed the hook. There is danger in too strong a jerk, which may snap the fly, break the leader, or loosen the hook's fastening, which would soon have been strengthened by the rush. Here is where many fine fish are lost through the angler's excitement. Luck must determine the security of the hold; but with the salmon well hooked, a battle royal is on that may end in thirty minutes or continue for hours. Now is required the exercise of vigilance, judgment, and coolness. No two salmon display the same manoeuvres. One may be a rusher, another a sulker. One may exhaust himself in constant leaps, another may not appear above water; one may weary you with protracted gameness, another may yield in a short time. Experience alone can teach the alertness and action required to win in any
particular case. Rules cannot be formulated; skill and judgment must govern.

While the fish is in play, the single aim should be to exhaust and bring him to gaff. You must be careful to give him slack when he leaps, that he may not shake out the hook, or break the leader with his tail. You must judge what check to give his rushes, and how much of the butt of the rod is needed in all his freaks and doldrums. You must care for the loose line during his inward runs, that it may not be wound around a stone or sunken log. You must know how to turn his courses and keep him from perilous obstacles. All these and many minor points must be acquired from tutorship and practice.

When casting from shore, it is advisable to have a boat at hand to take, that you may properly control from it the line and manage the rushes. It is believed by many that when a salmon sulks at the bottom, it is for rest, and that he should be dislodged with pole or stone. This is an error. He is weakening constantly, and is safe in hand. Take plenty of time in exhausting your fish. There is danger in hurry and impatience as to gaffing. It is best to land on the shore at the finish. Always have a man to assist if possible. Occasionally one is found who is a born gaffer, the knack coming to
him naturally; but, as a rule, a gaffer is not born but made by practice. The important act in the capture of a salmon requires good judgment of the water and the activity of the fish, and patience. More losses are caused by haste than by lack of skill.

When the tired fish is drawn towards the man with the gaff, he should wait for a side position, and never strike at hazard. A salmon that is cut and not held, recovers strength through madness, and in his wild struggles frequently gets his freedom. When shy, let him move away. At each return within reach, he will come nearer and be more quiet. Take your time until a good chance comes to gaff him through the back, close behind the first dorsal fin. This brings out first the tail, in which lies the salmon’s chief strength. Then with a quick and strong pull the prize is thrown struggling on the beach. When a salmon is thoroughly and artistically played, he is easily brought to gaff.

The salmon of the St. Croix River are conceded to be superlative for beauty, game qualities, and the table. They weigh from eight to twenty-five and even thirty pounds.

What is here written covers but little ground, and full points of practical value must be given by
object lessons. Calais is quickly and cheaply reached from any point in New England, and Mr. French will gladly render any service in his power to such of my readers as wish to profit by his advice and experience.
ROLLS, now, are cast on either hand
THE TROLL OF THE
LANDLOCKED SALMON

Sharp is the air along the lake;
Seats in our birch canoe we take;
Silver the foam in our zigzag wake;
Shake our barks, as the winds out-break.

Close by the bank our birches glide;
Flame out the colors, as flushed with pride;
Longer and stronger grows the stride;
Wider and wilder the waves we ride.

On with the race, till we reach the ground
Where the noble fish by skill are found;
Care! — have a care to make no sound,
Rounding in, where the game abound.

Trolls, now, are cast on either hand;
Ah! but the captive's leaps are grand;
Strong his pulls to rejoin his band
And escape from the twisted strand.

Upward he darts and cuts the air;
Trickily sulks and seeks to wear
In shreds the line; till, in fierce despair,
Where he rushes he does not care.
FOREST, LAKE, AND RIVER

So is he cunningly lured and let
The pace of his final race to set;
To rush, to sulk, to fume, to fret;
Yet — game, as he gasps in the landing net.

Splendidly game is his glazing eye,
When the cruel moment comes to die;
And he gives his victor, with panting cry,
By his tail's last flap a stern "defi."
KILL OF A KING
THE KILL OF A KING

A STALWART son of a race whose sun has set, holds firmly the birch canoe,—a product of his own handiwork. Carved it is at bow and stern, with strange scenes of Indian life, and the stranger words that mean so much even when rendered into English. With a lack of grace shown by many white men in getting into a birch canoe, I succeed in settling myself in the seat prepared for me and made comfortable by a broad back covered with deer skin, and by cushions made from interwoven dried grasses. A strong shove that sends the frail craft out into the sparkling wavelets, a spring of my guide, Lomay, a flash of paddles, all apparently in one movement, and we are off for the grounds. From the stern the net hangs within easy reach of my copper-hued boatman.

Such a morning! Keen and crisp is the air. The winds ruffle into motion the surface of the lake. Around are green islands, proud in their wealth of fir-trees, and blackened rocks snapping into purring foam the waters that quiver against them.
FOREST, LAKE, AND RIVER

Dark are the shadows of the distant land. For a moment visible, then lost to view, the other crafts dart in and out, each with its occupants intent on the sport of the day, and each possessing a distinct and vivid coloring that lends its charm to the scene. Boldly my little birch is pushed by vigorous paddle strokes into the centre of the lake, for we seek a fishing ground still far away.

It is early springtime. The water is so cold that we should not wonder if floating ice were seen. Fortunately for us the fish held in this zone of chill must be active to keep from freezing, yet there exists the disadvantage that the gaudy, dainty fly is no enticement, so one is forced to offer a more substantial repast. Under these circumstances, we use the live minnow, on a single hook, sunk a trifle under the surface, well swivelled and with plenty of good line, a reel that runs well and can be relied upon, and a rod strong, not heavy, eight to ten ounces in weight. Two rods equipped in this manner we know will give fair play, with plenty of chances for a biting fish to free himself in case of any slight carelessness, or a strike that is too light. We near the battlefield. Several small fish are taken, and fresh baits are made as tempting as possible. Just far enough from the shore, we glide on, still keeping up hope, while
THE KILL OF A KING

going forward and backward, for here it is that many a good fish has been captured. Little by little the wind grows stronger, the whitecaps larger; the wavelets are fast becoming surging billows. Skill is, indeed, required in the handling, and right well does Lomay, kneeling in the canoe and putting the strength of his muscles into every stroke, keep me safe from a watery grave.

'Tis now that the small fry take to the more sheltered creeks and nooks, and therefore our minnow, seen flashing in its naked evolutions, is an attractive bait. Suddenly the rod held in my left hand feels a moderate strike, but no sooner do I begin to reel in than a mighty whirr from the right hand reel causes me to pass the first rod to Lomay and leave it to him to struggle with the prize, or not, as best he can, for now I know there will be a combat. Grasping the right hand rod, I check suddenly the swiftness of the departing line. In a moment, with intense satisfaction, I see a magnificent leap far astern, and the sight of a beautiful landlocked salmon rewards me.

Steady, steady, one false movement and all is lost.

The acrobatic fish in his arch-like leap returns to the water head-foremost and darts away, luckily for me, in the right line of direction. Meantime
Lomay has succeeded, I do not know how, in reeling in his line and still keeping the canoe aright. He wastes no time in using a net, but lifts the fish into the boat, without waiting even to kill.

Now my beauty tires a bit, then spurs in another direction. Guiding as best I can, and swinging him completely over to the other side, I feel him pulling like a restive horse, trying to swim away with everything. But we are in deep water; I give him the butt, and he tires again, sullen in his wrath, surging deeper, deeper, toward the bottom. A sharp pull starts him from this mood. Again he flies from the top of a wave high into the air. All is ready for him; the line holds him safe when he touches the water. He tries pulling against all the opposing forces, and even seeks to make a run under the boat. Here he fails, as he is strongly held, and gradually eases away, until suddenly he dashes a short distance, immediately making another leap, shaking his grand old head and body in an effort to throw out the hook that holds him fast. Once more he fails and darts away, but grows a trifle weaker in his rush. Now he is being reeled in. This time he is seen lying on his side. He looks as if he soon would be our "meat." But not so at all. As he sees the boat,
THE KILL OF A KING

with a powerful swing he rights himself and rushes like a frightened deer, bending the rod until it seems that it must break.

Soon the strain is too great for him. He stops for a meagre respite, but no time is given and he is turned on his side, and slowly reeled in. His nearness to the canoe starts his endeavors afresh. With a tug that cannot be controlled, he makes a magnificent run far away toward the deeper water, pulling the canoe with him. Surely this is his last struggle, I think, as I begin to wind in; but long before the line is half shortened he plunges upward, and as quickly down. No struggle for freedom could be granted. The line is made tighter; the butt is given, and a test between fish and tackle ensues, in which the tackle triumphs slowly but surely. On the surface he is seen, and near enough to try the net; but it is still useless. As if he knew well the meaning of that net, he gathers all his powers and again darts away from it. Three times this same fighting is gone through with. At a fourth trial the net closes about him. He is lifted from his home, exhausted and panting. In spite of all, the spirit of combat remains. Even the quick blow on his head from a heavy piece of wood has to be repeated before he gives up that wonderful gamy life. As he lies there quivering,
the shades of coloring flash out in rainbow lines, as if a halo of gorgeous tints were marking the death of a king, as king indeed he is, weighing eight and one-half pounds.

A long fight, a strong fight, and a plucky death. Inch by inch the battle had been waged; one by one only had each counter-movement been met. Lomay, the stoic, even grunts out, "Good," — high praise from his lips; while I, tired by the exertion, rest content, filling and lighting my brier, as smoother waters are reached. At last we land, and soon beside a glowing fire each and every move of the contest is fought over again in our talk.

This day was a memorable one, and now, as the king looks down at me with his simulated eye of glass, I see him as if alive on the wall of my den, and I dream of the invasion of his domain and of his capture; and could he but speak, I am sure he would say: "I had fair play, even if kingdom and life were lost." So would I in sparkling wine drink to his memory in praise of his nerve, his beauty and strength, and the royal sport he gave.
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WHERE vapors rise to veil
The rushing, crushing waves that seethe
TO A LEAPING
OUANANICHE

In sleepy water still
Thou dost not care to rest at ease;
But, where the reckless rapids wreak their will
With foam as fierce and furious as the sea's —
Where thou canst find thy fill
Of struggle strong and free —
There dost thou love to be.
Where Danger beckons and the wild winds roam
To stir up louder strife,
Amid the flashing waves thou hast a home —
Rough Rider of the Rapids, thou; — not born
To doubt and dally or to sulk and mourn;
But born for strenuous life.

Where vapors rise to veil
The rushing, crushing waves that seethe
Below the dam, thou dartest on to scale
The proud fall which would bid thee stay beneath.
Yet, if thy first leap fail,
Thou hast the valorous breast
Never to quit thy quest;
But in a play of whirlpool power dost seek
To summon all thy strength
FOREST, LAKE, AND RIVER

Of reckless life that, scorning what is weak,
Spurning the idle quiet and the hush,
Keen as the lightning, mounts with zigzag rush
The moving wall, at length!

And in thy human fights
How, like a proud, a mettled steed,
Thy high-bred nature seemingly delights
Full to display the splendor of thy speed!
Thy leaps are more like flights,
As if thou wouldst forsake
Thine element and take
The wings of morning or the winds to bear
Thy Buoyancy along;
And how thine armor glows, as if the rare
Valor within shone through, to die in light!
Thou art, in faith, a Royal River-Knight—
Well worth a minstrel's song!
THE OUANANICHE

EVERYTHING that pertains to the subject of fish and fishing is of interest to the angler, particularly to him who is ever ready to study his art as well as practise it. No matter how frequently articles may be published referring to any or all game fish, each in turn is eagerly read and thoroughly digested. This, being true of all noted fish, is especially so in regard to the ouananiche or so-called landlocked salmon of Canada. This most illustrious member of the great salmon family came into prominence in the angling world about ten years ago, therefore it is, comparatively speaking, new to many fishermen. Much has been written in reference to this wonderful fish, and, doubtless, much more can and will be. This is possible for the reason that the subject is not only of such great interest that sportsmen can never tire of it, but also because something new is constantly being learned in regard to its life and habits.

The ouananiche is beyond question the gamest of all fish inhabiting either American or Canadian
waters. This is true when he is brought in comparison with the salmon, pound for pound, or with the trout, bass, or muskallunge. Ardent anglers whom fortune has favored to the extent of enabling them to enjoy the magnificent sport of killing the mighty salmon, and the large number of fishermen who believe the small-mouthed black bass, or the various kinds of trout, to be the greatest fighters, will naturally take issue with this claim. It is necessary, therefore, that a broad statement of this nature should be proven, and that beyond question.

To write fully regarding the ouananiche, and to cover the subject thoroughly, its descent and family history must be given so far as known, together with a description of its habitat and environments. A detailed description of its fighting powers and the consensus of opinion regarding the same is also necessary. The subject is of deep interest to the modern angler, and should be treated exhaustively.

The natural home of the true ouananiche is found in certain specific waters located within the Province of Quebec and the Labrador peninsula. The fish is especially known in connection with Lake St. John, Quebec, its tributaries, and its outlet, — the wonderful Saguenay River. There it is found at its best, and its popularity is evidenced by
THE OUANANICHE

the yearly increasing number of fishermen who seek its capture. A species somewhat similar is found in certain lakes in Maine, where it is designated by the varietal name Sebago. These fish have been artificially propagated at the State hatcheries of Maine and New York, and to a considerable extent by the United States Fish Commission. The fry have been successfully planted in a number of lakes in the States mentioned, as results now begin to show. Further reference to these last named fish will be made later.

The name ouananiche — this is accepted as the proper spelling, the pronunciation being "winnanish" — was given by the Montagnais Indians, who have inhabited the Lake St. John country for an unknown number of generations. The literal translation of the word is "ouanan," salmon, and "iche" (the diminutive), "the little salmon."

Some well known writers on the ouananiche have claimed that "ouanan" was not the proper word for salmon in the Montagnais language. The Montagnais are a branch of the Crees, and no less than seven or eight different dialects of their language have been or are now extant, the word being found in more than one. The name as spelled above can be traced back in Indian history fully two hundred and fifty years. Many words must
have become radically changed, as has occurred in the English language during that long period, especially as the Montagnais language was never written until early in the century just passed. Many of the tribe being illiterate, they would naturally either mix their dialects or speak incorrectly, thus using different words to express the same thing. Perhaps the best authority is Mr. Robertson, who has been for many years the interpreter of the Montagnais at Lake St. John. He is familiar with no less than seven dialects of the language, and states authoritatively that "ouanan" is the true word for salmon, as used by a majority of the tribe, and is as he learned it a generation ago from tribal traditions.

Thoroughly familiar with the salmon of the sea, as well as with its close relative, the ouananiche, these Indians quickly noted their similarities and named both alike, designating the latter only by the adjective small. Smaller than its progenitor of the sea, it is yet more powerful in size of fins and tail, and, pound for pound, by far the greater fighter.

The salmon spends much of the year somewhere in the quiet depths of the ocean, and only labors against fall and rapid when ascending the rivers to spawn. With the ouananiche, on the contrary,
life is one continuous struggle in the midst of terrific currents, rapids, and falls. Naturally it becomes strong and vigorous, and when once it feels the prick of the hook, fights fiercely until the end.

Lake St. John has no less than eighteen tributaries flowing into it, three of which are from four hundred to six hundred miles in length,—all are swift-flowing rivers with innumerable falls and rapids. They fairly teem with ouananiche throughout their entire length, which demonstrates the improbability of the fish ever becoming extinct. To avoid any possibility of their being depleted locally, a hatchery has been established at Lake St. John, where thousands of ouananiche, as well as the salt-water salmon, are hatched and placed in their native waters each year.

The most ancient traditions of the Montagnais Indians make mention of "the little salmon," and through them its nature and habits are thoroughly known to the present generation. Modern students of ichthyology for a long time believed that the ouananiche, at some time in the past, had ascended from the sea to spawn in the waters it now inhabits, and had become landlocked by some barrier thrown up by Nature. Investigation proves this to be erroneous, so far, at least, as
Lake St. John is in question, the Indians stating that the Saguenay River retains its original character, and the geological formation proving it as well. It must be accepted as a fact, therefore, that these fish remain in fresh water from choice, not necessity. That they are to some extent anadromous, is readily proven from the fact that they have been taken in the salt water of the Saguenay River near its confluence with the St. Lawrence.

A close comparison of the ouananiche with the salmon of the sea shows but minor differences other than a slight variation in body colorings, texture of the flesh, and rotundity. The ouananiche is rarely as plump and fat as is a fresh run salmon. True, the various fins and tail are larger, but general color, spots, markings, jaw, and flakiness of the flesh, as well as habits and fighting qualities, are in most respects alike. The flesh does not possess the layers of fat and oil held by a fresh run salmon, hence it is preferred by many for the table. A distinct variation in food would explain that. While the salmon will average from fifteen to thirty-five pounds in weight, and is frequently taken heavier, the ouananiche will average from two and one-half to five pounds, with eight or eight and one-half pounds extreme. They have, therefore, degenerated in size only. Why they
THE OUANANICHE

should have left the sea to seek a home in fresh water cannot be explained; but that they are true Salmo salar, differing only in the few particulars mentioned, due entirely to difference in environment, must be admitted.

In the swiftest flowing and most turbulent currents, in the foam-covered waters at the bottom of a rapid or in the boiling cauldron at the foot of a fall, there and there only, during the greater part of the year, is the ouananiche found. Its near relative, the landlocked salmon of the Maine lakes, is, beyond question, descended from the sea salmon as well, and has had free access to the ocean. Its home, however, is in the deep waters of lakes (except in early spring), where it attains a weight far in excess of the Canadian fish. Not infrequently, it is taken weighing from fifteen to twenty pounds and more. This would indicate some variance in the two fish, although in general appearance their similarity is marked.

While in the majority of waters where found, the ouananiche can, and to some extent does, seek salt water, in others it is not possible to do so. This is noted in the Hamilton River of Labrador, where these fish are found above the great falls (three hundred feet high). As geologists say these falls have existed since the glacial period, the
ouananiche could not have ascended from the sea. As to how they reached these or any other land-locked waters, theories only can be advanced. Two hypotheses present themselves, both of which are far from being improbable or impracticable. A great variety of water-fowl seek the waters of northern Canada as breeding grounds, many species feeding upon fish eggs from the spawning beds. It is more than possible that in devouring large quantities of eggs some would be voided uninjured by the gastric juices, and be dropped in various waters during the ceaseless journeyings of the fowl. The eggs, having been previously impregnated, would naturally hatch in due course. It is possible, also, that cranes or herons may serve as carriers. As they are constantly wading in shallow streams where the fish spawn, the eggs, owing to their glutinous nature, might easily adhere to their feet, to be washed off in other waters.

The greatest enemy of the ouananiche is the pike, (brochet), which is not only very plentiful in Lake St. John waters, but attains great size. Many fish are taken having fresh wounds resulting from terrible attacks, while thousands are disfigured with healed scars from injuries received from pike in the past. Another enemy is the burbot, or ling, which grows very large in Lake St. John. For-
THE OUANANICHE

Fortunately this great destroyer is confined to that lake alone, not being found in other surrounding waters.

The natural food of the ouananiche, as far as can be learned, consists of chub (ouitoiiche) and flies. The latter seem to be given the preference, while nothing dead or of a carrion nature attracts them. It is reasonable to infer that since their food is naturally at variance with that of the salmon of the sea, the color of their flesh (pink) is not caused by what is eaten, but is rather a family characteristic. While the salmon does not feed at all in fresh water, living entirely upon the layers of fat it brings from the sea, the ouananiche is a lusty feeder during all seasons and at all times.

Our "little salmon" of Canada changes his habitation with the seasons, and the sportsman must study and understand his vagaries in this particular in order to meet with success. During the late winter it is taken plentifully in fishing through the ice, which indicates that subsequent to the spawning season it is running wild. The moment the ice goes out, which, on the average in Lake St. John, is about the middle of May, the fish is to be found only in the mouths of the rivers, especially the Ouiatchouan and Metabetchouan. Early in June, as the water becomes warmer, none can be found in these places, all seeming to have migrated
to the tumultuous waters of the Grande Décharge. Here the ouananiche is found at its best; the winter’s sluggishness has passed away, and its wonderful fighting powers are taken on.

Fish can be taken in the Grande Décharge until winter again sets in, but the best fishing ends there during the latter part of August.

All through the season many fish can be taken at the various falls and rapids in the numerous inflowing rivers, but in the month of August fishing at these points is most successful. This condition is due to the fact that the ouananiche is making its annual pilgrimage to the head waters to spawn. The angler can have wonderful success in whipping with his flies the pools at the foot of the falls, as it is there that the fish are resting prior to making their high leaps. Incidentally, it is well to mention that the fifth falls of the Mistassini River are sheer fourteen feet high, but prove no barrier whatever to the ascending fish. The third falls of the Metabetchouan would be pronounced by most salmon fishermen as being impossible for any fish to ascend, yet the ouananiche, large and small, pass them without apparent difficulty.

The subject-matter thus far given shows, in a general way, the habitat, history, and characteristics of the ouananiche in detail. While showing
it to be a fish fully worthy "the foeman's steel," yet will a description of its fighting powers enhance the reader's knowledge of its capacity to smash tackle. In the case of the salmon of the sea, heavy two-handed rods of from fifteen to twenty ounces weight and special tackle are required. In angling for the salmon of Lake St. John, it is different. There one uses trout rods of from six to eight ounces, an "E" silk line, an automatic reel,—in fact, the same outfit which would be selected for black bass or brook trout casting.

Many anglers returning from Lake St. John, following a first trip, and frequently after a second or third, set forth in print certain suggestions as to the tackle to be used, innovations that make the experienced ouananiche fisher smile. The main fault arising from lack of experience—experience that requires more than one or two seasons to acquire—lies in advocating the use of small flies. While they may attract equally as well, or, for the sake of argument, it will be admitted better than those of medium size, the case does not end there. It is well known amongst anglers that small hooks are for small fish, and larger ones for those of increased size. If one is partial to small hooks, say number ten or twelve, let him try his skill against another using number four or five. Again,
FOREST, LAKE, AND RIVER

let it be admitted that the former will attract and hook the most fish. Result—the large hook brings to net two or three fish to the small hook’s one. This is not an individual opinion, but an absolute fact based upon the knowledge of practical ouananiche fishermen after many years’ practice. It is certainly far better to hook a few fish, and save them, than to prickle a quantity with a baby trout fly, and lose them. The possibility of bringing a four or five pound ouananiche to net with a number ten or twelve hook is as remote as that of bringing a tarpon to gaff with a number o bass hook. He who has a hobby will ride it, even if by so-doing he loses a majority of fish hooked. Unreasoning prejudice should, however, be avoided, and the consensus of opinion of experienced anglers followed.

Pictures, not words, could alone properly describe the fighting qualities of the ouananiche. A series of moving photographs representing the play of a lusty three or four pounder, well hooked, might do the fish justice; written descriptions cannot. Imagine the black bass at his best, increase his aggressive powers several fold, and you have the ouananiche. While the bass leaps from the water possibly three or four times, the Lake St. John fish is scarcely content with less than eight or ten. Perhaps the best simile would be to compare it to
THE OUANANICHE

a bull-dog clinging to a stick that one holds, and endeavors to retain. The securing of the fish or stick is equally difficult. The action of the dog and fish is very similar.

The angler casts his flies upon a swift-flowing rapid or a seething, boiling pool. Previous experience with other fish would indicate that no member of the finny tribe could live there. But previous experience does not count here. A silver flash possibly, a sharp tug at the line surely! This is usually the first intimation of a strike, as it is given under or just at the surface, being, therefore, probably unnoticed, owing to the rough waters. A sharp answering strike back on the part of the angler, and a battle royal is on. So erratic and at variance is the fighting method of one fish from that of another, that a general description is valueless. Perhaps the better plan is to describe the antics of one particular fish, and allow that to sufficiently stir the imagination to enable one to picture to some degree the behavior of all.

The black bass cannot be belittled as a fighter, since he comes of fighting stock, protects family traditions, and verifies them beyond question. Mayhap, like a poorly trained fighter, they may keep up a fierce battle for a few short rounds, but
eventually the one best trained makes the best showing. A fit candidate for the piscatorial insane asylum is the ouananiche who feels the prick of the angler's hook and fails to shake it loose. Every contortion known to the high and lofty class in tumbling is practised. Almost as much out of the water as in, it would be, perhaps, less difficult to describe what they do not do.

With the first prick of the hook, our fish is out of water, and well out,—two or three feet,—falling back with a splash. His next rush is deep down, jerking at the line as does the bull-dog with his stick. Not succeeding in securing freedom from the hook, a rush to and fro is made, followed by another leap. Now comes a run down stream that only an automatic reel with increasing tension safely checks. The drag on an ordinary reel is useless, and permits the fish to run into rough water, take out all the line, or so much that, should he run back, the slack cannot possibly be reeled in quickly enough. While the automatic checks a run, it also gathers slack, no matter how rapidly given. Another jump, another dive down, another run marks the continuance of the struggle. Enhancing the sport is the anxiety of the angler, fearing the loss of his fish after the hard fight. In the mean time the wrist begins to
tire from playing the rod with the butt presented, so much so that, when the fish is netted, a rest before again casting is absolutely necessary.

Many fish will be lost, and this must be expected. Loss from being poorly hooked or from broken tackle cannot be avoided; but when caused by sharp checking of runs, improper tackle, and especially impatience, it can be. Those who have caught black bass have laid the foundation for the art of taking ouananiche. That, however, is to have but the alphabet of this fishing learned, the advanced education being secured only through much experience. Written description and rules may give hints, but practice alone can bring success. Were all these fish to fight in a similar manner, specific advice could be given; but as they do not, actual practice, alone, enables one to learn their manifold vagaries of action, and to be prepared for the same.

Consultation with a score or more of anglers who have sought the Lake St. John fish, not once but many times, demonstrates fully the unanimity of opinion that they are the greatest fighting freshwater fish, pound for pound, extant. Investigation shows the few who may hold opposite opinions—possibly two or three—to have been the victims of adverse circumstances. Either the fish did not
bite, possibly ran small, or, as will occur with any game fish, were lacking in extreme fighting qualities at the time. As is well known, under certain conditions of weather, water, lack or superabundance of food, or other unknown causes, the bass, trout, and even the salmon are disappointing in their action. One should not, therefore, condemn them as a whole. There are other fish, and especially are there other days when conditions are reversed. It cannot be said that game fish always fight alike, since they do not; it is logical to add that to maintain that the same fish always lack game qualities is equally untrue—absurd. Those most enthusiastic over the gameness of the ouananiche are the salmon fishermen. In a position to secure the finest fishing our waters afford, yet will they leave that sport and seek Lake St. John and its justly noted fish. Most of them cheerfully admit that, size considered, the “little salmon” is the greater fighter.

Individual members of the St. Marguerite salmon preserve, located on a river bearing that name, flowing into the Saguenay, frequently hook a ouananiche in casting for salmon. Instantly a shout advises their companions of the fact. Joyous indeed is this fortunate angler, as he anticipates a fight far more strenuous and exhilarating than
that given by a salmon of even superior weight. No argument can be stronger than this to verify the game fighting qualities of the "little salmon." There is certainly none other of our fresh-water fish that would attract a salmon fisher from his chosen sport, or interest him so thoroughly.

While it is utterly impossible to make any rule or set of rules to be followed to successfully hook, play, and bring the ouananiche to net, as previously stated, it is entirely practicable to advocate certain tackle to use in their capture, such as is justified by ample experience. Prior mention has been made of the proper size rod, line, and kind of reel to use, and each will be found to be correct. Occasionally a devotee of an extremely light rod, or the opposite extreme, a heavy one, will insist upon his idea being the proper thing, and follow it. Certainly there is no absolute criterion in the matter of the tackle to be used, but there are sensible ideas on the subject, based upon long experience, that should be followed by rational sportsmen.

The use of an extremely light rod, primarily, entails not only a great amount of skill to preserve it intact, but to secure the fish as well. Backbone in a rod is absolutely necessary, since that alone will tire the fish without unduly tiring
the arm. Physical pain or exhaustion is absolutely out of place when following a favorite sport. When one needs to study every move to avoid breaking a too delicate split bamboo creation, he prolongs his sport to an unreasonable degree, exhausts himself, and increases the possibility of losing his fish. The other extreme, a heavy rod, lacks spring entirely, unless a very large fish should be hooked. This throws the whole labor of tiring the fish upon the angler, while any sudden jerk, unrelieved by the spring of the rod, will result in its tearing loose.

To properly play a ouananiche, the butt of the rod should be held towards it, which will bend it to a "C" shape. The rod being held in the right hand, fully six feet of line should be drawn between the reel and first guide ring with the left. Playing a fish by this method of using rod and line will, to a certain extent, prevent it from making long runs, and at the same time avoid excessive strain when it jumps. When a jump is made, the position of the rod is quickly reversed, being pointed directly at the fish, and the line given or taken as the pull may warrant. This method of fishing causes a steady strain, and is the only one that will prevent too much at any single moment. In reality, the hand takes the
place of the reel to a great extent, and will tire any fish much quicker than playing it with reel alone, and beyond question will bring a larger number safely to net. It is certain that a fish can thus be handled in a much more delicate manner, as the many jerks and pulls, through the delicate sense of touch, indicate just what is to be done, when a fish undertakes to make a run or pulls too hard. At such times the hand should release the line, and the strain and playing be maintained by the rod and reel. In the event of further jumping, the line can be again quickly grasped, and the hand-playing repeated.

Under no circumstance should more than two flies be used, while, if the fish are biting freely, one is advisable. Two fish hooked at once will always work at cross purposes, and if of good size, will probably destroy rod or tackle. Heavy, six foot, single leaders should be used, together with an "E" enamelled silk line. Loop leaders will be found to be most advantageous, owing to the constant changing of flies being necessary.

To advocate any particular reel as being better adapted to successful ouananiche fishing than all others, is to tread on dangerous ground. Equally so would it be to suggest some special make
or kind of rod. Every angler has his own preferences in this regard, and will defend his claims for excellence of choice to the fullest extent. For this reason it is better to state personal preference only and the reason for such.

As previous mention has been made of the automatic reel and a reference to its action noted, it is necessary to go deeper into the subject and institute a comparison with so-called crank reels. In the case of the ouananiche, as with the salmon, it will be found that it will make frequent long runs away from the angler, and is liable to return immediately to the starting point. During the run, a large amount of line is taken out, which with the rapid return of the fish, a crank reel, no matter how fast it multiplies, cannot recover sufficiently fast to prevent slack. If the fish immediately makes another run, as frequently happens, it carries the slack until the line is taut, and the sudden jerk tears out the hook. With the automatic reel the drawing out of the line gradually winds a spring, giving a steadily increasing tension that is impossible otherwise. This quickly tires and checks the fish, and no matter how quickly it returns, the spring reels the line as rapidly as given, and absolutely no slack can be formed. A
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special claim to superiority lies in the fact that only one hand is required to hold the rod and manipulate the reel. This leaves the other hand quite free to use in handling the line or to net a fish.

The selection of flies is of special import, success depending almost wholly upon correctness in this respect. The same flies, both as to kind and size, are to be used as in casting for salmon—the gaudy, bright ones being preferred. There are times, however, during which almost any fly will prove attractive. When the fish do not rise readily, one should thoroughly test each of the varieties he may have. Beyond question the Jock Scott and Silver Doctor are more uniformly successful, and one of them (in using two flies) should, as a rule, be used as the trailer or end. A fly in absolute color-contrast should be fastened on as the dropper or top. A great assortment of flies is not at all necessary, ten or possibly twelve kinds affording sufficient variety. The following list will prove of advantage to select from—all being exceptionally good:

Jock Scott, Brown Hackle, Ferguson,
Silver Doctor, Cow Dung, Montreal,
McCarthy Ouananiche, Professor, Grizzly King,
Royal Coachman, Hare’s Ear, Seth Green,
Queen of the Waters, Jungle Cock, March Brown.
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It is well to repeat here that number four or five hooks are unquestionably the proper sizes to use. Those tied with a double snell or helper are especially to be selected.

A parting word of advice is to suggest the selection of a large, deep, long-handled landing net. This is absolutely required as a measure of safety. Its open diameter should be at least fifteen or eighteen inches, depth thirty inches, and a five or six foot handle is necessary. A net of this size is required, as the ouananiche fights to such an extent that even when netted it is liable to leap from a shallow one and be lost.

To attempt to teach one who has never tried, just how to angle for, play, and bring to net a lusty ouananiche, or in fact a salmon, trout, or bass, would be as difficult as the effort to teach fencing or even photography by written words. To be sure the where and when to fish, the kind of tackle, method of use, and method of playing a fish when found, can be made clear in a great measure. The benefit to be derived ends when one has digested that amount of advice. The intending fisher at Lake St. John may learn from this article all that seems possible to make known in advance. With
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this knowledge to work upon, success should follow sooner or later.

There is no doubt that ample experience may elaborate or even improve upon the advice and suggestions herein set forth. There is much yet to be learned in regard to the ouananiche to perfect angling successfully for it. The sport is there for all—seek it! This fishing is not far advanced beyond infancy—study it! Whatever seeking, study, and experience may bring forth, in addition to what is now known—write it!
THE TROUTS
OF NEW ENGLAND AND
EASTERN CANADA
Red-Spotted Trout (1)

The Cut-Throat Trout (2)

Salvinius Fontinalis

Salmo Cinereus
(1) **Red-spotted Trout.** *Salvelinus fontinalis*

(2) **The Cut-throat Trout.** *Salmo clarkii*
(1) POROSAN SABLING. Salmo gairdneri

(2) THE STEEL-HEAD TROUT. Salmo gairdneri
(1) European Saibling. *Salvelinus alpinus*

(2) The Steel-head Trout. *Salmo gairdneri*
(1) **Scalare Trout**, Salvelinus alpinus concolor

(2) **The Bufflehead Trout**, Salvelinus phloxinus
(1) **Sunapee Trout.** *Salvelinus alpinus aureolus*

(2) **The Blueback Trout.** *Salvelinus oguassa*
THE ARCTIC TROUT. Salmo salar (Linn.) (1)

DOLLIE TROUT. Salmo gairdneri (2)
(1) **The Arctic Trout.** *Salvelinus alpinus arcturus*

(2) **Dolly Varden Trout.** *Salvelinus parkii*
FROM the middle of the fifteenth century, when Dame Juliana Benners wrote and printed the first book in the English language on the subject of fishing, to the middle of the nineteenth, when the Father of American angling, Thaddeus Norris, gave us his "American Angler's Book," the fishes of the salmon family have been looked upon as the most worthy by anglers; not, we think, entirely because of their acknowledged game qualities, but partly from the conditions under which they are captured and the skilful methods and delicate tackle used in bringing them to the net or gaff.

The refining influences of the environment of an angler, when on a mountain stream, may also have much to do with placing these fish above the plane of those of sluggish or even placid or purer waters. Be this as it may, the trout has been, and probably always will be, most eagerly sought by fly fishermen, and they do not, now-a-days, have to travel afar, particularly in New England, for owing to proper planting, and the better observance of
the laws protecting them, the trout streams are plentiful and the fish increasing in numbers.

The native trouts of New England and Canada consist of ten species, viz:

The Brook or speckled trout, *Salvelinus fontinalis*,
The Dublin Pond trout, *Salvelinus fontinalis agassizii*,
The Long-finned charr, *Salvelinus alpinus alipes*,
The Greenland charr, *Salvelinus alpinus stagnalis*,
The Arctic charr, *Salvelinus alpinus arcturus*,
The Sunapee trout, *Salvelinus alpinus aureolus*,
The Blueback or Oquassa trout, *Salvelinus oquassa*,
The Nares trout, *Salvelinus oquassa naresi*,
The Lac de Marbre trout, *Salvelinus oquassa marstoni*,
The Lake trout or togue, *Cristivomer namaycush*.

The above named fish are all "charrs," distinguished from the salmon and salmon trouts by the location of the teeth on the vomer, a bone on the roof of the mouth. This peculiarity will be hereafter described in detail.

In addition to these ten species of native trout, there has been introduced into New England waters five foreign species and a few transplanted forms from the Pacific slope. The foreign varieties are:

The German or Brown trout, *Salmo fario*,
The Loch Leven trout, *Salmo trutta levenensis*,
The Swiss Lake trout, *Salmo lemanus*,

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European Sea trout, *Salmo trutta,*
The European saibling, *Salvelinus alpinus.*

The Pacific forms introduced, so far, are:
The Rainbow trout, *Salmo irideus,*
The Black-spotted trout, *Salmo clarkii,*
The Steel-head trout, *Salmo gairdneri.*

Of all these species the common brook trout, *Salvelinus fontinalis,* is more than the peer from an angling standpoint. It will be known, on sight, by the bloom of the body, suffused and velvety in coloration from gill-cover to peduncle; by the deep olive tone of the vermiculations on its mottled back, and darker mottlings on dorsal and tail fins; by the dusky shadings on the lower paired fins, on which a cream-colored band appears anteriorly, followed by another of darker hue; by the red spots, smaller than the pupil of its eye, seldom found on the back, but always present, with their areola of bluish tint, on the sides.

Food, its character and supply, depth of water, its chemical constituents, and other causes, modify the tones, and sometimes effect wonderful changes in the coloration of fontinalis; but, take him where you will, on a dainty fly and a light rod, which should be an embodiment of yielding resistance, and he will be found full of knightly qualities,
sturdy resistance to capture and keen intelligence in resources of escape.

The habits of trout have elicited much discussion, and no fixed rule can be laid down in explanation of their idiosyncratic moods and traits. One angler finds them on the shallows, another in mid water or in the boil of rapids, and again lying in the deepest water of the pools. To-day they are leaping and flashing in the air, apparently feeding on midges; to-morrow lying *perdu* under sheltering banks or rocks, darting out upon their prey; while next day the most tempting lures cannot entice them to feed.

Often as the shadows are gathering over the stream, they may be seen coming into the air with the slow and measured leaps that a porpoise often makes in his lazy but symmetrical, arch-like movements. At such times they do not appear to feed, and seem to be seeking the air for hygienic or sportive reasons only.

Another interesting peculiarity, and one that has puzzled anglers and savants alike, is that of change of coloration under varying conditions. It is a recognized fact that trout in dark, deep water assume the color of it, the red spots, however, becoming more brilliant. In moderately shallow pools, their color becomes lighter, and
when feeding or lying on the light-colored sand at the mouth of the rivulets, they assume a silvery tint which pervades the entire body, the red spots becoming dimmer and the worm-like markings on the back less defined and more diffused.

The change of coloration is certainly involuntary, and is, doubtless, a safeguard that nature has provided against the king-fisher, the fishhawks, and other enemies. We have sometimes thought the change in coloration takes place or is adjusted through the organ of sight, for nature has so ordained that when a trout becomes blind he turns black, or nearly so, and his color remains the same on light or dark bottoms.

Trout spawn in a similar manner to other fishes of the salmon family. The two sexes mate, and the male is then on the watch for intruders. The female uses her tail in making the nest, whipping the gravel until a hole is made about two inches in depth, and then cleans the bottom for a foot or more around the bed. When she is ready to spawn, the male becomes aware of the fact by some language of their own, and approaches her. The ova are then dropped, and the milt deposited upon the eggs, the male being within a few inches of his consort. Many of the eggs, however, fail to become fertilized, dropping down
stream with the current. They are partially devoured by cunning minnows and other fish, now and then, who are lurking in the vicinity unseen by the male trout, who is deeply absorbed in the duties to which he is impelled by the spawning instinct.

Probably not more than five per cent of the ova dropped on natural spawning beds ever mature, while of those raised by the improved methods of the fishculturist, fully seventy-five to ninety per cent come to maturity in the hatching ponds.

Unfortunately those raised by the artificial process are generally placed, when less in size than fingerlings, in streams abounding with their natural enemies, and but a small percentage of these innocents become yearlings, at which time they are measurably able to take care of themselves.

The number of eggs yielded by an adult trout depends upon its size and age. Yearlings usually produce one hundred and fifty to two hundred and fifty; two years increase the number to three hundred and fifty to five hundred, and older fish five hundred to twenty-five hundred.

The general form of the brook trout varies very much. Sometimes it is long for its depth and sometimes short, but the average depth is about one-fourth, or one-fifth of the length of its body.
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The head is blunt and somewhat large, and is a little more than one-fourth the length of the body. It has a large mouth with teeth on the jaws, tongue and palate bones, and a small patch on the roof of the mouth.

The scales are numerous and very small, almost microscopical. The tail is nearly square in the adult, and somewhat forked in the young. The brook trout may be distinguished from the other charrs by the dark brown or blackish markings on the back, which are called "vermiculations" or "worm-like markings."

The Dublin Pond trout, *Salvelinus fontinalis agassizii*, has as yet been found only in the water of that name, sometime known as Monadnock Lake, and in Centre Pond, both being in New Hampshire. It is of a pale grayish coloration, the red spots being very faint; otherwise it is similar to *Salvelinus fontinalis*.

The long-finned charr (*Salvelinus alpinus alipes*) and the Greenland charr (*Salvelinus alpinus stagnalis*) are found only in the lakes of Greenland and of Boothia Felix, but are supposed to exist in other waters of Arctic America. The first takes its name from the extraordinary length of its rayed fins, and is otherwise distinguished by its forked tail and its very small adipose or rayless fin. Of the Green-
land charr but little is known. It is not supposed to be a distinct variety from the long-finned charr.

The Arctic charr (*Salvelinus alpinus arcturus*) is a native of Victoria Lake and Floeberg Beach, Arctic America, and is the most northern salmonoid known. We possess but little knowledge of its habits, as only a few specimens have reached our scientific institutions. It is closely allied to the two last named species.

The Sunapee trout (*Salvelinus alpinus aureolus*) is a large charr, growing to a length of twelve to eighteen inches, originally found in Lake Sunapee, New Hampshire, and since discovered in waters near Ellsworth, Maine. It is evidently a close relation or, perhaps, identical with the European charr, known as the saibling, which Professor Garman says was introduced into Sunapee Lake from Germany. Layman advocates, here and there, insist upon its being indigenous to the lake. Certainly no fish coming to the surface in American waters has ever found such difficulty in being awarded its legitimate origin.

Be this as it may, we know it to be one of the purest representatives of the charr or saibling found in our native waters. It is a fish of excellent quality, both on the rod and table, and of unusual beauty of form and coloration. Its back
is brownish, silvery gray below, with small orange spots on sides and beneath the lateral line. The caudal extremity is grayish, the belly of bright orange and the anal and ventral fins are also of an orange color with their outer edges white. There are no mottlings on the back as appear in the brook trout (*fontinalis*), which renders it easily distinguishable from that fish.

The Oquassa or blueback trout (*Salvelinus oquassa*) is the smallest and one of the handsomest of the charr trouts. It never exceeds twelve inches in length, and seldom grows beyond ten. The coloration is dark blue, the red spots small and round and usually confined to the sides of the body. Its habitat is believed to be restricted to the Rangeley Lake system in Maine, although Professor Merriam has stated, some years ago, that fish, anatomically identical, have been caught in the lower St. Lawrence river, weighing six to seven pounds.

The blueback lies in deep water during the greater part of the year, but about the tenth of October comes near the shore and ascends in great schools the Kennebago River for the purpose of spawning. Half a mile above its mouth the Kennebago receives the outlet of Lake Oquassa; the trout leaves the Kennebago to the left and
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runs towards Oquassa Lake, where its bridal voyage comes to an end. About the middle of November it goes into Mooselucmaguntic Lake, and is seen no more until October of the next year.

The blueback resembles the Sunapee trout more than any other of the charr species, yet differs from it in size, spawning habits, and markings of the young. The largest blueback weighs only a few ounces, while the Sunapee reaches ten pounds in weight. The blueback is relatively a slenderer charr than the Sunapee, and seems to lack the white edges found on the fins of the Sunapee and other charrs. There have been a few caught in summer with angle-worms as bait, and they have been taken with the same lure while in schools on their spawning beds. They give the angler the impression that the bait only annoys them, and that they take it in an effort to drive it away, — an influence which seems to control many other fish when on the spawning beds.

The Nares trout (*Salvelinus oquassa naresi*) is merely an allied varietal form of the blueback trout. It has a greenish back, reddish fins, blunt and deeply forked tail. It never grows beyond a length of ten inches, and so far has been found only in the lakes of Arctic America.
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Another charr, the Lac de Marbre (*Salvelinus oquassa marstoni*), is also closely allied to the blue-back of the Rangeley Lakes, although it reaches a greater size and has its tail more deeply forked. Its color is dark brown on the back with an iridescent bluish tint, and the red spots are very faint and apparently do not exist in many specimens, with the exception of a few along the lateral line, which are very indistinct. This trout has only been found, as yet, in Lac de Marbre, Ottawa Co., Province of Quebec, Canada.

The Great Lake trout (*Cristivomer namaycush*) is distinguished anatomically from the other charrs by the presence of a raised crest behind the head of the vomer on the roof of the mouth, the crest being armed with teeth. Its head is very long, with the upper surface flattened, and the mouth is large; tail well forked, and the fatty or second dorsal fin comparatively small. The general coloration is dark gray, sometimes pale, sometimes almost black. The coloration of the spots distinguishes lake trout on sight from the other charrs which show red coloration, while the spots on the namaycush are pale and grayish with often a reddish tinge only. It grows to a length of about thirty-six inches, and has been known to reach the weight of sixty to one hundred pounds, but the
average is not over seventeen. It varies greatly in form and color in different waters. In Lac des Neiges, Canada, it is said to be, by Professor Garman, almost black.

The local nomenclature of this fish is more singular and varied than that of any other species of the salmon family. In the northwest it is the "namaycush," the "togue," or "tuladi." In Maine and New Brunswick it is also sometimes called the "lunge." It is the "siscowet" or "siskowitz" of Lake Superior, and in the northern part of the lake it is generally known as the "Mackinaw trout." In the northern part of New York it is sometimes called "Lake salmon," and the Maine Indians designate it by a name signifying "fresh water cod." At Green Bay, Wisconsin, those having salmon-colored flesh and blackish bodies are called "black trout," those with white flesh, "lake trout." About Great Traverse Bay, the variety which is taken in shallow water, being long and slim, is called "reef trout," and when it is larger it is known as "a racer." Specimens of another variety, short and chubby, are called "pot-bellies." At Grand Haven they are known as shoal-water and deep-water trout, and "buckskins" is the name given them around Thunder Bay in Lake Huron.
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In Canada, many local names are applied to them, to wit: Tyrant-of-the-lake, forked-tail trout, black lunge, silver lunge, racer lunge, black salmon, lake salmon, and tuladi.

The distribution of this fish is widely extended, covering the Great Lake region and lakes of northern New York, New Hampshire, and Maine, also those of Canada, and westward and northward to the head-waters of the Columbia and Frazer rivers, the streams of Vancouver Island and north to the Arctic circle.

The trouts previously described are all charrs, and the only true salmon trouts in the waters of New England have been transplanted from other sections.

In this connection the angler will be apt to exclaim: How can we tell which is a charr and which is a salmon trout, with so many confusing variant forms of our favorite fish? The difficulty is easily solved. Put your finger in the mouth of your fish, and if you find the vomer—a bone situated on the front part of the roof of the mouth—flat, with teeth on its body, and behind these an irregular single or double series of teeth, you hold in your hand a salmon trout. If you find the vomer much depressed, convex, shaped like a boat, with teeth on the head of the bone and none on
its shaft, you have a charr under inspection. The peculiar and exceptional shape of the vomer of the lake trout has been described on a preceding page.

The introduced or imported salmon trouts are the German or brown trout (*Salmo fario*) called the Von Behr trout by the United States Fish Commission, and the Loch Leven trout (*Salmo levenensis*), the first named having been brought from Germany, and the other from Scotland. Many authorities question the differentiation between these two species, although the presence of red spots on the brown trout, and the absence of them on the Loch Leven fish, is a strongly marked characteristic. The brown trout with its ability to, and practice of, eating our small native brook trout (*fontinalis*), has lost popularity among those who seek for desirable fish to plant. When introduced, they should be in waters where our native trout do not live. The brown trout, like the rainbow, are adapted to waters of a higher temperature than our brook trout, and although the brown trout possess no game qualities equal to those of *fontinalis* or the rainbow, it may be planted in private waters where the species may live supreme, thus giving variety to the fishing.

The Loch Leven trout (*Salmo trutta levenensis*) was brought from Scotland about fifteen years ago, and
THE TROUTS

has been planted with moderate success in some of the waters of the Eastern and Western States. It takes its name from the old lake adjoining the dismantled castle within which Mary Stuart was imprisoned by Queen Elizabeth. It is very closely allied to the brown trout, and is a beautiful and gracefully formed fish, and is said to be distinguished from the brown trout by the absence of red spots on the body which, however, appear on specimens more than four years old, but so dimly as scarcely to be seen. This peculiarity of coloration is disputed, and yet it may be another illustration of the effect of food and environment on the coloring, markings, and form of fish.

The rainbow trout (Salmo irideus) is a native of the mountain streams of the Pacific slope, where six different species exist, all differing somewhat widely in coloration, form, and size. The distinguishing mark, however, which in various degrees of color may be seen on all the species, is a reddish lateral band, which disappears when the fish visits salt water.

The fish savants partially differentiate these six species by the number and positions of the black spots, which on many specimens are found to be very numerous. The rainbow that has been introduced into eastern waters is the species from the
McCloud River, California, known as the Shasta rainbow (Salmo irideus shasta). It may be known on sight by the characteristic reddish lateral band which as a rule assumes a deeper hue in the transplanted fish than in those caught in the waters of the west.

The charm of the rainbow to the angler lies in its great game qualities, and singularly these are displayed more prominently in the transplanted fish than when it is captured in its native waters.

The black-spotted, Rocky Mountain or cut-throat trout (Salmo clarkii) is found from Alaska to Mexico, and is very abundant in the streams of the Rocky Mountains, the Coast Ranges, and the Sierra Nevada of the Pacific slope. When it has access to the sea, it sometimes attains a weight of thirty pounds, but the average in the inland streams will not exceed one pound.

The distinguishing mark by which this species may be known, is the crimson slash on the throat, hence, the name "cut-throat," which is somewhat of a misnomer, owing to the direction of the slashes.

The United States Fish Commission have recently established hatcheries for these fish, and are distributing them to the fish commissions of the different states. They are hardy fish and doubt-
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less will thrive in waters having a higher temperature than is conducive to the health and vigor of eastern brook trout.

By the kindness of John W. Titcomb of St. Johnsbury, Vermont, Department of Fisheries and Game, I am enabled to record his experience in Vermont waters, with the rainbow and steel-head trout. About twenty years ago a gentleman in Rutland secured a lot of rainbow trout and kept them in a reservoir until they became fingerlings or, perhaps, larger. The reservoir overflowed in a freshet, and the fish ran out into what is called East Creek, a tributary to the Otter River. As a result of this plant, East Creek furnished very good fishing, two rainbow trout being caught there to one speckled trout. The tendency of the fish was to work down into the broader and deeper parts of the creek, where they sometimes attained a size of three pounds, and proved very gamy.

As the stream flows through the city of Rutland, the second largest place in Vermont, where there are a great many sportsmen, the fish have become depleted as a result of over-fishing. A few fish ran out of East Creek into Otter Creek, thence up towards its source several miles, and from there entered what is called Cold River, another trout stream, where they are occasionally
caught. This is the only successful plant in public waters.

Three years before the St. Johnsbury station was located on Sleeper River, some rainbow trout fry were sent in the spring of the year, just as the sac was absorbed, say 5000 in all, and planted in the head-waters of this river. Every spring since, a few rainbow trout have been taken below the falls.

Some years ago a plant of yearling rainbow trout was made in Mad River; as a result came fairly good fishing. In a majority of instances, the plants produced no results, but the fish were always put in as fry.

Senator Redfield Proctor had a pond in Proctor, Vermont, which he stocked with speckled trout and rainbow trout. The pond is stagnant water. Here the rainbow trout seem to have done well and attained good size. They are more gamy and make better eating than the speckled trout.

Regarding steel-head trout, there has not yet been time enough to note results. Several plants of fingerlings have been made in Lake Champlain during the past five years. Gratifying results have followed the planting of fingerlings in Willoughby Lake, a body of water four miles long and a mile wide. Quite a number have been caught ranging
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from one to three pounds in weight. The natives prefer the lake trout or lunge to eat.

Quite a few steel-heads were found in a small stream emptying into Willoughby Lake, in May, 1900, and a field station will be opened there this year with the hope of securing spawn.
A RAINBOW

From West Point
A RAINBOW smiled when thou wert born
TO A TROUT

O live, lithe gem of gorgeous birth,
Springing from icy waters clear
To wander restless, far and near,
Through crystal halls of liquid mirth!

A Rainbow smiled, when thou wert born,
Or Sunset gave thee hues to keep
And weave in secret waters deep,
Till they should match the eyes of Morn.

Oh! swift, shy nymph, thy favorite nook,
Down by the old forsaken mill,
No longer shields thee from the ill
temptation of a fly — and hook!

Upon the surface of the stream
The bright lure takes thy brighter eyes;
The unseen angler is more wise
Than thou canst understand or dream.

Yet he, who thus deceives thy sight,
How oft himself by outward shows
Is fooled — by superficial woes,
Or barbed baits of false delight!

Ah! once, how well thy joy shone out,
In motions musical and rich
In coloring, O Water-witch,
Soon to be only — a dead trout!
FOREST, LAKE, AND RIVER

But still the line of simile
Extends e'en here to fit thy fate;
A Mighty Angler lies in wait,
Eke for thy killer, as for thee.

No bait that Angler dangles bright
Before the hungry hearts of men,
Save a fond hope which, now and then,
They fancy is a heavenly light;

Hope of a Life unvexed by Doubt,
By bitter Death and Sorrow sour,
Life of as much more joy and power,
As Man is more than thou, my Trout!
Rour of MOUNTAIN STREAMS
THE TROUT OF MOUNTAIN STREAMS

Is there anything in existence more charming, more beautiful, more replete with the harmonies of woodland, than the splashing, gurgling, joyous, swiftly flowing brook? Its waters ever suggestive of the chill of snow-clad hills, ever sparkling in their cold, clear purity? Now its course dashes over rocks that break into frosting foam the wealth of never-ceasing waters. Again, it forms itself into a soft-flowing stream, as it twines in serpentine coils through meadows. Bending bushes bedeck its borders. Onward, ever onward, it rushes, until lake or ocean welcomes its coming.

Here is indeed the fitting nursery for the development of that rainbow-spotted, restless, beautiful life we know and love, and call the trout. Even the tiny specimen, but little larger than the fly with which it is captured, displays the characteristics of the race. Their birthdays but mark increase in weight, agility, and keenness.
Erratic in every mood are these fish, from the birth to the death. No man has learned, none will ever know, how to account for their various tendencies, which overthrow all reasonable theories, or manage to put together a menu of lures which will always excite their appetite. Generations of lovers of the sport come and go, and yet the great question never is settled. For this reason will these illusive specimens of the finny tribe always remain a joy to the true angler. Much has been written, much more will be written by able admirers, yet the humble attempt of the individual may be excused, when zeal of admiration is the incentive.

Many and varied have been the means and devices employed in the capture of these royal beauties. In boyhood, when financial embarrassment was a ruling factor, a common hook and line, a pole cut from the young tree, and a large worm, were enough to give joy to lads who even then became skilled in finding out the shady places, the deep pools, and other cunning hiding spots; or, with the shortened line, could crawl near to a narrowing brook and carefully, softly drop the bait, which would be quickly taken before the biter realized that it was not a dainty morsel, and thus became a captive. While, perhaps, the
TROUT OF MOUNTAIN STREAMS

charm, the freedom, and enthusiasm of this procedure never loses its fascination, yet as one grows older, with a keener wish for more artistic skill, the interest is heightened by more delicate methods than those employed when bushwhacking them in our pin-hook days.

In early springtime, alluring little artificial flies are not the tempters that later, in balmier air, they become. Productive of better results is the small line, the bait, a worm, and a single hook. Or, at times, a worm caught up by a set of three of the smallest hooks, on one gut, placed at intervals from each other, giving the worm the appearance of crawling through the water. Then is there good sport in the taking of a fish, as only one of the small hooks will hold him.

A cast ahead is made as the stream is waded, and almost unconsciously are picked out what appear to be favorable resting localities. How cautious one becomes in the approaching, how careful not to disturb, and to be sure to be well hidden; for there is no fish that swims which can so readily and easily be startled into sudden flight, as a trout, quietly lying in the deeper water where the shadow of the rock gives protection, or where tall grasses sway, wafting a feeling of security about him.
Casting is done so that the bait drops, without any noise, into the right spot, whether the wading be up or down stream. Many people hold decided views upon this question, but, after all, extreme care is the first consideration.

In quick, splashing streams, where at the foot of a hillside the waters lessen in intensity, flies can be cast into the seething froth itself and receive marked attention, the fisherman standing on some stone that gives a fair footing. Another time, without being seen, the flies must be gently fluttered into a pool where, perhaps, they will be well taken, and the creel soon filled.

A recollection of earlier days becomes vivid at this moment. Where a shelf of jutting rock, deep in the water, gave a sure foundation, a rest for my back against the broad boulder, I stood immersed to the hips in water, which to-day would cause my death from coldness, and snapped out side casts until my basket could not contain another one of the little fighters.

In a stream not broadly stretched in width, it is better to use but one small fly, waxing the wings and body, or smearing with vaseline, so that it will remain on the surface, and often a sudden dash means the striking of a large fish, requiring patience and skill before landing is accomplished.
TROUT OF MOUNTAIN STREAMS

The angler always finds that each and every trout born in these trembling, chilling waters is full of fight to the last, and often outwits all endeavors at capture.

In the broadening stream that, strengthened by additional tributaries, grows proudly into something more like a river, where from the banks fishing cannot readily be done, the silent, quick-moving canoe can be used. As it glides on its way, one watches for either a deep pool, or, perhaps, is fortunate in locating a spring hole, where, if the sun shines brightly, an army of feeding trout can be seen. The canoe can be held quietly, protection gained from the growth of bushes or long grasses of the banks, and the place well whipped. The splashing of the trout that rise to the flies only seems to incite their comrades into a frenzy of biting, and excellent sport is the result. Every section of fishing country abounds in such mountain streams, all in a way different, each bordered about by purple hills, each one having a familiar look, each appealing strongly to the angler through inviting pools, rapid waters, and still-flowings, all abounding in the same marvelous, dainty, strong, beautiful, fickle, elusive, tempting, wonderful, and fascinating form of life, well known as the brook beauty.
In the hours when the sun shines too vividly, or when the fish are not anxious for food, come the charm and joys of the keen realization of the greatness and all-satisfying gifts of nature. Over a fire which has dwindled into hot embers, upon the sharpened joints of a pronged branch, are thrust some of the catch that are clean, hard, and cold. Beside their very cradle they are transformed into such delicious morsels that the appetite craves nothing but a sufficient quantity. Perfection in food, and fit for the Gods! A stretch on the grass, and after such a repast the comfort of a good smoke, seems too delightful to be real. Forgotten are the weary journeys, hardships, and all annoyances in the life of a perfect day like this. Body and mind rested and strengthened, a better feeling toward all humanity comes over us. Back to camp are taken only such a number of fish as can be put to use. The day has been well spent, and in slumber we enjoy the victories that skill and patience allowed us to gain.
In the hours when the sun shines too vividly, or when the fish are not anxious for food, come the charm and joys of the keen realization of the greatness and all-satisfying gifts of nature. Over a fire which has dwindled into hot embers, upon the sharpened joints of a pronged branch, are thrust some of the catch that are clean, hard, and cold. Beside their very cradle they are transformed into such delicious morsels that the appetite craves nothing but a sufficient quantity. Perfection in food, and fit for the Gods! A stretch on the grass, and after such a repast the comfort of a good smoke, seems too delightful to be real. Forgotten are the weary journeys, hardships, and all annoyances in the life of a perfect day like this. Body and mind restored and strengthened, a better feeling toward all humanity comes over us. Back to camp are taken only such a number of fish as can be put to use. The day has been well spent, and in slumber we enjoy the victories that skill and patience allowed us to gain.

"THE brook with its lulling music, and its mantles of softer foam"
THE RUNAWAYS

SUMMONS

When the reign of the Ice-King is broken,
And the sea less noisily sings,
And breezes of balmier odor
Wave over the land soft wings,
Then the truant trout trip homeward
To the streams that gave them birth;
But a mermaid’s whim has changed them
Into beings less of earth.
For the shadings, rich with many a gleam,
They have caught from the mermaid’s hand,
And her smile’s bright beam now make them seem
Visions from rainbow-land.

Their skins have a glossier silver,
And their fins are flecked with fire,
When they leave the warring ocean;
And full of a sweet desire,
As if for a mother’s petting,
Return to their native home.
The brook with its lulling music,
And its mantles of softer foam.
O! the sea hath a mighty spell, ’t is clear,
But the tiny brook must be
A world more dear; since every year,
Spring wins them back from the sea.
THE ANADROMOUS TROUT

THROUGH bogs and meadows, hemmed by dikes, encroached upon by ditches, flows the brook, covering with its waters and protecting amid the chilling months of winter, the tender vines that later on give forth their rich treasure of delicate berries.

Onward in twisting curves speeds the stream seaward, until the tidal waters of the river welcome its flowing. Here, in the deep holes fashioned by the force of swirling currents through the undermining of vine-clad banks, lie the trout, our well beloved, red-spotted brook beauties, rejoicing in the cool protection offered. Restless wanderers by nature, they cannot long endure inaction, therefore they soon desert the pool and venture forth to see the world. At first the tiny falls are tried. For a time they are content to loiter in the boisterous foam. Continuing their explorations, each dike and bog is passed in turn, until, with a joyous rush, they disport themselves.
in the waters of the broader river. The influence of the sea now tempts them by its offer of alluring and novel foods, and, yielding to its influence, they enter upon a life of more exciting and hazardous adventure.

The ocean has now absorbed them; but what they do, where they go, and what lives they lead there, no man has found out. Despite different theories, no adequate solution of the secret has been offered. When the warming breath of spring conquers the ice zone, then are these bold travellers seen again in broad rivers and purling brooks.

Perchance, it may be the loving memory of earlier days that entices them, for to the rivers, streams, and brooklets of their infancy, do they return. Before them, with them, or soon after them, come the vast armies of herring, seeking seclusion for their spawning.

Now, by sportsmen is the capture of the salter attempted. Protected by high wading boots, he approaches close to the edge of the channel in a river, or wades a stream, and with live bait or small pieces of fresh herring, casts into the deeper water, allowing his line to gently pay out by force of the current, meantime giving gentle motion to the line. The sophisticated angler
THE ANADROMOUS TROUT

does not now use flies, knowing that thus early in the season they are not well taken.

The play of the salter is like that of all square tails, except that his sea life has given him greater strength, and he is not conquered readily. As the early days merge into those of late spring, these fish are taken far up in the stream and even at the head waters.

The salter is indeed welcomed most heartily, for he opens the fishing season, and April first finds his admirers ready, even if the air is cold and the winds apt to show their force.

He is a charmingly beautiful fish and a strong game battler.
SALTERS
OR BROOK-TROUT THAT SEEK
THE SALT WATER
In writing an article on this subject, I am placed in a rather peculiar position for the reason that there are so many conflicting ideas in regard to the habits of what ordinarily may be termed the brook-trout, and I am comparatively young in experience and have had to enter into consultation with older sportsmen in order to gain certain information which they may have at hand, although in a great many cases I have found that it was directly opposite that of my own experience.

April first, trout fishing is a sport which is enjoyed, I believe, more largely in Barnstable County than in any other section of the New England States. At that time the law is off, and you will see the trains, the day before the first, carrying among their passengers many sportsmen, and their destination you are well aware of when you witness their luggage, for it usually consists
of rod and reel, besides a very large and comfortable grip in which is stored all the necessities for the occasion. These passengers do not seem to be very talkative, and it would be very hard indeed for anybody to gain from them just what their point of destination is, but their smiling countenances and their light-heartedness convince one at once that they are bound for that pleasure of sports which relieves the mind and destroys for the time being all appearances of old age.

My first experience in trout fishing was years ago when a boy in Connecticut, where the trout that we took were small, very seldom measuring more than six inches in length, and were considered at that time very good-sized trout. Those trout I took from brooks which were shallow and rushed down through the hills, in many places so shallow that it seemed almost impossible for even a small trout to survive, and finally reaching the river, but never, under any other conditions, reaching the salt water. My experience in Barnstable County was just the opposite: all the brooks and rivers, small and large, reach the salt water, usually by direct connection; whereas in Connecticut they emptied into large rivers and of course reach-
ing the sea, but I never in all my experience in fishing in the Nutmeg State secured a trout that I ever had any idea had been into the salt water.

Some twenty years ago I became interested in fishing on the Cape, or, rather, in Barnstable County, as I believe that I have confined myself to that section, and have secured my share of brook-trout. It was some five years that I had continued this fishing before an old fisherman said to me, "You must come down sometime and try the 'salters;'" to tell you the truth, I surmised that he meant by the remark that he would like to have me come down and do some herring fishing, which, as you are well aware, means simply scooping up these fish in a hand-net. Much to my surprise, and hard for me to believe at that time, he said that he meant brook-trout that had lived in the salt water, and I shall never forget the first trout that I took. It was on the Mashpee River, and as nearly as I can remember it now, about the middle of April. The tide was working in, and we were wading down this river, the water reaching nearly to the tops of our wading boots, and I was constantly in fear of the water over-stepping them, which at that time of year was sufficiently cold to at least make it dis-
agreeable for the fisherman. Casting ahead of me in a deep pool that seemed to work in under the embankment, I felt that a large fish had made a dash for my bait, and within a few seconds I gave him the butt of the rod, and then I can assure you a royal struggle took place. Fortunately, there was plenty of room, but unfortunately for me I had no hand-net, and it was necessary for me to tire the fish out before I could successfully land him, and although it did not take me more than five minutes, it seemed to me that it was at least half an hour. The fish was a noble one, and weighed a trifle over two pounds. The water was now so deep that it was impossible to continue fishing farther down the stream, and wading back to the landing place, I took the opportunity to examine this trout closely, and there is no doubt in my mind but that he was one of the handsomest salters that I have taken. Possibly I was carried into ecstasies over him because he was the first trout of that kind. I studied him closely for the reason that I wanted afterwards, if possible, in taking trout, to decide in my own mind whether or not they had ever visited the salt water. From that day up to the present time I have continued this fishing, and I believe successfully, for my fishermen friends who have
been with me are, I believe, convinced of this fact.

Now in taking up this matter at the present time, which I was induced to do through a very dear friend of mine, Dr. Johnson, I have done so with many misgivings, for the reason that I believe that my ideas in regard to trout and their habits in these rivers will conflict with the ideas of other notable sportsmen, but at the same time I have made it a very careful study, and believe that the conclusions that I have arrived at are perfectly right, that is to say, so far as my own experience goes. Controlling and leasing one of the best rivers in Barnstable County, that is, the best portion of the river, for the past ten years, I have been in a position to make closer observations of these trout, I believe, than many others have, but even after this close attention to the matter, I am still at a loss to understand some things, and up to this writing I am unable to-day to say decidedly that I am right.

The first day of April, along the shore of Vineyard Sound, where these rivers empty into the salt water ponds adjacent to and connecting with the Sound, you will see from seventy-five to one hundred fishermen scattered along just at the edge of tidewater, and all of them taking more or less
trout, or what we can properly term, now, "salters." There seems to be the place where they look for them, and where they get them. As one old sportsman writes in regard to the habits of trout in the Mashpee River, "They spawn in the fall, descend the river to tidewater, go and come with the tide, and ascend the river on or before the fifteenth day of May."

In the Coonamessett River, of which I write and to which my close attention has been given, I fished on the first day of April, five miles from tidewater, and secured large and elegant trout, and there is nothing about those trout to indicate to me that they have ever visited the salt water. Possibly the same day I may go to the mouth of the river to tidewater and secure trout at that point. Now, why is it that all trout do not visit the salt water? Every opportunity is afforded them to do so.

This season, on the fifteenth day of May, accompanied by a friend of mine, a very expert fisherman, I visited the mouth of the Coonamessett River at tidewater; starting my friend at the bridge, which I had every reason to believe was the best piece of fishing, I went below nearly a quarter of a mile and entered the stream. I secured four elegant salters which weighed at least
two pounds each, and after reaching a place where it was impossible to wade farther, I returned to my starting point, and hailing my friend, inquired in regard to his success; he said that he had taken nothing but small trout which he had cast back into the river. Now this was an experience which I had not looked for,—the taking of small trout at tidewater,—for in talking with all the old fishermen, they all were of the same opinion, that a trout did not visit salt water until he was at least three or four years old, which with the feed that they would secure would increase the size so that they would be at least fully half-pound trout. Leaving the mouth of the river, we drove to the upper part of the stream, some six miles, and my friend started fishing at that point. I proceeded at least one mile above him, and in casting in a shallow pool in the open I secured a two and one-half pound trout, which I know had never visited the salt water. The golden hues were so prominent that I do not believe that he had ever ventured far from the location in which I found him; but previous to that I have taken his mate, of nearly the same weight.

A trout that visits the salt water goes through a most decided change; the golden hues are gone,
and the silvery cast, which is the result no doubt of this change from fresh to salt water, and possibly the feed that they secure, may have more or less to do with it, is a most decided one, for the reason that the silvery cast gives them almost the appearance of landlocked salmon; it makes them voracious, and there is not the slightest doubt in an expert fisherman's mind when they take the bait. I have never tried them on the fly at this early season of the year, and do not believe that they would pay any attention to it.

In conversing with quite a number in regard to the appearance of trout, and the changes they pass through, a great many attribute it to the condition of the water at the bottom of the stream; but it is hard for me to believe that, after a brook trout has been subjected to the change which he experiences after going into the salt water, he can change back again to his original colors; but, as I say, a great many differ from me in regard to this opinion, and until I can take a trout and mark him, and secure him again, I shall not be able to convince my fellow-readers that this is true.

Every opportunity is offered to watch the habits of the trout in this Coonamessett River of which I speak, for the reason that it runs through a comparatively open country, that is to
say, through miles of cranberry bogs, and it is what is termed "open fishing" nearly the entire length of the river. Aside from some ponds which exist, where the bottom is muddy, the bottom of this river is sandy, and I believe one of the best places for propagating trout that there is in this country. The young fry have an opportunity to work up into the ditches between the bogs, so that they evade all foes and increase in size sufficiently to enable them to properly protect themselves when they enter the stream. Also, at the upper part of the stream is a narrow, shallow brook, that is a most excellent place for young trout, and the excellent fishing that exists continually, from year to year, justifies me in the belief that there are no better brooks in existence to-day in which to propagate trout than in these streams and rivers on the Cape. Of late years a great deal of interest has been taken in this direction, and I believe that the privileges are to be more and more valuable from year to year, and that the fishing shows no falling off.

The large trout which I have taken in the Coonamessett River are the most beautiful that I have ever seen, and there is not a State in New England where I have not fished a good share of the lakes, rivers, and brooks and secured my
share of their holdings, and I will say that for beautiful trout I have never yet seen any that can equal those taken on the Cape. The salmon trout is the only one I have ever taken. The meat is hard and pinkish in color; many times it reaches a reddish color, whether it be a brook trout or salter.

In closing this article, I will venture this opinion in regard to the trout, and in reference to those that reach salt water: I sincerely believe that after spawning they form into schools, and if a certain school starts for the salt water, they go there, whether they are large or small trout; if another school locates at a certain pond in the brook where they find deep pools or holes in which they think they will secure sufficient food for the winter, they stop there. This fact I do know, — that all trout do not, although they have the opportunity, go to the salt water. I know also that small trout go there, and that the age of the trout has nothing to do with it. I am also aware of the fact that they leave the salt water about the fifteenth of May, and I believe in many cases they run up the river into the ponds or source of supply at the head. In regard to trout changing their color from the surroundings, I am still loath believe that it has anything to do
with it; but on this matter I am not quite sure, and must leave it in the hands of others to fully determine by investigation which may be made hereafter, and I can assure you that the writer of this article will continue this line of investigation and, if possible, determine the truth.
The Aureolus of Summer
THE AUREOLUS

Here resting near a giant lichen'd ledge,
Where grow tall pines that lean t'ward ridge beyond;
In waters deep enfringed with rock-ribbed edge,
Seek I for game ne'er found in stagnant pond.

Down, down amid the icy water, pure,
Where sunlight dwindles to a starlit way,
Temptation, in the guise of dainty lure,
I cast, with throbbing hope and spirits gay.

A maddened power strives now the line to hold,
Unseen, but not unknown, O captive stern;
The contest waxes strong as jousts of old;
For glimpse of hidden foe my senses yearn.

Now sings the reel a song of victory,
Now flashes forth a streak of living light,—
A gleaming meteor struggling to be free,
To sportsmen's eyes a vision of delight.

Alas, the glory of the lake, its gem,
Fades, now, in force before the fire of day,
As flowers at nightfall droop upon their stem,
Embracing death, while life-tints fade away.
American Saibling

or Golden Trout
In the summer of 1882 anglers first began to hear of the capture of a large, silvery, deep-water trout at Lake Sunapee, New Hampshire. For several years this fish was known as the St. John River trout, on the presumption that it was descended from certain yearlings rumored to have been introduced into Sunapee from the St. John River, New Brunswick, in 1867, but which really came from Grand Lake, Maine, and were ouananiche. The conspicuous development of the under jaw in the males led to the local names of "hawk bill" and "hook-bill"; the silvery sides of the fish in summer gave rise to that of "white trout."
In October, 1885, George F. Peabody, now of Sunapee, then a resident of the East Shore, accidentally came upon a mid-lake spawning-bed, an acre or two in area, covered with hundreds of the new trout, ranging from three to ten pounds in weight. He promptly notified the Fish Commissioners of his find, and specimens were sent to Washington and Cambridge for identification. They proved to be representatives of a highly variable Alpine charr distributed through the Dominion of Canada, Labrador, and Greenland, but whose presence in United States waters was unsuspected. The charr is now believed to be aboriginal to Lake Sunapee, as well as to Flood’s Pond, in the town of Otis, near Ellsworth, Maine. The water of both these lakes is deep and exceptionally pure and cold. Lake Sunapee is a true ancient rock basin, as shown by the natural granite dam at the outlet. It now discharges into the Connecticut River; but until the receding ice of the last glacial epoch reached, in its sluggish melt toward the north, the lower valley of the Sugar River, the mighty inland sea of primeval times poured into the Merrimack over Newbury Summit, sixty feet higher than the level of the present effluent. Through the Merrimack watershed, while the valley of the Sugar River was as yet
choked with glacial ice, the quaternary trout, if of marine ancestry, must have found their way into this mysterious lake, following, like man and the higher mammalia, but by watery channels, the retreating ice-fields, and swarming into the basin of Sunapee, excavated anew for their reception by the erosive power of the glacier, and filled with its melting snows. This quaternary charr or Alpine trout — represented in the saibling of the mountain lakes of Europe from Austria to Spitzbergen, in the Dolly Varden (Malma) on both sides of Beering Sea, in the pygmy blue-back of Maine (Oquassa), and in the large anadromous or sea-run blue-back of Labrador — is believed to be the ancestral type from which our common brook trout is differentiated. It has simply found in Lake Sunapee and Flood’s Pond conditions for its survival — in the purity of the water (Sunapee, one and three-tenths grains of solid matter to the gallon), in the depth of the water (both lakes over one hundred feet), in the character of the bottom (white sand and gravel), in the temperature of the lower layers (Sunapee, 38° Fahr. to 52° Fahr., according to depth and season), and in the abundance of crustacean and fish food.

The distinguishing features of the Sunapee charr are: The presence of a broad row of teeth
on the hyoid bone, between the lower extremities of the first two gill arches; the absence of mottling on the dark sea-green back, and excessively developed fins; inconspicuous yellow spots, without blue areola; a square or slightly emarginate tail; a small and delicately shaped head, diminutive, aristocratic mouth, liquid, planetary eyes, and a generally graceful build; a phenomenally brilliant nuptial coloration, recalling the foreign appellations of "blood-red charr," "gilt charr," and "golden saibling." As the October pairing-time approaches, the Sunapee fish becomes illuminated with the flushes of maturing passion. The steel-green mantle of the back and shoulders now seems to dissolve into a veil of amethyst through which the daffodil spots of mid-summer gleam out in points of flame, while below the lateral line all is dazzling orange. The fins catch the hue of the adjacent parts, and pectoral, ventral, anal, and lower lobe of caudal, are marked with a lustrous white band.

It is a unique experience to watch this American saibling spawning on the Sunapee shallows. Here, in all the magnificence of their nuptial decoration, flash schools of painted beauties, circling in proud sweeps about the submerged boulders they would select as the scenes of their
loves,—the poetry of an epithalamium in every motion,—in one direction, uncovering to the sunbeams in amorous leaps their gold-tinctured sides, gemmed with the fire of rubies; in another, darting in little companies, the pencilled margins of their fins seeming to trail behind them like white ribbons under the ripples. There are conspicuous differences in intensity of general coloration, and the gaudy dyes of the milter are tempered in the spawner to a dead-lustre cadmium cream or olive chrome, with opal spots. The wedding garment nature has given to this charr is unparagoned. Those who have seen the bridal march of the glistering hordes, in all their glory of color and majesty of action, pronounce it a spectacle never to be forgotten.

The Sunapee saibling takes live bait readily, preferring a cast smelt in spring, when it pursues the spawning osmerus to the shores. As far as is known, it does not rise to the fly, either at this season, or when on the shoals in autumn. Through the summer months, it is angled for with live minnow or smelt, in sixty to seventy feet of water, over a cold bottom, in localities that have been baited. While the smelt are inshore, trolling with a light fly-rod and fine tackle, either with a Skinner's fluted spoon No. 1, or a
small smelt on single hook, will sometimes yield superb sport, as the game qualities of the white trout are estimated to be double those of the *fontinalis*. The most exhilarating amusement to be had with this charr, after the first hot June days, is in trolling from a sail-boat with a green-heart tarpon rod, three hundred feet of copper wire of the smallest calibre on a heavy tarpon reel, and attached to this a six-foot braided leader with a Buell’s spinner, or a live minnow on a stiff gang. The weight of the wire sinks the bait to the requisite depth. When the sail-boat is running across the wind at the maximum of her speed, the sensation experienced by the strike of a four or five pound fish bankrupts all description. A strong line under such a tension would part on the instant; but the ductility of the wire averts this accident, and the man at the reel end of the rod experiences a characteristic “give,” quickly followed by the dead-weight strain of the frenzied salmonoid. To land a fish thus struck implies much greater patience and skill than a successful battle, under similar circumstances, with a five-ounce six-strip and delicate tackle. The pleasure is largely concentrated in the strike, and the perception of a big fish “fast.” The watchfulness and labor involved in the subsequent struggle
border closely on the confines of pain. The duc-tile wire is an essentially different means from a taut silk line. The fish holds the coign of vantage; when he stands back and with bull-dog pertinacity wrenches savagely at the pliable metal,—when he rises to the surface in a despairing leap for his life,—the angler is at his mercy. But, brother of the sleave-silk and tinsel, when at last you gaze upon your captive lying asphyxiated on the surface, a synthesis of qualities that make a perfect fish, when you disengage him from the meshes of the net, and place his icy figure in your outstretched palms, and watch the tropæolin glow of his awakening loves soften into cream tints, and the cream tints pale into the pearl of moonstone, as the muscles of respiration grow feeblter and more irregular in their contraction,—you will experience a peculiar thrill that the capture neither of ouananiche, nor fontinalis, nor namay-cush can ever excite. It is this after-glow of pleasure, this delight of contemplation and specu-lation, of which the scientific angler never wearies, that lends a charm all its own to the pursuit of the Alpine trout.

*In consideration of the experience which I have had with the American saibling, I would select it in preference to any other fish, if I desired a salmonoid to*
rear from the fry, and obtain the best results in size and percentage matured.

I most confidently recommend this charr to the attention of State and National Commissioners who are presumably interested in placing a valuable and easily propagated food and game fish within reach of the American people. It is facile princeps, from its rush at the cast smelt to the finish at the breakfast-table.
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"INVASION of thy home"
THE VEILED AURORA

The tints of sparkling gems that gleam as flame,
The clean-cut lines that grace and strength proclaim,
The wild resistance skill alone could tame
Were thine—all thine.
In quivering throes didst thou, as if in shame,
To death resign.

'Tis Nature's law that thou shouldst thus resent
Invasion of thy home where sweet content
Spread through the lovely pond. Thy life is spent,
Thy race is run,
And we who capture thee, thy death lament,
Thou gamey one.
The Dublin Pond Trout. *Salvelinus fontinalis agassizii*
THE

DUBLIN POND TROUT

The Dublin Pond trout — *Salvelinus fontinalis agassizi*, the subspecific name after Louis Agassiz — is a sub-species of our own Eastern brook trout, *fontinalis*. Its color is pale grayish, with few spots, resembling somewhat in markings the lake trout, *namaycush*. It is found in Dublin Pond near Keene, and in Centre Pond, New Hampshire, and doubtless exists in other waters of the same State. It formerly swarmed in Dublin Pond to the extent that the farmers are said to have backed their wagons into the shallows and scooped in the fish with nets, for manuring purposes. Mr. A. H. Thayer, an observant angler, residing in Monadnock, New Hampshire, has written at large to the author on the subject of the habits of this trout. He states:

"The young are as beautiful as a bar of mother-of-pearl, but the adult fish, living in deep water, are much darker; they show bright red spots,"
FOREST, LAKE, AND RIVER

which are not seen on the silvery-toned young. The latter feed in vast schools along the shallow shores upon insect life."

These insects are evidently May flies, so-called, as these insects are numerous at the time when the young of the Dublin Pond trout appear on the shoals.

Mr. Thayer continues: "The appearance of the young trout on the surface of the pond is very sudden; towards the end of some calm warm day in the latter part of May, or the beginning of June, we see the whole pond alive with them, and in a few days they are found in large schools along the shores. Their return to deep water is not as instantaneous as their appearance on the surface."

This statement of Mr. Thayer indicates that the Dublin Pond trout has similar habits to the cisco or lake herring of some of the Western waters, which is only seen on the surface between May 20th and June 10th, during which period they feed greedily upon the "drakes" and ladies of the ephemeral May flies, the artificial imitations of which are so highly prized by anglers, more particularly those of the British Isles.

Mr. Thayer also states: "The trout appear again in shallow water about September 15th, and remain there until their spawning season ends,
THE DUBLIN POND TROUT

which is usually November 1st or thereabouts; during that time many fish are crowding close to the shore. As a rule, young or immature fish can be caught with hook and line during their 'rising season' in the spring, and when they come to the surface in the fall; but no method of fishing can take the larger ones, except one, now and then; but the aggregate of those caught in a season does not exceed three or four. The smaller ones, from five to ten inches, are taken, when at the surface, in large numbers, affording excellent sport on light tackle; yet it is useless to whip the water when the fish are not jumping. They are, also, very keen in 'getting onto' a cast of artificial flies, which they will refuse, if cast for them continually during several days. There are, however, off days, when their intelligence seems to weaken or their appetites strengthen, for they will, now and then, up to the date of their retreat to deeper water, take the fly greedily, under any conditions.

"Again, they will take a natural bait in eighty to one hundred and twenty-five feet of water at all seasons; but large ones, as I have said, are seldom caught by this method of fishing.

"Those formerly seen on top of the water are certainly diminishing in numbers, but I am unable to give an opinion as to the cause; the United
States Fish Commissioner in charge of the Hatchery at Nashua, New Hampshire, states that it is owing to planting of large quantities of crawfish, locally called 'fresh-water shrimp,' in the pond, thus furnishing a full supply of bottom food."
'High mountains, ornamental tress!'
States Fish Commissioner in charge of the Hatchery at Nashua, New Hampshire, states that it is owing to planting of large quantities of crawfish, locally called 'fresh-water shrimp,' in the pond, thus furnishing a full supply of bottom food.

"SING on, wild winds, amid the pine!
Wild waters, onward race!"
SONG OF THE
LEAPING TROUT

Sing on, wild winds, amid th' pine!
Wild waters, onward race!
Sing what a shining world is mine—
A realm of liquid space!
Huge rocks the currents break, and shake
My flowing fields to spray—
White wreaths, as in a vessel's wake,
Bright bubbles, full of play,
Dance on the top; but soon each flake
Turns watery blue or gray—
Each bubble bursts— as on I take,
Up stream, my rainbow way.
Now in dark pools I love to lie;
Now, darting, clear bright falls,
Feeling that I might almost fly
Above the woodland walls;
Might almost be a bird and sail
Within the blue afar,
Until the golden day grows pale
And shines the evening star.
Yet glad am I, when poised in air,
Once more to tumble home,
Nor have I from my proper sphere
A truant wish to roam.
Oh! how I love the frolic foam,
The eddies’ whirling grace,
That ever seem in glow or gloam
Strange wefts of fairy lace.
The sunbeams’ and the moonbeams’ pranks
To me are magic spells,
And the tall trees upon the banks
Are wizard sentinels.
And full of safety is my realm,
All tempests it defies;
The freshets which the fields o’erwhelm,
But bid my spirits rise.
Out of my winter sleep I leap,
My heart attuned to Spring;
With dart, with bound, with swing and sweep,
I revel, like a king.
Sing on, wild winds, amid the pine!
Wild waters, onward race!
Sing what a shining world is mine—
A realm of liquid space!
THE RAINBOW TROUT
THE RAINBOW TROUT. Salmo irideus
A noble stream, born among the snow-clad hills, gathering power from the rivulets that joyously rush to its embrace on its seaward flight, pours forth its strength through a ravine grand in its rugged beauty. Stern are the rocky barriers that, in their attempt to impede, succeed only in causing a crashing into angry surgings of the mass of waters that throw themselves in victory against and over these battlements,—the mad and glorious assault causing veils of tinted vapor to hover over the scene, like fairy clouds of misty shrouding. These natural falls are lashed into feathery foaming where their strength is crushed against the boulders of the river's bed, and then more even becomes the flow. Where a sharp turn of the stream is made, the quiet waters of a pool is formed. Here, just beyond the mad whirl, the powerful little finny knights in their shimmering armor of bright coloring love to rest. To attain a point of vantage the
searcher after sport should, with extreme care, gain a foothold on some level rock. This task is difficult, so strong is the energy of the current. When at last it is accomplished, a spot in the pool is chosen where casts can be readily made with fair chances of success.

The angler then guides the flight of his flies, so that they rest where he deems it to be the most advantageous. The roar of the winds that forever sing their weird and wild greeting is but a fitting musical setting to a drama of nature that beggars description and holds enchanted the senses of the looker-on. Nerved and keyed to a high pitch, the angler will tingle and thrill when a rise is seen and a strike is made. The trout seek to regain their liberty by strenuous leaps for freedom. They know not the meaning of death, and, while life remains, beg not for quarter, as they seem to fly from place to place. Now from the quiet waters into the whirl, now rushing towards you, then darting away. These tactics are alike characteristic of large and small. A quick eye, steadiness, and careful watching are necessary from the first to the last. Even when the fish seems to be tired out, yet must he be landed, and the sight of a net acts upon him as an elixir that imbues him with a new life. With no one nigh to aid, the exciting
contest will test to a marked degree, the skill and courage of the solitary sportsman.

Rainbow trout excel our well beloved brook trout in their salmon-like characteristics. They are bold leapers, and fling themselves constantly far out of the water. At no moment can we be sure of them, certainly not until they are safe in the creel. They exemplify the fact that environment is often the factor that causes unusual game-like qualities. With them existence means a necessity for sharper struggling against danger.

In broader and smoother, but quick rivers and in lakes, the rainbow trout show their rare fighting qualities. Flies are taken readily and quickly, my own experience leading me to believe the brown hackle, the Wilson, and flies with grayish wings to be the favorites. Much depends upon the day, for many varieties of flies are taken well at various times.

The small fish which frequent narrow streams are very quick and easily frightened. Small flies should be used, and rapid striking is essential. Here a brown wing, or black with a little bright color is apt to prove of most value.

Rainbow trout are being introduced into many New England waters, and without doubt will soon become marked favorites.
7^0 crystal pool, there came a stranger fish
THE STRANGER

To crystal pool there came a stranger fish;
Homeless, was he, tho' born of opal spawn;
Here sky was blue as nature's bard could wish,
And feathered warblers ushered in the dawn.
The waters were serene and clear and cool,
While leafing green encircled all the pool.
He was content.

Teutonic his philosophy, he basked
In plenty, gobbling all that came his way.
This happy fish no foolish questions asked,
And soon throughout the pool held kingly sway.
His vivid spots of color flashed in pride.
"'Tis joy to live — 't is joy to live," he cried
In merriment.

He dodged all dangers with a sapient wink,
And saw his race increase and hardy grow;
He taught his offspring to observe and think
That life was well worth fighting for below.
Brown German Trout! Gesundheit wer du bist!
You thrill the soul, but tire the stoutest wrist,
When rod is bent.
Brown or German Trout. *Salmo fario*
THE GERMAN OR

BROWN TROUT

A river, wide in its flowing, rushed on its mission to the sea, encircling the soft green of meadowland, in the glorious sunlight of a perfect morning, with a radiance like that of diamonds. In such a place and on such a day, was I introduced to the salmon trout of foreign antecedents. I had read of him, talked about him. Long discussions had stirred the sultry air into a summer zephyr, when I, a humble listener among the mighty, had wondered who was the truth-teller of them all. By some, this trout was considered a good game fish; by others, he was rated low. A few thought that he and his Scotch friend, the Loch Leven, were twins, and that no difference could be detected between them. Some of the sportsmen who had been fortunate enough to visit this gem of Scottish lakes, and on its beautiful surface cast tiny flies that seemed no bigger than an ordinary gnat, using a leader like a thread from a spider’s
web, denied, in an earnest and outspoken manner, any such suggestion. When danger arose of strong phrasing becoming too much of a factor in the discussion, then, like good sportsmen as they were, they quieted down and started another argument.

My guide was a man who did not know how to drive, and when my destination was reached, told me he had to go back, but would return late in the afternoon, and take me to my transient abode. So I was left alone in a country new to me, but safe, open, and clear. My rod was a fairly light one. I selected for a cast a brown hackle, a Wilson, and a Montreal,—merely to start with. These flies were small in size.

The river was an easy one to wade, so I started in and secured a desirable position, one where I had a good chance to cast all about. No sooner did the flies touch the water, than I had a rise that argued well of good things to come. I struck the fish sharply, and found him full of fight. His rushes were grand ones, and after he awoke to the fact that he was no longer a free agent, I found he required the little skill I possessed to tire him out, and get him within reach of my hand-net. He proved to be in weight a little over two and a half pounds.
Again I tried my fortune, and this time was lucky enough to strike two medium-sized fish; they gave me good sport, however. I did not care to kill many, and when I had secured about half a dozen I waded the river, and climbed out upon the bank, seeking a comfortable resting-place for luncheon, for I suddenly discovered that I had developed an appetite.

Walking about a little later, I discovered a purling stream, emptying its waters into the rushing river, and circling through a meadow enriched by the highest grasses, waving and emerald-tinted, that I remember to have seen. As I wandered along the side of this charming brook, I saw where, in its turnings, delightful pools had elbowed for themselves a space so tempting to the angler that I could not resist. I did not change my cast, but laced them well, and was rewarded by many rises. One fish was large enough to furnish quite a long and well fought struggle, and I nearly lost him. He made a run under the bank, and sulked so long I surely thought he had hung my leader on some hidden object; but when I had almost given up, he started again, and then I found him tired with the strife, and reeled him easily. I sought new pools, caught many more fish, but carefully restored them to their charming abiding
place. As the sun sank behind the distant hills, I trudged back to the place of meeting, and found my Jehu awaiting me, sound asleep, while his spirited animal was almost in a similar condition. Such was my first day with the German trout.

This fish is now found in some of our New England lakes, although I have taken none in these waters. I have been told that good-sized ones furnish a deal of pleasurable sport, and, for one, I cannot understand how they should do otherwise.

They breed well in our hatcheries, and soon, I hope, as is the case with the other transplanted trouts, they will be found in many of our waters. We ought to have all the variety in sport that can be obtained, and while, perhaps, in bringing to notice these various newer forms of the trouts, am I convinced my labor with the pen may fail to arouse attention, yet I am sure that the minute and lifelike characteristics of the fish, as portrayed by the artist, will excite the interest I wish to awaken. Let me say further, that my desire to aid to the best of my ability any measure that will bring additional and perhaps greater pleasure to the sportsman, is the motive underlying my efforts in this cause.
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The Loch Leven Trout. \(Salmo trutta levenensis\)
A SONG OF
SCOTLAND

A song is sung amid the hills,
And wafted o'er the mountains;
A song that sings of sparkling rills,
Gay as the mirth of fountains,
Of perfume of the fruitful fells,
And blossom of the heather,
Of ferns that grow in dewy dells,
The joys of summer weather.

The sound is born of whirring wings,
Of breezes kissing waters,
Like music from a thousand strings,
From harps of wood-nymph daughters;
Of silver forms, Loch Leven's gems,
A sportman's joy,—their capture.
The brightest gleam of diadems
Could ne'er enhance his rapture.

In dainty sport we pleasure find
In all the gifts of nature,
With love alone, no thought unkind,
For every happy creature.

Where soft the air, and sky of blue,
Or gently falling showers,
Where scenes are old but ever new,
The song that dies 'mid flowers.
LOCH LEVEN TROUT

The Loch Leven trout takes its name from the famous lake or loch of Leven in Kinross-shire, Scotland, to which, if it be not peculiar, it is almost exclusively linked in angling tradition.

This noble expanse of fresh water, 3,500 acres in extent, is the property of Sir Graham Montgomery, who leases it to the Loch Leven Angling Association for £1,000 annually. This company supplies the angler with boat and oarsman at a cost of about $7.50 a day, and pays a dividend of ten per cent to the shareholders. The height of Loch Leven above sea-level is 360 feet. It discharges through the Leven River into the Firth of Forth, the mean supply of water to the mill-owners throughout the year amounting to 5,000 cubic feet per minute. Its two most celebrated islands are Queen Mary's Isle, once the abode of the Arch-Druid and favorite seat of Pictish prince and Scottish king, whereon stand the ruins of the castle in which Mary, Queen of Scots, was imprisoned, 1567-68; and the Inch, now St. Serf's, eighty acres in extent, the site of
FOREST, LAKE, AND RIVER

the old Priory of Loch Leven — in remote ages, a Druidical stronghold, in Roman days bestowed upon the Culdee missionaries of the Cross.

Some years ago I visited this loch for the purpose of investigating personally the nature and habitat of its salmo, — the gamest fish that ever strained rod for me. It was a case of love at first sight; and at the great Howietoun Fishery near Stirling, where the Loch Leven form is bred and dealt in, I arranged for the shipment of 30,000 eyed ova to Lake Sunapee, New Hampshire. The importation was a successful one; the ova were incubated at the Holderness Hatchery with slight loss, and the fry were planted in one of my streams at Soo-Nipi Park, by Commissioner Hodge, in 1887. A ten-pound specimen has since been taken.

My visit to the Howietoun Fishery was a most interesting and instructive one. There I saw thousands of the world-famed trout, from fry an inch in length to monsters weighing from eight to ten pounds. At this magnificently appointed hatchery, then owned and managed by Sir James Maitland, upward of ten million trout are annually incubated. Great pains are taken to obtain the strongest embryos and healthiest fry. The milt of vigorous selected males only is used; all eggs are eyed on
glass grilles; and the most approved piscicultural apparatus is employed, the proprietor having adopted the principle that "it is of no use to hatch unless the ova have been so incubated as to endow the fry with strong constitutions." Age and selection are recognized as the chief factors in determining the hardihood of eggs and alevins. On the principle that old spawners produce strong and healthy fry, while young spawners, though comparatively more prolific, give being to weaker young, the maturity of the parents is taken into account as of paramount importance in bettering the chance of offspring in the struggle for existence. The stock is fed on machine-minced horse-flesh (old horses cost from nothing to two pounds each, furnishing the least expensive provender) and New Haven clams partially boiled, a number of girls being constantly employed in preparing either food. The ova of trout fed on horse-flesh are white, while clams impart a rich salmon hue and unwonted vigor and size both to ova and fish. And this is but natural, since the Loch Leven trout, among the varied nutriments afforded in its native waters (including an abundant and constantly renewed supply of crustacean, insect, and vegetable food, besides aquatic worms and small fishes) feeds largely on a water snail about one-third of an inch
in diameter, easily crushed by the teeth, and filled with juicy meat. This reddish snail (*Limnea ovata*), that inhabits the shallows near the shores, and a sessile-eyed fresh-water shrimp (*Gammarus pulex*) stand first in importance among the native articles of diet. In new quarters, where the menu is different, Loch Levens invariably deteriorate in quality and flavor.

The colors of the muscles and integument also change with change of environment. The Loch Levens in their native habitat are graceful, silvery, dark-spotted fish. The coloration of the back varies as the trout matures, from greenish gray to purplish, shot with gold. The spots are black and ocellated, a red spot being exceptionally rare. The adipose fin is not banded with red, nor are the edges of the caudal tinted with orange. The flesh is a deep orange pink; the coloring substance of the crustacean fare, reddened by the stomachic secretion as by boiling, passes into the circulation of the fish and imparts to the muscles a rich salmon hue. Transfer to other waters destitute of crustacean food disposes to a livery more like that of the common brown trout. Loch Leven diet conditions Loch Leven colors.

Water contains no pluckier fish than this sharp-eyed, quick-eared beauty; and those who have
been at one end of a five-ounce split bamboo with Salmo levenensis at the other will be reluctant to stoop to less noble game. He is simply incomparable, from his rise to the descending "teal and red" to the finish at the breakfast-table.

Nor the least remarkable peculiarity of this trout is its capacity for attaining an extraordinary size. We were fortunate enough to be introduced to Mr. George Barnet, editor of the "Kinross-shire Advertiser," who exhibited to us a ten-pounder captured by him with rod and reel, while trolling with an Aberdeen minnow. Others of ten, eight, and seven pounds have been taken in the loch, the largest on record weighing nearly eighteen pounds. The average life of a Loch Leven trout, determined by careful experiment at Howietoun, is eight years, seven years for males and nine for females. Spawners become sterile at eight years of age.

So capricious is the trout of Loch Leven, so indifferent to the angleworm of the hoodlum, so appreciative of the most refined "casts," that where it once becomes acclimated, fly-fishing is permanently insured. Depopulation by legitimate angling is impossible. As a result of personal investigation, I can most confidently recommend all desirous of stocking depleted waters with the bravest fighter of his race, and the most difficult of
extermination, because so fastidious in his tastes, to do as I have done, and import ova eyed and packed at Howietoun. Let the fry when hatched be planted in waters favorable to their development, and sport as yet undreamt-of will be obtainable, while a most valuable food-supply is placed within reach of the people, and for these reasons:

First, whereas these trout are capricious, they are not in the least wary, and often rise within six feet of the boat, so that a persistent fisher in favorable weather will be sure both of his sport and his supper. Secondly, their reproductive powers are unbounded, and where the requisite conditions meet, viz., well adapted spawning-beds and a suitable supply of food for young and old, the increase is beyond calculation. To insure all this, a reasonable protection of the young fish is imperative. State Commissioners should close the spawning streams, and every sportsman should make it his business to see the law enforced. Let a popular sentiment be created against the murder of fingerlings in the inlets, and within five years the easy capture of two and three pound trout in our lakes becomes possible to every fly-caster. But of all the various forms of poaching, the wholesale slaughter of spawning fish, exhausted by procreation and unfit for human food, is the lowest and
LOCH LEVEN TROUT

least excusable, and should be frowned down by every right-minded citizen. Who can forget old Jack Falstaff's disparaging allusion to "the shotten herring" that had cast her spawn? The killing of spawning fish in the inlets of Loch Leven with torch and spear at night depopulated the lake to so alarming an extent as to compel the passage of various acts imposing the severest penalties, and to-day the practice has been virtually discontinued, together with poaching and netting of all kinds. As a consequence, Loch Leven literally swarms with trout; 20,000 have been taken with the fly alone in a single summer. Be it remembered that three or four dozen good spawning fish, under proper protection, would contribute this number. If we estimate 1,250 eggs to every pound of net weight, the enormous injury to the fishing resulting from the slaughter of even a very few spawning trout may be approximated. Moreover, so many enemies have the fry, that a noted English authority, Mr. Andrews of Guildford, reckons the loss at ninety per cent, when fry are turned into the lake with larger fish; hence the importance of protecting them in the streams, from which they will not venture into open water until, as yearlings four or five inches in length, they are capable of caring for themselves. In two years after
planting, Loch Leven fry began to tell on the rod fishing; not frequently they attain a weight of one and a half to two pounds in the first two years of their life.

The ordinary British trout (*Salmo fario*) abounds in Loch Leven; but its flesh is neither so high-colored nor so delicate, and it does not attain the size of its famous congener, rarely weighing two pounds. Between this trout and the specific Loch Leven there are essential points of difference. I am of opinion that the Loch Leven trout is a distinct species of *Salmo* from the yellow fario that inhabits every burn and fattens in every mill-pond in Scotland. I regard it as the descendant of an anadromous fish that was sea-going within the present century; its silvery coat is an infallible evidence of a migratory habit. Sea fishes originally had access to the loch; flounders were caught there almost within the memory of living men; and there can be no doubt that this fish, which inhabits the Forth to-day, ascended annually from the Firth, before the age of dams and bleacheries, to spawn in the inlets of Loch Leven and feed upon its luscious crustacea. Tradition credits its presence in other Scottish lochs to the fathers of the church, who, being restricted to a fish diet during many days of the year, were active in planting choice food-fishes,
among them this delicious sea-run trout from Loch Leven and the toothsome grayling from the continent.

The fry that were hatched from the ova imported in 1887 certainly did not develop into *Salmo fario*, for a brown trout had never been seen in any of the lakes or brooks of the Sunapee system. But so like are the young and adult Loch Levens to our landlocked salmon, that many anglers believe a Loch Leven trout is often fast, when the exciting cry of "Salmon! salmon!" from the fishing fleet greets the first frenzied leap of a supposed ouananiche pierced by the lucky steel. One Scottish authority unhesitatingly declares the Loch Leven trout to be a landlocked salmon dwarfed to its present proportions in its shallow miniature ocean. But I believe it to be a landlocked sea trout. With its purplish gray back, and silvery sides starred with X and XX spots, it so closely resembles the well-known migratory *Salmo trutta*, that foreign experts commonly fail to distinguish between the two fish. The fin-ray formula is identical in each. Moreover, sea trout that have been confined in fresh water are absolutely indistinguishable from the true *Salmo levenensis*.

The theory that the differences observable in
the two trouts of Loch Leven are due to differences of food or residence is hardly tenable. Every one is aware that trout, by the divine law of adaptation, instinctively put on the tint that harmonizes with their environment. I have known our American brook trout entirely change its coloration in twenty minutes. But no one ever heard of a trout’s losing all his fighting qualities on running from a lake into a brook; or, on returning from brook to lake, of exchanging his round, red, haloed spots for black crosses, doubling the number of his caecal appendages, modifying his fin-ray formula, altering the shape of his maxillary, and generally refining his form, pointing the rounded extremities of his tail, and doffing the red tips of his adipose fin,—a marking never lost by the brown trout; as soon believe the saibling of Sunapee will become a brook trout, if taken up Pike Stream and fed on grasshoppers, or that a Chinaman will lose his almond eye and musky pig-tail by swapping his native diet of rice for Yankee crustacean salads. Both species of trout live side by side in Loch Leven, subjected to precisely the same influences. Why do not all lose their silver and stars (if all are brown trout), and why are not all structurally the same? Dr. Parnell, Yar-
rell, Sir John Richardson, and Dr. Gunther have answered these questions by pronouncing *Salmo levenensis* an independent species.

But finally, dear brother of the angle, and most effectually, there is as much difference between the killing of one of these sublime fish, and the suffocating of an ordinary brown trout, as there is between the conquest of our ouananiche and the potting of a sucker. In full view of the castled isle of Mary Stuart, one casts his delicate flies, deftly knotted on the most invisible of gut. As he floats toward the suggestive ruin, the scenes in Queen Mary's eventful life flit before him,—from her youth, whose rare beauty is immortalized in the Orkney portrait, to the beginning of the end, when, charged with complicity in the murder of Darnley, she was committed to Loch Leven Castle in 1567; to her escape the following spring with the aid of "Little Douglas," who yielded to the power of her resistless charms; to the revolting murder that closed her career in 1587, and the agony so inimitably expressed in the livid pallor and contracted features of the Abbotsford painting of the Queen's head after decollation—but, look! that gleam through a wave's crest! Instinctively your wrist turns, and the barb of your tiny hook is
set in the lip of a pound-and-a-half Loch Leven trout. The moment you have dreamed of for years has come at last! Be cautious, for your tackle is refined to the utmost, and your fish is the prince of finny diplomats! His first rush is toward the drifting boat. “Catch the pîrn!” cries the watchful oarsman, and in response you reel madly on the slack, and lead your fish successfully across the bow. Then, in a succession of leaps that would do credit to a Salmo salar, he dashes into the eye of the northeast wind behind the floating skiff. His object is thus figuratively, as well as literally, to get to the windward of the angler. But, mindful of Dame Juliana’s caution, you keep him ever under the graceful arch of your five-ounce, until, his last mad bound from the water made, his last wintle over, he lies superb in the death-glisk, amid the encircling meshes of the Highland gillie’s landing-net.

And now that he has so skilfully taken your fish in out of the wet, untie your boatman’s tongue with a draught of Campbellton and Isley blend, for he has “gang gizzen” with the excitement, and you would fain have him “glib-gabet” for awhile in bits of folk lore. For every hillside, each wood, each ruin has its tale,
and you long to make them speak of prehistoric ages, of the thousand years that intervened between the landing of the Celt and Julius Caesar, when the Arch Druid was absolute in the land,—even of the stone men who preceded the Celt, and whose remains and implements are imbedded in the caves and river strata of Britain. Your eyes have lifted from the cast to the distant mountains, as if they would indeed find voice and satisfy the craving. "There's a lovely one, sor!" growls the oarsman, disgusted with your pre-occupation, risen while you were dreaming of by-gone years. A flash of bluish silver beneath the flies, like the sudden blaze of a Brazilian diamond, and that is all. He has recognized the sleave-silk and feathers, and has glanced past, on the wind, in pursuit of the genuine Culicidæ. Let him go. "You are not greedy, sor," says our boatman. We have had our share, more than our share, for many an angler spends days at Loch Leven, awaiting favorable weather, without killing his single trout, and our take already, as announced in the "Glasgow Herald" of June 30th, is ten fish, weight eight pounds twelve ounces.

As we plod our way at evening toward Harris's Hotel in Kinross, the sights and scenes about
us recall Tannahill’s picture of the closing Scotch day: ---

"Beneath the gouden gloamin’ sky,
The mavis mends her lay,
The redbreast pours his sweetest strains,
To charm the lingerin’ day;
While weary yeldrins seem to wail,
Their little nestlings torn,
The merry wren, frae den to den,
Gaes jinking thro’ the thorn.

"The roses faul their silken leaves,
The foxglove shuts its bell,
The honeysuckle and the birk
Spread fragrance thro’ the dell.
Let ithers crowd the giddy court
Of mirth and revelry,
The simple joys that Nature yiel’s
Are dearer far to me.”
THE TOGUE'S

REMARKS

I am stubborn, I am sulky,
But my appetite is good;
So I'm under weight but seldom,
Though I'm rarely understood.
For my moods, they differ greatly:
In the summer I am still;
While, in early days of springtime,
My emotions make me thrill.
At my jumping I'm a stunner,
And no angler can seduce,
Till I get right good and ready,
When — I often slip a-loose.
For I know a thing in rushing,
When I wish to let off steam,
I'm a wonder; yes, by thunder,
I'm a college-football-team.
Yes, I know a thing in rushing,
Know just how to break a line;
And, for clinging to live bait, sir,
Who can match the knack that's mine?
So I often fool those "Waltons;"
As they think they have me sure,
When I'm simply, of a rumpus,
Playing soft my overture.
Some day, may be born a sportsman
Who at once will know my game,
Beat me always; and, moreover,
When, alas! at last, I’m tame,
Being weighed out dead, that Villain—
Oh! the shadow of the shame!
Oh! sad gloaming of my glory!—
Then may even change my name;
Or may tell his friends a fable
How he caught me "on the fly;"
But I now, a simple laker,
In advance that boast deny;
And if he would only meet me,
Face to face, in water, why,
I would give him in his gullet,
Deep as to his lungs, the lie!
Not with flies am I caught often;
Reason why, I’m far too "fly."
A LAKER

OR THE QUICK AND

THE DEAD
The Togue. *Cristivomer namaycush*
A LAKER

OR THE QUICK AND

THE DEAD

From the records of many cases of alcoholism, the strong fact is elicited that always in the individual, when at recurring periods an excess of stimulant causes a striking change in the mentality and personality, yet each time are the same symptoms produced. It matters little how many years have elapsed between the occurrence of such sprees, alcohol in any form will give rise only to well-marked peculiarities of sensation, motion, speech, hallucinations, and irritative nervous disturbances. I crave pardon of the reader for dipping thus into professional experience, and do so only in order to bring out the thought, that if men are thus dominated by abnormal conditions, so in their turn and in their own way are fish influenced by the state of the waters, the methods of capture, the lure used, and the season of the year. No better illustration occurs to me than the statements which follow, showing how utterly different is the action
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of the same fish when his changed environment is, more or less, a controlling factor. I shall divide these memories into two chapters, recording my experience with the familiar chap called the togue or laker, which is sometimes, I fear, passed off as a brook trout by imaginative sportsmen when relating the size and weight of a catch.

CHAPTER I—THE DEAD

It is several years since I was first introduced to the togue. A friend, a good-hearted, generous, and delightful sportsman, informed me, while I was at his camp, that in a lake some four or five miles away there were plenty of togue to be taken; and he even went so far as to trust to my care and keeping a rod as strong and beautiful as that used for salmon, but much stiffer. The reel was a large one, with plenty of line. He also gave me a weird and strange combination of hooks, in clusters of three, some twelve in all, I think, strung on a strong, stiffened gut, at varying distances, on which I was instructed to fasten a live minnow. I knew nothing at all about the togue or laker, and, asking for information, gained these points: The fish in this lake are large; they take the bait fiercely, and then dive to the bottom with a quick
run, where they sulk for a time, and from whence they have to be coaxed to the surface.

I started with a supply of provisions, as two or three days would be required in which to conquer this variety of fish, and there was a log cabin, merely, to provide shelter at the other end of my trip. I confess I was a bit frightened at the prospect of the fray. My route lay through a beautiful forest, where the fallen leaves made walking most agreeable, and where the effect of sun rays, filtered through the network of brilliant green, thrilled me with keen pleasure as my eyes rested upon the blending of sunlight and shadows. A rippling brook, flowing over moss-grown stones, provided a sparkling, satisfying draught, and the happy chirping of feathered warblers, or the crash of an old-time monarch of the forest, the echoes of its fall pervading the still air, broke any monotony that might have existed. Thus the new camp was reached safely.

After rest and refreshment, putting my tackle together, and selecting a good-sized live minnow, I affixed it to the mass of hooks, and, seating myself in a fairly comfortable boat, was pulled out into the lake by the guide. I tried to remember my instructions in all details. A good length of line was let out, and then I waited. Suddenly a
sharp pull was felt. I struck deep and hard, and away went the line, my reel singing its joyous whirr. Now, thought I, a big one has my minnow. But he never seemed to reach bottom, nor anywhere else, and as most of my line had gone, I had the guide stop rowing, and even then, not feeling any decided movement at the end of the line, began to reel in, and after a deal of labor found I had caught, strongly and well, an old water-logged trunk of a tree. It took a long time to get free; but I renewed my bait and started over again. This time I did get a fish. Truth compels me to relate that he did go to the bottom and hump himself a bit; but he was “dead easy” to reel in, to lift into the boat, and to kill.

I discarded my nightmare of a study in hooks, and my guide constructed a contrivance of three single hooks, that held a live bait securely. I caught togue — had to catch them in order to have food-supply; but I never found one that gave a decent fight. I grew tired of them; ate all I could, began to hate them, and had the guide make pan-cakes out of flour as a substitute for them. Once two togue were taken, from the same minnow, each being caught by one of the hooks spoken of, but it was only a haul; neither had any nerve, and both were pulled by hand.
into the boat, for I did not trouble to use the net.

So this sort of thing went on. One afternoon a terrific thunder-storm broke, and most of the rain seemed to fall on me, which only made my disgust the stronger. It was late in June; the flies never bit better or more smartly. By way of recreation, I did have fifteen minutes’ fun with a trout which was kind enough to take my trolling bait. It was a godsend, and I enjoyed both catching and eating it.

But my hate grew stronger every hour; every togue sulked, made no decent rush, and was utterly stupid. So I gave it up and went back to my camp, where I could have splendid, glorious trout fishing. I vowed I never, never would be fool enough to try any more togue fishing; and for some time afterwards, if I heard togue or laker spoken of as being in such a pond or lake, I rushed elsewhere. Such was my introduction to and deductions regarding the laker.

CHAPTER II—THE QUICK

Early in springtime, so early that the water itself seemed to the touch as if it ought to be frozen instead of being fluid; the air bracing;
the winds strong in their blowing; power, endurance, and skill requisite in the guide who managed the canoe. A phantom minnow provided with only one hook, or a live minnow or strip of pork on a single hook, with sometimes a flashing spinner just above the bait, served as a taking attraction. Trolling with two rods proved to be exciting sport, and while I naturally wished for landlocked salmon, I secured a fine laker. But I did not know my old acquaintance. In the chilled water, he was a fish of a different color and mood. Baits were strongly taken, and his rushes resembled those of a favorite and noted football hero. Proudly would he tear about, at times shaking his head fiercely in his attempts to get free. He cared less for the bottom than he did for the middle of the lake, and equalled the landlocked fellows in his wild turnings. If he had only learned in his young life to make a leap from the surface, it appeared to me his gamy battling would have nearly equalled that of the "little salmon." So I had to change my mind utterly, for now I was perfectly willing to class him with game fish, and I believe he is such under the favorable conditions I have pictured. I like him now as much and as fervently as once I hated him; but I should not try to capture him
when the water grows warmer, or the air is too balmy; for then would I be sure that only the sulky, lazy, pulling-back, humping capacities would manifest themselves, and that I might be tempted to swear, and of a surety lose valuable time. “Experencia docet.”
ANGLING

IN CANADIAN WATERS
ANGLING

IN CANADIAN WATERS

At the head of the American angler’s list of fresh-water game-fishes stand those species of the salmonidae which thrive the best in cool, clear, crystal waters, such as are nowhere on the American continent cooler, clearer, or more crystalline than in the Dominion of Canada.

The various members of the salmon family are conspicuous amongst the finny tribes, as well for the quality of their delicious flesh as for their splendid fighting powers, elegance of coloring, and symmetry of form; but more so than any others of the family is the Salmo salar, or common Atlantic salmon, which Cuvier has appropriately placed at their head.

For some time after the European settlement of North America, salmon abounded in the Hudson, the Connecticut, and almost all the more northerly streams flowing into the Atlantic. The fish wealth of these rivers, which had survived the supposed
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destructiveness of the aboriginal inhabitants, could not long endure the higher civilization of the Pilgrim Fathers and their descendants, and the salmon of the New England streams have gone the way that was to be later followed by the American bison.

Nothing but their greater inaccessibility has preserved many of the Canadian salmon rivers from the same spoliation. Those whose banks have sustained many generations of settlers are, in several instances, as devoid of salmon as the Connecticut. This is specially true of all the tributaries of the St. Lawrence west of the Jacques Cartier; for a century ago all these streams, as far as the head of Lake Ontario, were salmon rivers. The extinction of the king of fishes in other Canadian waters would have followed that already described, but for the efforts, in more modern times, of the legislatures, fish-wardens, pisciculturists, and fish and game protection clubs. In view of the awakening of the public conscience to this important subject in recent years, there is reason to look for the restocking of some of the fished-out salmon rivers, both in Canada and the United States; while the criminal exhaustion of existing salmon waters can never occur, except through such malfeasance of office as our present-day enlightenment is scarcely likely to permit.
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The Canadian rivers in which the sport of salmon fishing is practised by anglers, are found among those which flow into the Gulf and lower part of the river St. Lawrence, into the Baie des Chaleurs, or the Atlantic Ocean. The governments of the different provinces of the Dominion, in virtue of a judgment of the Imperial Privy Council, claim to be the owners of the rights to the salmon fishing in all navigable waters, apart from those within the limits of lands originally granted by crown patents to their first holders, together with the right of fishing in such waters. This claim is contested by the riparian holders, and it is probable that in time a test case will be taken to definitely settle the question, as many American anglers have paid large sums of money for lands bordering upon famous salmon streams, in the belief that the tenure of the property carries with it the right of fishing in the waters included within its limits.

Almost all the more accessible of the salmon rivers in undisputed possession of the different Canadian governments are under lease to clubs or individual anglers. These leases are transferable, and a few of them are now in the market. Most of those still unleased are extremely difficult of access, such as those flowing into the Gulf of St. Lawrence from the interior of Labrador, near the
western limit of the Straits of Belle Isle. Though badly poached for some years back, there are many salmon in these streams, which could be largely increased in numbers, by careful guarding of the rivers for a short term of years.

Fortunate is the angler who owns the lease of a Canadian salmon stream, or who can secure a few days' fishing in one. His sport is that of kings. His companions will almost certainly be men and women of culture and refinement. His surroundings are the most beautiful that a God of Infinite Beauty in all His created works has devised for the terrestrial enjoyment of those of His favored creatures who have eyes to see and to appreciate the beauties of Nature and the benign goodness of the Creator.

Let us recall some of the glories of the scene of a Canadian salmon fishing expedition, and a few recollections of the stirring incidents of the sport. We have ascended the river for four or five miles from the village at its mouth, the novice and I, each in his own canoe, with a couple of Micmac Indian guides, one in the bow, the other in the stern. The character of the river is so changeable that birch-bark canoes are discarded by its fishermen for the stouter and more substantial craft, built of wood, and known as a Gaspe canoe, from
the place of its manufacture. The guides are supplied with both paddles and poles. In a very few minutes we are beyond the tidal water, and shortly afterwards pass the last signs of civilization, our passage, thereafter, being an avenue of which each side is formed of forest-clad mountain, sloping to the margin of the river. The water of the river comes from countless springs, and is so perfectly filtered by the gravelly nature of the river-bed and surrounding country, that it is clear as crystal, every pebble at the bottom of the stream being as clearly visible at a depth of forty feet of water as if only separated from us by a sheet of glass. Quite abruptly the bed of the river, which was nearly fifty feet below us a moment ago, now rubs against the bottom of the canoes, and the Indians have dropped the paddles, and standing up in either end of the canoe are forcing it against the current with all their might, their long poles stuck into the gravel or pried against the rocks of the shallow channel. So the journey goes; the Indians sometimes wading through shallow passes, where the canoes scrape the bottom, and driving the somewhat heavy craft directly up picturesque rapids of half a mile or so in length, where the water is carded by angry rocks into white and fleecy foam, and where, by dint of muscular effort and judi-
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cious employment of brain and pole, the guides succeed in fairly forcing the canoes up perpendicular falls of water over the large scattered rocks of the rapids. At every turn of the constantly winding river, new beauties of scenery are revealed, and sometimes a salmon pool is passed, where the water is disturbed as little as possible, since it may be fished on the morrow.

Salmon pools are discovered at times in the most unlikely places, while many probable-looking holes or rapids are found to contain none at all. Why the salmon select certain pools for their resting places on their way up stream to their spawning grounds, and reject others which apparently fulfil exactly the same conditions, is one of those things that nobody can understand. In the river we are now visiting, and in some others in which the water is equally clear, the fish are so plainly visible that it is not difficult for close observers to locate some, at least, of the salmon pools. On many of the north shore streams, and on some of those of the south shore, such as the Restigouche, for instance, the water is not nearly so clear, and the fish are only distinguishable in the pools with great difficulty, and sometimes not at all.

Some of the salmon in the pools we have passed
took alarm at the passage of our canoes, despite all our precautions, and shot by us to another resting place. We did not fish any of the pools so far described, having resolved that the novice should enjoy his first salmon fishing in the best pool of the river, where the fish were not only most abundant at the time, but where the large extent of beach offered special advantages for fighting and killing them when hooked. Here the pool is of large extent, or rather, there are two adjoining pools. The upper one consists of the tail of a long rapid, where the water, though oily and strong in current, gradually deepens to the level of the bed of a narrow gully, forty feet deep, walled in by perpendicular rocks, less than thirty feet apart, and protruding slightly above the surface of the water. The gully itself, a hundred feet or so in length, forms part of the pool, and immediately below it, where the river widens out to nearly two hundred feet in extent, is the lower pool, extending to the head of the rapids some distance away.

The novice is a past master in the art of trouting, and has nothing to learn from anybody in the matter of casting a fly for *fontinalis*. Yet he modestly declines to be the first to cast over the hundred and fifty salmon that are plainly to be seen resting in the lower pool, fearful that he may alarm them
and spoil the day's sport. While I endeavor to hook him a fish in the upper pool, Narcisse Lambert, one of his Indians, makes a few preliminary casts in most admirable manner in the other. There may be other novices at the sport, or intending salmon fishermen, to whom a description of the tackle used in angling will be interesting. That with which Narcisse is whipping the pool is one of the most dainty that is employed upon Canadian salmon rivers. It has already done good service on some of the north shore streams, in the hands of the New England friend by whom it was lent for the present expedition. The rod, than which none could be more delightful for salmon casting, is a split bamboo, fifteen feet long and weighing twenty-three ounces. I must confess that the killing power of so light a salmon rod somewhat surprised me, though when a fish of over thirty pounds takes to sulking, it is tedious work attempting to force him with a rod so light as this. The reel for salmon fishing must hold at least a hundred yards of line, and more if possible. The casting line should be as good as money can buy, and ought to be able to stand a strain of ten pounds dead weight. The names of the principal salmon flies are known to all familiar with the literature of angling. Canadian rivers are no exception to
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the rule that the standard varieties are the most reliable. The Jock Scott, Silver Doctor, and Black Dose proved the best killers upon the river in question. The water being comparatively low and warm, the fish in the pool paid scarcely any attention to the Indian's casts. After many fruitless efforts, however, and two or three changes of the fly,—for of course only one fly is used in salmon fishing,—the screech of the reel and the sudden bend of the rod told of a fish fast to the line. Everybody rushed to see the novice play his first fish. It did not take long. No sooner had he taken the rod in his hand than it straightened as quickly as it had bowed a minute before, and the line came back minus the fly and half the casting line. My friend had forgotten all his reading up on the subject in the pages of Wells and Forrester, and the others, and all the verbal instructions that had been poured into his ears, and in the excitement of his first salmon had grasped both line and rod together in the hollow of his hand, with the inevitable result that something gave way. The same angler is not very likely to repeat an error of that kind, and the next fish that took his fly was properly killed by him in fairly good time, and weighed thirteen pounds. I had the good luck to hook another fish for the novice, which he killed on my
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English greenheart rod, in short order, though it weighed twenty-one pounds.

The best piece of sport that the novice had during his first campaign against the salmon was the killing of a foul-hooked fish weighing thirty-one pounds. It was hooked near the adipose fin, and took nearly three hours to kill. Even at the end of that time, the Indian who gaffed the fish waded forty feet into the river and secured it in three feet of water. It seemed to me at the time that three hours was too much time to spend over one fish, but even with a rod over thirty ounces in weight, I have spent close upon two hours in killing a foul-hooked fish of thirty-six pounds, and over an hour and a half in bringing to gaff one of twenty-five pounds.

It is difficult to imagine keener sport than that afforded by the playing of a freshly run salmon; that is, one which has not been long in the river from the sea. In some of its long runs to escape from the hook and line which hold it captive, it takes all the line from the angler's reel, and he must follow it along the shore, or through the water, if he is unable to do so in a canoe, or submit to the loss of his fish and part of his tackle as well. Often in its wild leaps for liberty, will the gallant fish not only break water many times in

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succession, but vault several feet into the air. This is well calculated to bring the angler’s heart up into his mouth, and no fisherman who has had thirty pounds of *Salmo salar* leap into the air at the end of his line in the endeavor to get free, is ever likely to forget the experience.

Large prices are paid for the leases of some of the Canadian salmon rivers. Mr. Ivers W. Adams of Boston purchased the riparian rights of the famous Moisie River, early in 1901, for $30,000, and then, to make sure that the Government would not interfere with him in the exercise of those rights, made an arrangement to pay it $2,500 a year for the rental of its own alleged rights, without prejudice to his own. The Moisie is a broad, deep river, producing very large salmon, and affording fishing for several rods. Fish of over forty pounds in weight have been taken out of it, and despite the large amount of netting done in its estuary, as many as three to four hundred fish have been taken from its waters in one season, by rod and line, of an average weight of eighteen to twenty pounds.

In the St. John River of the north shore, one hundred and forty-eight salmon have been taken by anglers in less than a month. The rod and line fishing of this stream is now leased to Mr.
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James J. Hill, the St. Paul railway magnate, for $3,000 a year.

The better part of the pools in the Godbout are private property, and in four weeks a party of anglers killed five hundred and nine fish in them. One angler is known to have killed over forty salmon in one day in this river, though an average of one or two per day satisfies most anglers, and three, four, and five per day is considered excellent fishing. Sometimes there are several blank days in succession, and anglers have been known to whip the water faithfully for ten days or even a fortnight without securing a single fish; and this in rivers like the Restigouche or the Ste. Marguerite, known to abound in salmon. Three fish, weighing respectively, thirteen, fifteen, and seventeen pounds, killed one morning before breakfast on the Trinity River, north of the Gulf, in the summer of 1897, are a memory of my most enjoyable hour and three-quarters of sport with rod and line, in a good many years of angling. What burnished silver could flash and dazzle in the sunlight with the opalescent hues of the smallest of the trio, fresh from the sea, and what racehorse ever more valiantly struggled to pass the winning post than this salmon did to return to his salt-water home, when finding himself
impaled by the barb concealed in the gay deceit which had lured him to his doom? Only the foresight of my half-breed guides in having the canoe ready to receive me at the foot of the pool enabled me to save both fish and tackle, for from the moment that he felt the hook, he never paused in his mad rush for the sea, until he had led us a chase of nearly half a mile.

There is a limit to everything, however, even to the space that I must occupy in this book, and since salmon fishing is by no means the only sport that awaits the angler in Canadian waters, I am compelled to pass over an intended account of the salmon club of millionaire anglers, having its headquarters on the far-famed Restigouche; a more lengthy reference to the Cascapediea, in which H. R. H. the Princess Louise is credited with killing a fifty-two pound salmon, and the fishing of a portion of which is leased for $7,500 a year; some notice of the Nepisiguit and other famous salmon rivers of New Brunswick; and a big bunch of advice to salmon fishermen, or rather to those who ambition to become such, which is perhaps, better, after all, unuttered, since experience in salmon fishing, as in so many other affairs of life, is a much more effective teacher than precept. If I were asked what kind of fishing most nearly
approached to salmon fishing in its methods and in the sport which it affords, I should unhesitatingly reply in favor of the angling for my old friend the ouananiche, or fresh-water salmon of Lake St. John and other far northern waters. I have known him and loved him these many years, though frequently he has matched his cunning and agility against mine and worsted me in the struggle. He is a plucky, open, fair-fighting opponent, by whom it is no disgrace to be beaten. And so when the salmon pools are too far away, and the necessary leisure to reach and fully enjoy them is wanting, I find the best substitute for salmon fishing when I have set up my trout rod by the roaring rapids of the Grande Décharge of Lake St. John, and dropped my cast of flies upon the oily, foam-flecked water eddying round the rocks or birch-bark canoe. So violent are the rapids, so heavy the water, that it is scarcely safe to fish from a canoe with less than two guides. Very often the ouananiche swimming around the pools amongst the rapids, watching the opportunity to snatch the flies entangled in the foam, keep so near the surface of the water that their dorsal fins protrude from it like those of a school of sharks. If the fish are on the feed, a judicious cast of the angler's lures is likely to secure an
immediate rise. As in salmon fishing, the ouananiche angler will often best succeed when his fly is somewhat below the surface of the water. Sometimes, like the salmon and large brook trout, the ouananiche will impale himself upon the hook without any assistance from the angler. It is always safer, however, to strike, as in trout fishing, when a ouananiche is seen to rise. Herein is the principal point of difference between angling for salmon and for ouananiche, for every salmon fisherman knows that to strike when a salmon rises to his fly is simply to drag the fly away from him.

As soon as a ouananiche is hooked the angler knows all about it. There is not a moment of uncertainty. "Almost before you have ceased wondering at the length of line that is being run off your reel, a bright, arched gleam of silver darts out of the water a hundred feet away from your canoe, as suddenly as an arrow shot from bow, and deliberately turns a somersault three or four feet up in the air. If you are a novice at the sport, or he has taken you unawares, you may never see him more. If he managed, by his superior dexterity and cunning, to get the slack of the line, he probably shook the hook from his mouth and is free. If, in your excitement, you gave him the
butt too quickly, you perhaps tore the hook out of his delicate mouth. Or, matching his agility and strength against the endurance of your casting-line or the pliability of your trusty rod, he has made shipwreck alike of your tackle and your happiness. Sometimes his leaps are made in such rapid succession that you are fighting your fish alternately in air and water. At others, if he be a large fish, he goes down and sulks like a salmon from the sea. His different methods of defence would appear to indicate that he possesses the combined *finesse* of the salmon and the bass. When impaled upon the hook, he has not infrequently been known, in the course of his prodigious leaps, to alight in the bottom of the angler's canoe. . . . Whatever the cause may be, there is a vast amount of difference between the sport afforded by different specimens of the fish, often even when they are similar in size and taken out of the same water. Occasionally, but not often, unless it be a very small one, a ouananiche may be hooked and landed without having leaped out of the water at all. Others, again, and sometimes heavy fish, content themselves with leaping and struggling hard and valiantly, but without running out much, if any, line from the reel. These are, of course, exceptional cases; and the angler
who has had any extended experience of the fish, who has fought and killed any large number of them in the heavy waters of the Grande Décharge, will know something of the many-sidedness of the sport, and be ready to concede that at least the pleasurable emotions which it causes the angler cannot well be exaggerated. In the vicinity of these rapids, the fish can know nothing of the life of indolence and luxurious ease that conduces to enervation and effeminacy. The very excitement and unrest of their surroundings render inactivity impossible to them, while the physical exertion necessarily employed in their constant struggles amid the mighty forces of those turbulent waters insures for them the possession of that courage, agility, and strength that make them the recognized champions of the finny warriors of Canadian waters. In proportion to their avoirdupois they can do more tackle-smashing than any other fish that swims. Their leaps are prodigious. Habituated to overcome obstacles to their progress up-stream by throwing themselves over them through the air, their skyward somersaults and aerial contortions, when hooked, leave the angler little leisure for contemplation while the struggle is in progress. When it is understood that a ouananiche of five pounds’ weight will frequently
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leap three feet or more out of water in his endeavor to get free, and perhaps a dozen times in succession, some idea may be formed of the skill that is necessary to bring him safely to the net."

In the charming Introduction to the book from which the above extract is taken,—The Ouan-aniche and its Canadian Environment, published for me by Messrs. Harper and Bros., in 1896,—my old angling companion and friend, Lt.-Col. Andrew C. A. P. Haggard, D. S. O., says of the ouananiche: "Such is his elasticity, the India-rubber, gutta-percha, racket-ball nature of his backbone, that he resembles Rudyard Kipling's description of the 'Fuzzy Wuzzy' of the Soudan. Like that Hadendowah Arab, the ouananiche is distinctly an 'India-rubber idiot on the spree.'"

Some anglers fish for ouananiche with grilse rods, and I have even seen salmon rods in use on the Grande Décharge. I have killed a three-pound fish on a rod weighing less than four ounces, though I believe the best sport in ouananiche waters is to be had with one of about seven ounces. With a rod of this weight there is no need whatever for the automatic reel recommended by some fishermen. The best flies for ouananiche differ with the seasons. When the fish make their
ANGLING

first appearance in the mouth of the southern feed-
ers of the lake, and around its shores, as soon as the
ice has disappeared, they rise to large lures, such as
salmon flies tied upon number 4 and number 5
hooks. The brown hackle, the professor, the
grizzly king, and the queen of the water in large
sizes will also be found useful at this time.

The fishing usually commences in the Grande
Décharge about the 10th or 12th of June, and con-
tinues good for the remainder of the season, which
lasts till the 15th of September. For the first week
or two, the ouananiche take the same flies in the
Décharge as those mentioned above for the earli-
est spring fishing. They should be reduced in size,
however, as the water grows clearer and lower,
and the temperature of both the air and the water
becomes higher. In the latter part of July the
ouananiche has become an epicure. He wants
the daintiest of flies, and wants them in small sizes
too. The General Hooker, B. A. Scott, Reuben
Wood, and hare’s ear are good flies, in small sizes,
for late ouananiche fishing.

Ouananiche are found in many of the rivers of
Labrador, including the Hamilton, which flows
into Hamilton Inlet. The majority of these are
very inaccessible, however, though the large nor-
thern feeders of Lake St. John, such as the Peribonca,
the Mistassini, and the Ashuapmouchouan, may be ascended for hundreds of miles in birch-bark canoes, with Indian guides, with the certainty of enjoying excellent sport in their waters.

Many other varieties of fish are to be had on these canoe trips. Monster pike (Esox lucius) inhabit all these rivers, and the pike perch (Stizostedion vitreum) is almost everywhere met with hereabouts. Enormous lake trout (Salvelinus namaycush) thrive in the lake expansions of these rivers. Almost all the more northern streams contain a whitefish, closely allied to, if not quite identical with Coregonus clupeiformis, or the whitefish of the great lakes and of commerce.

In the inland waters of Labrador, the whitefish, which farther south rarely takes the angler’s lures at all, is readily caught on the artificial fly, the May-fly having been found quite successful for the purpose. This exceedingly handsome and palatable member of the salmonidæ is found in large numbers in the Grande Décharge, often schooling with the ouananiche, and taking the same flies. The finest tackle is needed for it, and when hooked it affords splendid sport.

The large gray or lake trout, already referred to, called by the French-Canadians queue fourchée or forked tail, grows to a very large size in Eastern
ANGLING

Canada. In Lake Superior it is known to exceed fifty pounds in weight. In Lake Metis it exceeds thirty pounds. It attains a similar size in Lake Nepigon. It grows just as large in the lakes of Labrador, and in some of the waters of the Lake St. John region, notably in Lake St. Joseph and Lake Tschotagama. It has been known to take a fly in the waters north of Quebec, but this is quite a rare occurrence, and has only been noted early in the spring, when the ice was but just disappeared. As soon as the water grows at all warm, the laker seeks its lowest depths, and is only to be taken by deep-water trolling. The line must be long and weighted with heavy sinkers. Minnows and spoon bait are found to be the most successful lures.

Of the fishing for brook trout (Salvelinus fontinalis) to be had in the Dominion of Canada, several large volumes might be written. Both the habits of the fish and the manner of its capture being exactly the same in Eastern Canada as in the Eastern and Northern States, there is no reason for consuming valuable space in the description of them here. The enormous size to which some of the species attain in the cold northern waters of Canada is, however, worthy a passing notice. Only in Maine, perhaps, are such monster brook trout to be found as those to which I have reference. Eight
and even nine pound trout have been taken out of Canadian waters, and there are stories of very much larger ones which I have been unable to confirm. The Nepigon in Ontario, and the Batiscan, the Jacques Cartier, Kenogami, and Lake Edward in Quebec, as well as the Montmorenci, the Ouiaitchouan, the Jeanotte, and the Moise rivers, are amongst the most favored waters for large brook trout this side of the international boundary.

Lake Batiscan, on the Triton Tract, has yielded several fish from eight to nine pounds in weight, in the spring of the year, to American anglers, many of them, it is true, taken upon trolling lines, though there are fishermen who claim to have taken equally large ones here with the fly, in some cases the large coarse fly known as the Moose tail, and looking much like a tuft of that animal's hair. This fly is principally used for trolling behind a boat on a long line, some distance below the surface of the water.

Undoubtedly very large specimens of fontinalis are taken every autumn in the Moise and other waters of the Triton Club, on the ordinary trout fly, and immense trout, running from four to seven pounds each, in the brilliant coloring of their spawning livery, fall victims to the fly rod-
ster's skill as often as the summer rolls by, in many of the outlets of large lakes, where the monsters, which have sought secluded depths during the July and August heat, repair early in September to seek out the gravelly stretches of the rippling water's river-bed, whereon to gratify the burning instinct of procreation. The Ouiatchouan, which is the outlet of Lake Bouchette, and the Jeanotte, which carries off the waters of Lake Edward, afford the observer excellent illustrations of the autumnal habits and spawning operations of some of the largest specimens of the speckled trout known to exist in their native haunts. It would be interesting to pursue this subject at greater length, but memory interposes the reminder that this book is intended to be something more than a treatise on the brook trout.

The flies that are most successful in the trout waters of Eastern Canada are the Parmachenee belle, the professor, the grizzly king, Jock Scott, silver doctor, brown hackle, queen of the water, claret, fairy, and coachman. There are many others, of course, with which I have had good success, but I have mentioned my favorites in what I sincerely believe to be their general order of merit, though, of course, some localities call for a different arrangement of the list. The Parma-
FOREST, LAKE, AND RIVER

chenee belle is almost always a good first choice, and one of my favorite casts has, in addition, either a grizzly king or professor and a silver doctor or Jock Scott.

It would require more space than is devoted to the whole of this paper to tell of all the attractive trout waters of this portion of the Dominion. Scarcely a lake or stream is to be found in northern Quebec or the Provinces down by the sea, which does not contain fontinalis. Many have never yet been visited by white men, or been whipped by the angler’s flies. Many more are leased from the Government for the sport which they afford the angler, by American rodsters. There are many more procurable on similar terms. Non-resident anglers, who are not themselves lessees of fishing privileges, or members of clubs leasing such privileges from the Government, may fish in any unleased waters, the property of the Crown, upon payment of the license fees of one dollar per day, or ten dollars for the season, which fees are expended for the protection of fish and game.

Closely allied to the brook trout, if not a member of the same species changed in coloration and general appearance, by its habit of anadromy, is the Canadian sea trout, which runs up into the
salmon rivers and other coastal streams to spawn, returning to the sea for the winter season. This very gamy fish affords quite as much sport to the angler as the grilse, and is no way inferior to a salmon of equal size. It rises to the salmon fly, frequents many of the streams in which the salmon spawn, and is also captured in their estuaries and along the neighboring bays. As this grand fish is a notorious eater of salmon spawn, the owners of salmon waters are often glad to accord permission to their friends to fish their rivers for sea trout, after the salmon fishing is over. Those who may not be fortunate enough to enjoy an invitation of this kind may secure this excellent sport in several of the Nova Scotian rivers, in some of the Gaspé streams, in many of the bays on the coast of Labrador, and in the vicinity of Tadoussac, at the mouth of the Saguenay. July and August are the best months for this fishing.

Many varieties of coarse fish abound in Eastern Canada, but in a land so highly favored as this with the best and highest types of game fishes, they obtain but slight recognition from anglers, though some of them would be highly prized in localities less richly endowed by Nature with a wealth of the higher forms of fish life, as viewed from the standpoint of the angler.
The chub, the pike, and the pike-perch of Canadian waters attain to very considerable size, and the two latter, which occasionally claim the Angler's attention, are made the subjects of special monographs in another part of the present work.
TROUT FLIES

MONTEREY
ABBEY
KATY DID
PROFESSOR

GRAY HACKLE
ROYAL COACHMAN
REDWOOD
PARMAHUMED

FIN FLY
SCARLET IBIS
JACK COCK
COACHMAN

QUEEN OF THE WATER
YELLOW JAY
WHITE MINNOW
KING OF THE WATER

PARMAHUMED BELLE
QUEEN OF MOOSEHEAD
BROWN HACKLE
YELLOW BODY MONTEREY
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AMONG the most interesting features of trout fishing are the apparent differing traits of character shown by trout at different times.

It sounds oddly to speak of traits of character in fish, but that is the way in which their various actions impress the close observer; sometimes they are angry, sometimes they sulk, sometimes they play: perhaps all their actions (when they are not dashing around impaled on a hook) are caused by hunger, by the instinct of catching prey for food; but it is an interesting question whether trout, when they strike with their tails at flies in the air, are animated by such an instinct of hunger, following a habit developed from that instinct, or whether they simply do it in sport, — the wantonness of their innate liveliness. For that they do at times spring out of the water and slap at the fly in mid-air with their tails is the fact, although many may doubt it. The trout often do it on
the Beaverkill; in this I am corroborated by Mr. J. S. Van Cleef, of the Willewemoc Club, who throws a graceful and far-reaching fly. In a letter to me dated December, 1879 (December’s a good time to write about fishing), he says he has often seen a trout strike with its tail at a fly or insect; that they never do it when they are “on the feed,” but they often do so in the middle of the day; and he thinks he has seen them turn and devour the flies after knocking them under, and that they only do it when they are not hungry. Mr. Prime, in his delightful book “I Go a-Fishing,” states in several places that, as a rule, trout, in taking an artificial fly, strike it with their tails before they attempt to take it. And he has since repeated, over his own signature, that his opinion, based on many varied observations, is that trout more frequently strike with the tail, and anglers often strike an instant too soon, mistaking the blow of the tail, and the dash of the water over the fly, for the grasp of the mouth.

But many who have gone a-fishing are not aware that trout have any such peculiarity; they know that the latter are a capricious and festive fish, and have often watched their antics and capers when they seemed to turn full somersaults every time they rose to the fly; trout at such
times have seemed the most difficult to hook, and it has been with the sportsmen an exciting endeavor to hook the fish by the angler's wrist-knack; and they have done so, perhaps, in various parts of the body, and frequently in the tail; but it never struck them that the trout might use his tail to get the fly into his mouth, and the idea of the accomplishment of such a thing would appear like a trick of legerdemain (if slapping a fly with its tail would be called a sleight of hand in a trout).

Ordinary trout which are hungry make straight for the lure; they have always been known as bold biters; feed them with worms attached to a hookless string, and the trout always come head on to the bait; and under most conditions trout seem to bite naturally, the tail having nothing to do with the operation; so these unobservant fishermen conclude that, while they may have seen an elephant poke food into his mouth with what some persons have supposed to be his tail, or have seen John Chinaman chuck his food into his mouth with a chopstick, or a dexterity Jap toss up an object with his foot and catch it in his mouth, they never have seen a trout knock a fly into his mouth with his tail — never! This is undoubtedly literally true; but the real question
is whether trout strike the fly with their tails before they attempt to take it with their mouths. I have seen them take the fly in just that way. The trout would turn over on the top of the water, slap the fly with his tail, and I have instantly caught him with the fly in his mouth. I have caught many that way; and there comes back to my mind's eye and ear a pool below a twelve-foot dam on the Dry Brook in Delaware County, New York, where, late one summer afternoon, I laughed with glee at the constant recurrence of this acrobatic feat on the part of the trout, and at the sound of their tails as they slapped the water. They did not strike the fly into their mouths; but striking and sending the fly in one direction, the trout would curve his head around from beneath, in the opposite direction to the tail, almost in a circle, and very like a capital C or G.

Ordinary trout are not always hungry, and ordinary trout usually act in a different way every time. Sometimes they play base-ball with the fly with their tails, knocking it into centre field, while they make a home run, and sometimes they are "caught on the fly," as it were, by their tails, or again by their mouths; and then they'll bump their noses against the fly, and push it away, or they will take it, and spit it out at you, notwith-
standing all your wrist-knack, or they will come up and look at it, and laugh at you; and I have known them to come up like lightning, two feet out of water, turn a full half-circle, and come down head-first, and pounce on the fly as it lay on the surface of the water. It did not take any wrist-knack to hook them then (this was in Willewemoc Lake), but it did take several trials for me to learn to keep my hand still for a second after that lightning flashed, until the trout could turn and get down on the fly; at first I jerked the latter away too quickly, but after I watched a little, I caught a good many in just that way.

Then again, they will not bite at all. I have, in the clear pools of the Big Indian, at low water, seen twenty trout together at a time, all lying motionless, head up stream, and I have put fly and grasshopper and cricket and worm under the nose of each one, and they were not "bold biters," and did not come head on to the bait. The most I could elicit was a faint wag of the tail; it seemed to me a sort of wag of recognition; these trout were evidently in a waggish humor.

The fact is, that the only thing that you can count on in a trout is, that you can't count on him at all.

I do not say that, as a rule, trout strike the fly
with their tails; but I agree with Mr. Prime so far, that I have often seen them do so, and instantly thereafter get caught in the mouth.

One would have trouble in deciding this question so as to please both sides. The evidence must be merely of a negative character, unless the witnesses should be speaking of the same particular trout. One man says he has seen trout play cricket, and catch themselves out; others say they have not seen any such game played. The weight of evidence on either side, therefore, must depend a good deal on who gives it. The testimony of a man who has been, for twenty-five or thirty years, fishing for trout in all sorts of places and under all kinds of circumstances, whose eye has been trained by constant use in the woods, would be worth more than that of a beginner in the art.

As remarked by a writer in "Forest and Stream," there is nothing so remarkable, however, about a trout's flopping a fly into its mouth with its tail, as there would be if the fly had flopped the trout into the fisherman's mouth, or the fisherman had flopped the trout into the fly's mouth, or the tail had flopped the fly into the fisherman's mouth, or the fly had flopped the tail into the trout's mouth, or the flop had flied the mouth into the trout's tail, or the tail had flied the flop into the trout's mouth,
or the fly had flopped its tail into its own mouth, or if the flop had flipped its head into the trout's mouth, or if the trout had flopped its head into the fly's mouth.

Shoo Fly!

In fact, it has been urged that analogy would lead us to expect that a trout would flirt a fly into his mouth. For does not every ten-year-old country boy know that a swallow uses its tail to flip gnats and other insects into its mouth? A hawk or an eagle uses its claws for the same purpose, and a monkey its foot. Now has it not been demonstrated by proof as clear as logic can deduce from conjecture, that man is the development of a monkey, and a monkey of a fish? We should, then, naturally expect a trout to use its tail just as a man his hand, or a monkey his foot.

Another view of the question worthy of notice is, that the trout is a dainty, lordly fish, and, like a true sportsman, scorns to take his game in any other way than on the wing, unless he be very hungry. When he sees a fly lying still, or skipping along on the water, he strikes it with his tail to make it rise (in hunting parlance, flushes it), and then catches it; he would no more think of catching a fly on the water than a sportsman would of shooting a bird on the ground.
It might be well, in view of the rapid extinction of trout going on all over the country, to lay down a new rule that all true gentlemen sportsmen should scorn to hook their fish in the mouth; that the really artistic and scientific way is to hook them in the tail, and that no gentleman would take such an unfair advantage as to take two chances (head and tail) on the poor fish.

But let us put on a little pinafore, made by another writer in "Forest and Stream."

"Salmo fontinalis is a roaring soul,
    As free as the bird on high;
His energetic tail should be ready to nail
    The ar-ti-fi-cial fly.

His tail should flop and his body curve,
    And from this plan he should never, never swerve;
His eye should flash, and his fins protrude,
    And this should be his customary attitude."

Be glad if, when you are fishing, some trout, frenzied with hunger or desperate after repeated failures, does not, with one mighty rush and slap, shoot your fly into his throat with such force that he swallows himself tail end first. Rather may you have the experience of "Sancho Panza," of Mifflinton, Pennsylvania, who went fishing on the first of April, and penned this result to the same breezy paper:
HOW THE TROUT SEASON OPENED

Having read in your paper
How the trout take a fly,
On the first day of April,
We thought we would try,
If the weather was fair,
And our health did not fail,
To see if a trout
Really "bit with his tail."
So Ned and myself,
With fly-rod and reel,
Struck out for a stream,
Each to fill up his creel;
But when we arrived
On the north of the hill,
We discovered the snow
Was lying there still.
And to make matters worse,
The wind blew a gale,
And the trout would not bite
With their head or their tail.
But while fishing a pool,
Now what do you think?
One came to the surface
And gave me a wink;
And in order to please him,
I threw him the fly,
And he actually jumped up
And bit with his eye.

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FOREST, LAKE, AND RIVER

But notwithstanding the humorous view of this scientific fact, a well settled fact it remains. Many experienced fly fishermen have observed it in our Salvelinus fontinalis; and Mr. Livingston Stone, United States Fish Commissioner, in March, 1881, wrote, over his own signature:

"There is no longer any doubt that the California trout, at least (Salmo iridea), uses its tail intentionally for the purpose of disturbing and examining any unusual kind of food which it finds on the water. Long continued observation has confirmed this fact beyond a doubt."

So, hereafter, when you go a-fishing, let me ask you to observe that trout often (not always) strike at the fly with their tails. Close observers will occasionally see a trout come out of the water, and hit with its tail a natural fly, striking it down to the surface; the trout will then drop into the water head-first, turn, come up, and eat the fly. Probably bait fishermen will laugh at this—but then bait fishermen seldom see a trout alive. After a man has used his eyes for twenty years, or even less, in the wild woods and on mountain streams, his eyes get so that they see distinctly many things,—paths without a trace, shadows, motions,
HOW TROUT TAKE THE FLY

"With here a blossom sailing,
And here and there a lusty trout,
And here and there a grayling,
And here and there a foamy flake,

With many a silvery water-break
Above the golden gravel!"

to all of which he was blind when he first began to hold communion with nature.

Happy the man who is so familiar with her that he can say, with the old Massachusetts poet, Jones Very:

"The bubbling brook doth leap when I come by,
Because my feet find measure with its call;
The flower that on the lonely hillside grows
Expects me there, when spring its bloom hath given;
And many a tree and bush my wandering knows,
And e'en the clouds and silent stars of heaven."
Fishing and the Reasons Why
FLY FISHING
AND THE REASONS WHY

FLY fishing is a delicate art, and all art fascinates because the true artist never arrives, but ever strives. Skill in the handling of the rod is essential to real enjoyment in fly fishing, and the sportsman who learns to use the rod properly may, with practice, constantly improve his form, adding distance, accuracy, and delicacy to his casts as time goes on.

Not the least of the pleasure of fly fishing, and upon which much depends, is a knowledge of the fly book. I am a firm believer in the standard makes of flies, and have little faith in the belief prevalent among some fishermen that one or two flies each of the four hundred varieties made, are necessary to insure success in Maine trout fishing. There are times when the fish will take anything that is thrown to them, no matter how it is thrown. They will rise within ten feet or forty feet of the canoe; they will take a delicate cast, and they will jump for a fly that strikes the water with the force
of a stone; they will take the fly under water or on the surface with equal eagerness; but these times are exceptional, and such fishing is not sport, not real pleasure.

Taking fishing the season through, day in and day out, skill in the use of the rod and a fine sense of judgment must be exercised. Personally I am a great lover of the brown and gray hackles. Not the palmer, but the brown hackle with a green silk body wound with gold, and the gray hackle with a gray silk body wound with silver. I am insistent upon these little, and what some may consider unimportant, details. I have experimented extensively, and have no use for the hackles with peacock bodies, and, generally speaking, I care little for the palmers, though at times they are good killers.

Here is an incident: On one occasion in particular I was fishing with a Parmachenee belle and a brown hackle of the kind mentioned. It was the only fly of the kind I had in my book, and when after a time I lost it, I put a peacock-bodied hackle in its place. Up to that time I had been taking a trout on the hackle at every second or third cast. With the appearance of the new fly, the trout stopped rising, except occasionally to the Parmachenee. I tried other flies in the book
FLY FISHING

without success, and then determined to make a test, paddled to camp, got more hackles, and returned to the fishing grounds. Immediately the trout began rising as they had done previously.

This and other similar experiences have convinced me that there is a vast difference in flies, and that one cannot be too particular in their selection. Taken the year round, the Parmachenee belle is a great killer, but there are times when it is useless. The Montreal is a great summer fly, and early in the spring the silver doctor has often stood by me well. The gray-winged flies I like to have handy, and the Parmachenee beau will work often when others fail. During the period of what is known as the trout fly, a large green-winged fly with brown hackle and a yellow body will kill; but at other times in the season it fails to provoke a rise. A white miller, yellow May, and red ibis are flies which I have found would call forth big ones when every other fly in the book failed, and I should not think of going into the woods without them, although, perhaps, I might not use them but once or twice in a season. There are other good flies which sportsmen, from experience, have learned to value, or which they will gradually fall in love with.

As regards fishing. The trout is a peculiar
fish. Little fellows are heedless, and the more bungling the cast, the more readily they rise for it. My explanation is this,—the unusual splash attracts them, but it frightens the older and more wary trout, who know a real fly doesn’t light on the water with any such blast of trumpets. I have seen two men fishing from the same boat, on practically the same ground, changing positions from time to time, and one took fish weighing four to the pound, and the other’s catches ranged from half a pound to a pound and a half. Why? Simply because one man was thrashing the water, and the other’s flies were alighting as soft as air. Positively no other reason.

I have seen a man fish a pool in vain at a distance of ten yards, and then seen the same fisherman try his luck with sixty-five feet of line, and pull out good ones at every cast. Why? Simply because in the first case he was too near the pool.

Trout in quick water will often refuse to take a fly moving up stream, but will jump for it eagerly when it floats down past their retreat on the current in a natural way. Early in the spring, flies should be trailed at a depth of two inches under water, later, on the surface, simply because
FLY FISHING

before the presence of natural flies the trout do little rising.

I know several deep pools overhung with alder bushes. One may cast direct into these pools by the hour, and skill will count for nothing. But make a cast so that the flies will catch lightly upon the bushes, let them rest for a moment, and then jerk the line gently so that the flies will fall from the bushes into the water, and a trout is a certainty. Why? Simply because the trout lie under those bushes waiting for insects to fall from them in a natural way. Any other method makes them suspicious.

I have known the back belly fins of a trout to take fish when every other bait, artificial or otherwise, failed, and a trout's eye is sometimes effective. Early in the spring, just plain salt pork danced up and down on the water will often call forth the big ones; but the sportsman will never resort to these methods unless the larder positively demands it.

I do not believe in record catches. Seven trout is the largest number I have ever killed at one time, in spite of repeated opportunities to kill a hundred or more. Fish enough for my personal needs is my motto. I never catch fish
for others, believing that if the fishing is to last, it must be carefully protected.

My suggestions are purely those which my personal experience has taught me to rely upon in the Maine waters I fish, mostly the smaller lakes and streams, some of them often visited and others unfrequented. Trout, as I have found them in Maine, are much the same, no matter where they are; but their surroundings make different methods necessary.
A FEW
FACTS AND FANCIES
A FEW
FACTS AND FANCIES

SALMON go down stream tail first, only when descending heavy rapids or going over a dam. This is for protection, as the power of a salmon lies in the tail, which is used at such times as a feeler. In still water, deep water, and in eddies, they go down stream in the usual way, head-first.

When a salmon has been caught in a net, this is plainly shown by an exterior mark around the gills, made by the mesh; moreover, the tail will be found to be split, caused by the thrashing about of the fish in its struggles to evade capture.

Even when a fish has been salted and dried, it is possible to determine whether it was taken in a trawl, as by this manner they remain some time in the water, and the blood settles along the backbone, showing as a dark line, whereas, if caught by line, being quickly secured, no dark marking ensues.
FOREST, LAKE, AND RIVER

In rod fishing, a salmon is both attracted and irritated by an artificial fly that is kept in motion above the spot where he is resting. The fly is never taken, in my opinion, as a food.

Much depends upon the state of the waters, as regards the fly to be used. If one does not care to purchase a larger number, as they are naturally expensive, I think the following will give entire satisfaction: Jock Scott, silver doctor, silver gray, and black douse.

The netting of fish in a salmon river affects, to a marked and dangerous degree, any fly fishing. The weirs do but little harm, and with netting abolished, heavy fines and imprisonment being enforced among the law-breakers, the record of salmon taken with rod and fly will increase ten-fold in a very few years.

Trout are fond of salt. A bag of rock salt that will serve also as a light anchor dissolves slowly in the current, and cools and flavors the water for quite a distance, causing the fish to be attracted to the locality.

Trout, also, at times, can be lured into taking a fly, when the ordinary casting proves of little value, by smearing the body and wings of a fly with vase-
A FEW FACTS AND FANCIES

line into which has been well rubbed as much sugar as possible. A certain quantity of this sweetened and oily mixture is washed out, and seems to attract the fish, who paid but scant attention to the ordinary flies that were thrown.

Curiosity is a factor that now and then is of especial importance, so we can take advantage of it. I have seen a fly, badly worn and torn, with little streamers of tinsel and worsted waving in free ends, destroying all the original beauty and neatness, be the one that was taken in preference.

A long curling feather can be tied to a fly, causing an uncouth appearance, and yet, from its queer aspect, seem to excite into striking the curiosity of these fish.

An ordinary piece of brownish worsted can be attached to the barb of the hook and allowed to float free, and, by the unusual form, serve as a better lure.

Where there are "chubs" in fairly large numbers about, and the trout do not seem to be eager for the fly, use on the cast one small fly, let a chub take it, but do not land him, let him swim about. By doing this, the other flies are dragged about in deeper water, and among the fish in this locality, and often a fairly good-sized trout will snap a fly and be taken.
Large trout are hard chaps to awaken into biting moods. One thing after another is tried, and failure alone comes. Once struck well, their play is the same, and demands extreme skill. At one time I fished in a lake where I knew there were large trout. I sent my guide early in the morning, just before dawn was breaking, simply to watch and ascertain where a break was made. Just off a rocky ledge he found that fish were rising, and were evidently large ones. I began fishing at about nine o'clock. I caught only a few, and these were small. I tried fly after fly, with no success. Finally I secured some small live minnows, placed one on the tail hook, and above this, attached two good taking flies. I then trolled over the ground, but secured only one medium-sized trout, and at about five o'clock, tired and cold, I had decided to return to camp. Before doing so, I determined to make a final try. I used a fresh and very small minnow, and placed a medium-sized sinker on the line just above the leader, then let out a long line, and trolled near the point mentioned. The canoe was merely kept moving. This time my patience and work were well rewarded. My chill and weariness utterly disappeared, for I had two strikes that were strong ones, and I knew the biters were large. So
it proved to be. It was the battle of all my fishing experience. The largest fish was a six pounder, and his companion, four and a half pounds. The fight was a long and hard one,—the excitement exhilarating. The method, surely, is worthy of consideration from the results obtained.

If you wish to find where fish are feeding in a lake, try deep-trolling. This is how it is done. Put on a cone-shaped sinker (they call it a "dipsey" in Maryland and farther South), weighing not less than four ounces, at the end of the reel line; three feet above the sinker attach a single or double twisted gut leader (weight of fish to determine its size), three feet in length to the line, and another similar leader three feet above the lower one. Place swivels wherever needed, and bait with live minnows, or use light feathered spoons,—the former, however, are preferable because of the weight of the spoons being apt to cause entanglement of the leaders. Laying down your rod within convenient reaching distance, and instructing the boatman to row slowly over every shoal and deep hole in the lake, you hold the line in your hand, and, as the boat progresses, you will feel the contact of the sinker with the bottom. If the pluck of a fish is felt, and you have it hard and fast, take up your rod, being careful
to keep the strain on the fish when lifting the rod.

Apropos to this series of notes, a portion of a letter is here quoted, written to the author by Mr. A. H. Thayer of Monadnock, New Hampshire.

Dace swarm in Dublin Pond, and are believed by the resident United States Fish Commissioner and others to be the devourers of an immense quantity of the spawn of the trout, hence the decrease of these fish may well be charged to sportsmen who kill such fish-eating birds as the herons, kingfishers, and fish-hawks, which they shoot, or order to be shot, believing them to be great trout eaters. Introducing or exterminating various species of birds, without thorough study of their habits, is proving to be disastrous to fish life in our lakes and rivers. Science is authority for the fact that very few creatures should be spared by the classes who try to kill them. These fish-eating birds get, of course, quantities of other fish to one trout, and if the United States Fish Commissioner is correct in the statement that fish devour nearly all the natural spawn of the Dublin Pond trout, it is time that sportsmen thought twice before killing the enemies of the dace and shiners. In the mean time lovers of nature and its study are threatened with the extermination of the herons and other birds that we love to see and hear in their haunts.
AMONG THE TROLLS OF THE KENNEBEC
AMONG THE TROUT
OF THE KENNEBEC

SPRING has opened her sleepy eye to the delight of all who love this beautiful world. If "in the spring a young man's fancy lightly turns to thoughts of love," the heart of an older man opens and, perhaps, more wisely, to another of nature's impetuous invitations. He hears and heeds a voice that stirs a fever in his veins,—a voice from out the forests and the streams, a resistless voice that he is all too glad to obey.

Do you know the blackened timber—do you know the racing stream,
With the raw, right-angled log jam at the end;
And the bar of sun-warmed shingle where
A man may bask and dream
To the click of shod canoe poles round the bend?
It is there that we are going with our rods and reels and traces,
To a silent, smoky Indian that we know,
To a couch of new-pulled hemlock, with the star-light on our faces,
For the Red Gods call us out, and we must go!
And we go — go — go away from here!

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On the other side of the world we're overdue!
See the road is clear before you when the
Old Spring fret comes o'er you,
And the Red Gods call for you.

With the ring and the rhythm of these words
my heart turns towards the head waters of the
Kennebec, as they flow with a rush and a roar
through the gates of the dam at old Moosehead.

For ten years, I have stepped from the Canadian Pacific train, and gazed with delight upon the
great lake lying in its beauty, one thousand feet
above the level of the sea, and buttressed in the distance by Katadin, whose crest, one mile nearer
heaven than the lake itself, looks calmly down on
Moosehead. As I draw nearer the hotel on the lake
shore that for so many years has sheltered so many
enthusiasts in the pursuit of big trout, I hear a
murmur, ever growing louder. It is the music of
the great stream,—a stream bordered on either side
by forest primeval, and by a woodland road for five
miles southward, to the Indian Pond.

In a few minutes from the hostelry, one finds
himself on the delightful pathway, amid a soli-
tude,—the great trees arching overhead, and here
and there footpaths through the woods to the
river and its pools. Once seen, that river with its
ever-varying vistas of beauty, with its rounding
bends, its peeps of purple mountain, its picturesque shores, its murmur and hiss and roar, its mysterious and deep-toned chug! chug! as it passes toward the sea, now with wide level sheets of water, and now in swift rapids, broken by falls and whirlpools into which strong men have fallen and slept their last sleep — that river, with its beautiful pools that quicken one's step and fill his heart with hope as he draws near, — who having once seen it at its source can ever forget the Kennebec?

I came, years ago, to that river as a tyro, never having made a cast, never having seen a fly, but soon received some kindly instruction from the men who were there, for all masters of the gentle art will meet even a neophyte upon the level, act toward him by the plumb, and part with him upon the square. One of them, a distinguished clergyman, was fishing a certain pool, day after day, but without success, the Red God being sometimes capricious in his bestowal of favors. In my ignorance of the laws of the game, I conceived that pool to be the minister's especial preserve, and religiously kept away from it. Upon his departure I eagerly started for the pool, and, wading in, took my place at its head, — a swift strong current on the one side and shallows on the other. Making an awkward cast, to my surprise and delight, a great head

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popped up in the strong water, but I failed to make connection. With nervous haste I made another bid for the big trout; this time there was no "going—going—gone!" The bid was taken at once, and my work was cut out—the fight began. Owing to my inexperience, it took me fifteen anxious minutes to land that fish. I could not guide him with my tip; first, he rushed across the deep pool into the swift water where I feared his pull would break away, then, down and up the pool, and then across to the shallows, where he thrashed so vigorously that I thought he would free himself; but amid all my excited errors there was one I did not make, that of giving him any slack. Being an Englishman, I instinctively held on with bull-dog tenacity that at last brought him in triumph into the net,—a four-pound trout, a thing of beauty, with dark-green back, mottled sides, and a belly of brilliant red. With hands that, wielding the rod, trembled like a leaf with excitement, I had started my reputation as a fly fisher, and was happy.

The next season, a half-hour's visit to that pool weighted my net with a three and a four pound trout. From that time on I lost that miserable feeling of inferiority that troubles a tyro among experts.

Perhaps I have caught enough big fish to permit
me to give a bit of advice to beginners. Don't be so anxious to hear the singing of the reel as to allow your fish too much line; shorten your line, as soon as possible, without stopping to play your fish; when he is a heavy one, haul in your line, hand over fist, as fast as he gives you opportunity, accommodating yourself to his rushes this way and that, with the tip, and as short a line as possible. Your tip will do the business. I have seen many a fine trout lost by too much finicky play.

Last season, going a mile down the river, by a charming leafy path through the forest, I waded out with difficulty to a little ledge, peeping above the water far from shore. It was treacherous footing to that ledge, and I had the pleasure of seeing a dignified clerk of the United States District Court of Portland execute a frantic dance in the ford, to keep his feet; this way and that he tumbled, with arms waving and a tremendous splashing. I laughed till I ached, and having sat down myself several times in that river, I hoped to see this official take his seat; but, alas, he did n't. Making the ledge, I began fishing. The beauty around me on that September morning was enough, but after a little casting I had a lively one—a half-pound trout. Having no basket, and unable to place him on the ledge, I had to wade all the way
back to place him on the shore; this I had to do each time, as I successively caught three more trout, from two pounds and an ounce to three pounds and a quarter in weight. Tired out and bearing a heavy net, my homeward steps were elastic; for, as every angler knows, the heavier the burden, the lighter the steps for home.

Once more, and I’m done. The last day came, a day of tender regret for the angler who must leave divine nature for the man-made town. Just one more cast, and then for home. With this feeling I went to an old mill that stood at the intersection of the lake and the dam,—a point so difficult to land a fish that but a few days before my ministerial friend lost both fish and leader through the gate.

The diagram will explain the situation:
TROUT OF THE KENNEBEC

Taking my station on the platform, I made a long cast, and struck a heavy fish. The water was pouring with a powerful swing through the gates at my left into the river. I must pull that fish toward me, past the heavy currents, and not let him get the better of me. To add to my trouble, a storm had brought in a large tree, and placed it ten feet in front of me, so I must also guide the fish around that tree, and then past me to the right until, getting him alongside the wharf to my right, I could reach down and net him. With several narrow escapes that quickened my heart, I at last, got him to the wharf, and, having neglected to bring my net, raised a yell for help that, heard above the roar of the water, brought a net in which I landed a handsome two-pound-and-nine-ounce trout.

With this last triumph, I took the midnight train for home, content, and in the hope that a kindly Providence will allow me to visit that beautiful Kennebec for years to come.
(1) **The Montana Grayling.** *Thymallus tricolor montanus*

(2) **The Michigan Grayling.** *Thymallus tricolor*
THE GRAYLINGS

There are three forms of graylings in North American waters, none of which, however, are indigenous to New England and Eastern Canada. The typical species is represented by the Arctic grayling, \textit{Thymallus signifer}, the generic title being an ancient one, conferred upon it because of the odor of thyme that its body diffused (a quality which the grayling of this generation certainly does not possess); the specific name, \textit{signifer}, from its large and resplendent dorsal fin or flag.

The Arctic grayling was first found in the streams flowing into the Arctic Ocean, by Sir John Franklin in 1819, and Midshipman Back of that expedition was the first angler to take them with a fly; hence the fish is frequently called "Back's grayling"; by the voyageurs of the extreme Northwest, it is known as the \textit{Poisson bleu}. The coloration of this grayling is extremely beautiful: the back is dark, the sides purplish gray, and the belly darkish gray with irregular whitish blotches. The head is tinged with brown, and a blue mark-
ing or shading appears on each side of the lower jaw. The dorsal fin is high and long, the upper and backward range of the posterior and bifid rays extending as far as the adipose fin. A dark grayish color pervades this imposing flag with paler irregular markings and cross rows of deep-blue spots, edged with lake-red.

The second species of grayling (*Thymalis tricolor*) is the one found only in Michigan waters, but now gradually disappearing, owing to the depredation of the trout upon its spawn and fry, the grayling spawning in the spring,—a time when fontinalis is recovering from its winter torpor and eager for food of any kind. Doubtless more fatal to the increase or preservation of the grayling than even the trout, is the lumbering on the rivers of Michigan in the spring of the year; the eggs are torn from the beds, dispersed and destroyed, by the rapidly descending logs in the comparatively shallow grayling streams.

The Michigan grayling is similar in coloration to its Arctic congener, but with more varied beauty in the hues of its dorsal fin, which has “a black line along its base, then a rose-colored one, then a blackish one, then rose-colored, blackish, and rose-colored, the last stripe being continued as a row of spots.” Above these lines there is a row of
**THE GRAYLINGS**

dusky green spots, then a row of minute rose-colored ones, then a broad dusky area, the middle part of the fin being tipped with rose. The height, length, and iridescent beauty of this fin will serve as an identification of species, should the fortunate angler lure the Michigan grayling before its extermination. It appears to be doomed, as it has not been, and, doubtless never will be, propagated by artificial means.

The Montana grayling (*Thymallus tricolor montanus*) is a subspecific or varietal form of the Michigan grayling, and is, I think, inferior to that fish in beauty of coloration, as it certainly is in height and length of the dorsal fin. Unlike it, however, it is now successfully raised by artificial processes, and is being very generally introduced into the waters of the Eastern States, more particularly in those of New England. It is a stouter, stronger fish than the Michigan grayling, and is not as game on the rod, never leaping on a slack line, when fastened, into the air,—a true test of a game fish,—but making deeper, longer, and more obstinate surges in its efforts to void the hook. The coloration, although less iridescent and varied than its more Eastern relative, surpasses in beauty that of any other of our stream game fishes. Its dorsal fin is of a general dusky green shading, with three
FOREST, LAKE, AND RIVER

rows of bright orange spots, somewhat irregular in position, but always posteriorly, the spots being faintly ocellated and oblong in shape, and placed obliquely; the fin is edged with bright orange-brown. It is indigenous only to Montana, being most numerous in the upper reaches of the Madison, Gallatin, and Jefferson Rivers, which meet near the town of Gallatin, and form the head waters of the Missouri River.
Rows of bright orange spots, somewhat irregular in position, but always posteriorly, the spots being faintly ocellated and oblong in shape, and placed obliquely; the fin is edged with bright orange-brown. It is indigenous only to Montana, being most numerous in the upper reaches of the Madison, Gallatin, and Jefferson Rivers, which meet near the town of Gallatin, and form the head waters of the Missouri River.

"As the ice peaks that towered overhead"
THE

STANDARD BEARER

In the heart of the Ice King's domain,
All flashing, he leapt into life;
Chilled waters to him were no bane,
They bathed him in strength for the strife.
No warmth for this stranger as cold
As the ice peaks that towered overhead;
No warmth for this fighter as bold
As the boldest that ocean has bred.

Of the blush of the rose on his fin,
That waves like an undulant wing,
Of his courage and speed of his kin,
The poets of Lakeland will sing.
And the fisherman, finding him game,
Will tales of his powers unfold,
As he tells of the stranger that came
From the region of ice and of cold.
Dorsal Fin of Michigan Grayling of \(1 \frac{3}{4}\) lbs.—exact size
THE
GRAYLING OF MONTANA

To my mind there is no more beautiful fish than our American grayling. Its shape is finer in proportions than the trout. Its color is of a silver gray, fins of an olive-brown tint; the pectoral fins near the ends shade into a blue hazing. The distinctive characteristic is the wonderful and peculiar dorsal fin, dotted with reddish and orange spots, and about these greenish-like tints, or those of the rose. This particular fin is approximately about one-fourth the length of the body, and its apparent use, assisted by the pectoral fins, is to aid the fish in rapid risings or descendings.

The spots on the body appear almost black, but in the direct rays of the sun are found to be of deeper shades and richer coloring.

The grayling belongs to the family Thymalidae, and is the only genus of the family. The scales are fairly large. The first fish were found amid the Arctic waters, and, from descriptions, I judge, were rather more marked in brilliant coloring.
FOREST, LAKE, AND RIVER

While at the United States Hatchery at Nashua, New Hampshire, I was enabled to study a fine lot of splendid specimens of the Montana grayling, and personally I am delighted that ere long we shall find this grayling in many of our New England streams. If this can be accomplished, and certain laws enacted to govern their taking, the anglers will not only have a fish that will give variety to the usual experiences, but one well worthy of their best skill. Not alone this, — the best months will be late in the season, — September, October, and November. If then laws will be enacted making the open season from September to December, the sportsman will find that he can combine fishing with his hunting, and our fly book will not be laid away in its camphor-perfumed home quite as soon.

So far, success is making itself more and more marked in raising these fish in the hatcheries, and, in my belief, it will not be many years before, with the right sort of protection and planting, we shall have our fill of a new pleasure, in the taking of these beautiful grayling at the season in which their game-like qualities are at the best. Think of all the charm that will come when the air is crisp and clear, and the autumn colors touch the landscape with a resplendent beauty all their
GRAYLING OF MONTANA

own. No sultry atmosphere, no stinging, buzzing, annoying insects; surely it would be perfection indeed!

The grayling lies deep in the water, quite near to the bottom. He rises eagerly, and the fly is not taken until it has passed him. If he misses, then he quickly disappears. When the hook is struck, then the superb fin is brought into full play, and he now fiercely struggles to go deep down again. In this effort, he exerts his strength to the utmost, and tests well the skill of the rodsman.

The grayling is considered by many anglers as being fully equal, in fighting power, to the trout, although their manner of taking the fly is entirely different, the trout rising with a dash and snap which the grayling does not equally display. Leaping above the water, and taking the fly in the downward turn, seems to be a favorite habit of the trout, while the grayling takes it more deliberately, from beneath. Yet so far as my personal experience extends, I have never seen the Montana species leap from the water when hooked; yet the Michigan grayling frequently does, and as often, in some instances, as five or six times, a trait,—by the by, not shown by our brook beauty, fontinalis. Nearly all fresh-water fish, when tightly held, will fight on the surface, but few indeed, of their own
sweet will, leap into the air when they feel the tension of the line.

The waters seem to exert their influence, and in different localities the fish is either a jumper or a deep and hard puller. Then, too, his attempts to free himself are different in character.

The Montana grayling is considered rather stronger, and with better equipment of fighting qualities, than those of Michigan waters. It is, however, less beautiful in coloration and outline.

The flies used as a rule for trout, will be found efficacious in luring the grayling. The black, brown, red, and gray hackles, the Abbey, Lord Baltimore, the coachman, the Wilson, Montreal, professor, yellow Sally, etc., are all good. A light rod, click reel, and water-proofed line, such as we use for ordinary trout fishing, is the proper tackle. In this connection it may be well to note that the Michigan grayling has a relatively tender mouth, although not so weak as credited by writers on angling from the days of Juliana Benners in the fifteenth century. On the other hand, the Montana species has as tough a pair of lips as the brook trout of any waters of the Western continent.

In their native waters, as well as in the hatcheries, the grayling are not as nervous and restive as
the trout, and not so easily scared. They will frequently rise many times to the same fly. One of the most charming and delightful narratives I have ever read, is that written by Mr. William C. Harris of the "American Angler," for "American Game Fishes," dealing with both the Montana and Michigan grayling. All that is written makes one tingle and envious, for a time, that it was not his good fortune to enjoy such a trip as is described. The transplanted grayling should, however, in the course of a few years, give us in our own streams and rivers equally enjoyable and bewitching hours of pleasure. It is for this reason that I have placed him "in oil" among the large portfolio illustrations, so he may become familiar to my readers, even before his time, in this section of the country. Success will in the end come, for, once known, the grayling will be made welcome. Protected well for a sufficient time, their number will increase. If certain waters can be selected and guarded, and, when opened, to be under laws that make the season such that the time is one when the grayling is in his power of fullest activity, then I predict rare sport can be obtainable at an unusual time of year, when it will be all the more welcome. The United States and the State Commissioners, with the encouragement of the best sportsmen, will accom-
plish this, aided by gentlemen enough interested to help them by private measures.

It has been my good fortune to obtain, quite recently, the control of a remarkably fine water supply, adapted in every way by nature for hatchery purposes, and in the near future it is my intention to do all in my power to raise and breed the fish, for the purpose of stocking appropriate waters. If other gentlemen are willing to do their share in this direction, either alone or through the different clubs of which they are members, then a full and rich reward will be reaped within a comparatively short time.
The MAID of the MOUNTAIN
THE MAID OF THE MOUNTAIN
The MAID of the MOUNTAIN

PART FIRST

It had been a long day on the Jacques Cartier River. We had run it in my canoe from far up among the mountains down into the valley where it ceases to fret and foam, and an occasional clearing on the bank indicated the pioneers' struggle for foothold on the land. I had fished the twenty miles of water and a goodly pile of trout lay in the bottom of the canoe. It was time to camp while there was yet light enough to make snug for the night. At a likely looking point I directed Charlo, my half-breed guide, to beach the canoe. The little tent was soon set and the fragrant bed of balsams laid. Charlo had crossed the river to gather some birch bark, and I had thrown myself down for that sweet half hour of rest that follows the fatigue of a day of cramped position in a canoe. I must have dozed off, for I heard no approaching footsteps, but a voice that was evidently that of a woman awakened me, and I sprang to a sitting position. Standing beside
the camp fire was the most extraordinary looking creature I had ever seen, — a woman, but of masculine features and coarse, beady-eyed, with closely-cropped gray hair. She wore an old cowboy slouch pulled well down on her head, a man’s long homespun overcoat of many hues and patches, a skirt of potato-bagging that dropped an inch or two below the overcoat but barely covering the long sheepskin tops of the beef moccasins that served as footwear. Slung under her left arm was a single-barrelled gun of formidable but antique appearance.

I stared at her in speechless surprise.

"I say, mister, you need n’t look so scared, it ’s only me," said the woman.

"And who the deuce may ‘only me’ be?" I asked, recovering my speech.

"What me? Why, mister, I’m the Maid of the Mountain back beyant. Me cow, bad luck to her, strayed down to the river, and it was lukin’ for her I was whin I saw ye’s two comin’ down the river. You’ll say to that black haythen that ’s with you that the Maid of the Mountain wants that sthumpin’ done at onct. At onct, mind ye, or I’ll have Angus McTavish to do it."

“But, my good woman, Charlo ’s engaged with me for another week,” I answered.
"Is he indade," she replied; "and who the divil may you be to set yourself above the rest of the wurruld? 'You give him the wurrd as I tell you!"

She looked so fierce that I hastily promised to deliver her message, and, to further propitiate her, I produced my flask with a cordially expressed hope that she would take a nip.

"Be gobs, thin, I don't mind if I do," she replied; "shure, it's chilly and I must be futtin' it. Here's to your fishin' and better luck to you, and don't you forget the wurrd."

"And how are you going to find your way home through the bush in the dark?" I ventured to ask.

"Find me way home in the dark! Glory be to God, man! — for tin years I've tramped the trail, and it's every sthump and stone I know. I wish you good-night."

I had come out of the tent by this time, and I watched her as she strode off into the fast gathering gloom. She looked a veritable Amazon.

Charlo soon after came in with his roll of birch bark, and silently, as was his custom, made up the fire and prepared the supper. Later, when we had finished the first pipe, I said: —

"I have a message for you, Charlo, and from a lady."
Ah! you 'av' de veesite from de Maid of de Montagne. Sacré! I 'ave her de promeese made for long tam for work h'on de stump."

"Oh! you have, have you? Well, she left word that you were to come at once or she would get Angus McTavish to do it."

"She giv' dat word? She go got dat tam An-goose for work. No, nevare! I go for do dat work tout de suite. You see dat gal, well, she verra fine h'ole gal. I go for marry her when she 'av' de lan' h'all clear. To-morrow I h'ax you for leave me go."

"But, Charlo, you were to stay with me for another week?"

"Wal you h'ax anuder man h'on de settlemen' for go wid you."

As any further argument seemed useless, I let it go at that. In the morning we paddled down the river to the three or four log-houses that constituted the settlement, and Charlo departed after consigning me to M'sieu' MacDonald. To my inquiry of the latter as to a man who knew the river and could paddle a canoe, MacDonald replied:

"Angus McTavish is the mon. He kens the reever fine. If he's no at the Maid's, you 'll find him at his ain hoose doun the river."
THE MAID of the MOUNTAIN

"May I ask, Mr. MacDonald, who the Maid is?"

"Ah! mon dear, but it's no a question I can answer. I ken weel the necht she came. It was a great rain storm and as black as yon tom. There was a great clap of thunner, and the gude wife said, 'I'm thankfu', Thammas, you're no on the road the necht.' Just then the door was opened and in walked a woman clean drippit from head to foot. She carried a great pack on her back, which she unslung, and shaking herself like a dog, she said in an Irish brogue:

"'Shure I've done some hard trampin' in me toime, but that's a divil's road from Quebec here, and the night's bad. I'd be thankful to you, mum, for a cup of tay,' turning to the wife. 'Your name's MacDonald,' said she, addressing me, 'and you'll be after showing me lot 10 in the mornin'. I've bought it.'

"'Woman,' said I, 'do you no ken tha lot 10 is away on the mountain, and no an acre cleared nor as much as a cabin on it?'

"'I'll attend to all that in good time,' said she.

"'But, woman, have you no a man to helpit you?'' put in the wife.

"'A man, is it,' said she, in a fierce way, 'I'd have you understand, mum, that I'm as good as any man.'"
"She may be a bit off in her reasoning, but she's come and gone this ten years, and it's a great farm she's got with a tidy house on it."

"And that is all you know of her?" I further inquired, eager for information respecting my strange visitor of the night before.

"Weel," replied MacDonald, "only that she's a great hunter. It's not lang syne she killed a muckle big bear that was rinnin' after her sheep, and in the winter she gangs awa' intil the bush for caribou. And it's fearsome to see her standing in her canoe wi' a lang fishing pole, casting recht and left, and a-tearin' down the rapids. But she minds her ain business, and she no likes veesitors."

"Not unless they are handy at stumping," I laughingly replied.

"Man, you're recht, but she's great at that hersel' as weel," and MacDonald chuckled at the thought.

"And now," said I, "for McTavish." I found him sitting before the door of his cabin modelling a paddle. His appearance was quite as striking as the Maid's. He was tall and raw-boned, with a red beard and hair to match. The latter was long and curled, hanging over the collar of his blue flannel shirt like a great mane. He was, perhaps, fifty or more. I explained to him that Charlo
THE MAID of the MOUNTAIN

had deserted me for the Maid, and that I wanted his services for a week as canoe-man.

"So the black felley has gone to the Maid," said McTavish. "Man, man, but she plays him like she does a trout she's well hooked. But no matter, I'll send him to the right about as soon as the land is all cleared, so let the Injin work away." McTavish grinned at the picture he had evoked.

So did I, but I saw two trout on her cast, and I wondered which one she would land. McTavish's preparations to accompany me were simple. He merely closed the cabin door, picked up a long lithe spruce pole shod with iron at one end, and announced that he was ready. He proved so skilful in poling a canoe that I decided to return up river to the pool of the big rock. There again I set my tent, and for several days I fished for the great trout that lurk its depths. Of all the rivers that take their rise in the table-land that forms the divide between Lake St. John and the River St. Lawrence in the province of Quebec, there is no one that is so justly celebrated for its trout as the Jacques Cartier. Its island-studded waters, the irregular-shaped mountains that guard it, clad to their summits with the spruce and balsam, its rough rapids that subside into long reaches of placid
FOREST, LAKE, AND RIVER

water also lend to it a charm possessed by no other river in the whole Dominion.

But to return to my story, though I love to take the angler’s privilege of an occasional cast to one side on the chance of an unexpected rise.

One evening McTavish, after lighting his pipe from a coal deftly extracted from the camp fire, turned to me and said:

“Do you know the Maid of the Mountain?”

“Yes,” I replied, “slightly.”

“A grand woman, sir.”

“A very remarkable one, I should say,” I dryly replied. This, however, was quite lost on McTavish, who continued:

“I have known that woman, sir, for ten years, and she has n’t her like in our parish. She can do anything that a man can. It’s a treat to see her swing an axe. I’ve asked her to marry me.”

Here McTavish paused.

“Well,” said I, “what was her answer?”

“That she would n’t marry the King of England until every acre of land on her farm was cleared, and then she’d decide. It’s all right though, and I give her a hand whenever I’ve spare time. Faith, a man without a wife in these parts has a hard time, and I’m tired of it.”

I wished him all success, and thereupon we
made up the fire and turned in for the night. As our subsequent adventures on the river have nothing in relation to my story, I must resist the temptation of another side-cast, lest I forget what I started out to tell. At the end of my week's engagement with McTavish, I dismissed him and took my way back to Quebec.
PART SECOND

About the middle of the winter that followed, a messenger from one of the hospitals came to me and said that an Indian by the name of Charlo, who was a patient in the institution, suffering from frozen feet, wished to see me. I answered thesummons at once, and found my quondam companion of the preceding summer, minus several toes, but otherwise convalescing. While caribou hunting he had broken through the ice, and before he could reach his camp, both feet were badly frozen. It was Angus McTavish who found him, and with infinite toil had drawn him out to the settlement on a toboggan, from whence he was brought in to the hospital in Quebec.

"Hein!" said he, "you 'av' de good 'eart for come see a h'ole Injin man, m'sieu', I would not h'ax you for come but for de grand communication which I 'av' for mak'."

"Found a new fishing ground in the river for us to try next summer, I suppose," said I, at random.

"Baguette! non, m'sieu', it ees more strange dan h'all does tings. Attendez, m'sieu', for I would not spik loud for it ees not that 'e should yet know of
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wat I 'av' for say,” and Charlo pointed to a man in the next cot, but whose back was turned to us.

I drew my chair nearer to Charlo’s bedside and he went on:

“Two—tree day, mebbe, h’after I come h’on dis place I spik h’on dat man. ’E h’ole H’Irish-man wat ’av’ de pneumone but ’e go for get bettar. I h’ax ’im who he was, and ’e say ’e was wan of dem fellers wat fight for de Queen, but ’e not fight h’any more, but look for ’e’s wife wat was los’. Den I h’ax ’im ’ow for ’e lose ’is wife, an’ ’e say, ‘It ees long story for tell. I was married man h’on de regiment wat come to Montreal from H’Englan’. My wife she come too. She was great woman for mak’ de work h’on de h’officers’ house an’ for de wash. Bime-by she say, “Pat, you ’av’ tree month more for serve h’on de regiment den we go buy de lan’ for mak’ farm at Quebec. I ’av’ four huner dollar wat I save.” I feel so good h’over dat news dat I mak’ beeg spree de night tam h’on de canteen. Den I mak’ de beeg fool and keeck h’up wan grand row. De h’officer h’of de night tam come for see who mak’ dat row, but I feel so bully for fight I strike ’im h’in de face tree, four tam. Dat’s bad ting for do, h’an’ I go h’on the lock-up. Nex’ day wam I’m sobre I feel verra bad, but no matter I ’av’
for stan' trial h'all de sam'. De h'office wat I strike h'ax de court for be h'easy, dat I good soldier-man. De court say dey tak' dat word h'an' would give me h'only ten year h'in de jail h'in H'Englan'. My wife she feel de shame, but she say, "You 'av' a good 'eart, Pat, h'an' I go for mak' a farm h'all the same, h'an' I wait for you." I get one lettre to say she go h'on Quebec, den I not 'ear h'any more. Mebbe she die, but h'anyway when I get h'out h'on dat jail one year before my tam, I hire me h'out h'on de ship for come to Quebec for see. Two month I h'ax h'alway for Mrs. O'Scanlen, but nobody not know her, h'an' den, I tak' de seekness which bring me h'on de 'ospital.'

"Baguette! m'sieu', when I 'ear dat H'Irish-man say Mrs. O'Scanlen, I jump h'up h'on de bed queeck.

"'You 'av' de pain,' says 'e.

"'Begosh!' I say, 'I 'av' 'im bad.'

"Den I h'ax 'im eef de wife wat 'e want ees short woman, h'an verra beeg' roun'?"

"O'Scanlen, 'e laf,"but 'e say: 'No, my woman tall lak man h'an' thin.'

"I know dat woman fine, but I not say word to O'Scanlen but sen' for you, m'sieu'."

"What," said I, "the Maid of the Mountain?"
"De sam', m'sieu', I 'av' seen de name h'on de prayer-book which she keep h'on de 'ouse. I would h'ax you, m'sieu', wat it ees bes' for do?"

I thought for a moment or two, and decided upon a plan of action. "Leave it to me," said I to Charlo, "I'll make it the event of the winter."

I got up and walked around to the bedside of O'Scanlen. "Well, my man," said I, extending my hand to him, "I'm glad to see that you are almost better, for I've some news for you that you'll be pleased to hear."

"Is it" — and here O'Scanlen raised himself in the bed, and fixed me with an appealing look — "is it that she's alive and well?" said he, in a voice trembling with emotion.

"It is," I simply answered.

"Glory be to God!" said O'Scanlen, "but this is a great hour."

Thereupon I told him the story of the Maid of the Mountain, and Charlo's part in the discovery. "And now," I added at the close, "as both Charlo and you are to be discharged from the hospital to-morrow, I am going to drive you two out to the mountain, instead of sending for Mrs. O'Scanlen, and we'll have a house-warming when we get there."
As I was leaving the hospital, I almost ran into the arms of Angus McTavish, who was on his way, as he expressed it, "To see the Black Haythen." I drew him aside and as briefly as possible I related to him what you, dear reader, already know.

"Man, man, but it's a queer yarn, and all my stumpin' this ten year past gone for nothin'." McTavish looked so doleful at the thought of this loss, and the greater loss that was not expressed, that I laughed outright.

"Tut," said I, "an old bachelor like you ought to rejoice at so happy an ending to a romance like this. You'll drive out to-morrow with us to the house-warming."

"Well," he replied, "I suppose I might as well."

My story ought to end here, but it doesn't. The happenings in real life are so much stranger than in fiction that I am forced to go on with it to the end.

It was near the close of the short winter day when I drew rein on the edge of the clearing from which the Maid's house was visible. The sun, setting in majestic glory over the western mountains, spread a soft pink glow across the open fields of snow, while from the windows of the house there shone the reflected light that glowed
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like beacons. We sat silent for a few moments, each, no doubt, filled with an emotion inspired by the scene and the circumstance of our being there. It was O'Scanlen who first spoke:

"By my faith! Maggie has made a grand fight, and it's a beautiful place entirely."

"She 'av' de great courage," said Charlo, simply.

"And, man, but she's fine at the stumpin'," replied McTavish.

I made no remark, for something in the stillness about the place jarred unpleasantly upon my nerves. I tipped the horse with the whip, and we drove up to the door. "I'll rap," said I to O'Scanlen, "not to cause too great surprise, and you follow me in." There was no response, however, to my rap, and I lifted the latch. The door opened and I entered, closely followed by O'Scanlen. Sitting before the table facing one of the windows, but with her back turned to us, was the Maid, evidently writing. She held a pen in her hand, and before her on the table was spread a large sheet of paper. She did not turn, however, at the noise of our entrance.

"Maggie, Maggie dear, I have come at last," exclaimed O'Scanlen, reaching out his arms, as he advanced towards the sitting figure.

There was no response.
"Have you no word for me, Maggie?" said O'Scanlen, touching the shoulder of the woman.

"Man," said I, as gently as I could, "she has left a message for you, but she is dead."

He staggered and would have fallen, but for McTavish, who at that moment came into the house and caught him in his arms.

Let me, as is the storyteller's privilege, mercifully draw a veil over the husband's first violent outpourings of grief. When we had decently and reverently placed the body of the dead woman upon the bed, and had made a fire to warm the chilled house, in the last flickering light of the day I read to O'Scanlen the message which I had found upon the table:

_Dear Pat,—I am ritin' this in hopes that you will get it to let you now that I am true to you to the ind, and that the prisint year, God be praised, will be your last in prison. It has been a lonesome time, dear Pat, but glory be to God it's a great farm I've got, and it's happy you'll be whin you get here for it's a great country entirely. It's the Maid of the Mountain I am, dear Pat, for I've kept our sacret, and it's siveral of the lads, fine min, Pat, and trew, who would marry me, but I put thim off with one excuse and another for it's thinkin' of you, Pat, I am and the little dead one. They think it's hard I am, Pat, but it's you who nows best, for it's always of you I'm dram-
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ing of nights, and the days and months are long without you—

Here the letter ended abruptly.

It was bitterly hard for the man. In our rude way we tried to comfort him, but his grief and disappointment were deeper than our sympathy. It is time only that heals the wounds of the heart though the scars remain. I returned to Quebec after the funeral, leaving McTavish in charge of O'Scanlen. Summer came again, and it was Charlo who met me at the river with his "Saluts, m'sieu", I verra glad for see you some more for fish. Dat feller Angoose h'ax you for come h'an' camp h'on 'is 'ouse, for see O'Scanlen wat liv' wid 'im now, 'an' we h'all mak' fish togedder, for we 'av' feenish wid de stumps."
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