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W. H. Harris

THE PRACTICAL ANGLER.

HOW, WHERE, AND WHEN TO CATCH FISH.

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BY

KIT. CLARKE,

AUTHOR OF "WHERE THE TROUT HIDE," ETC.

GIVING A DESCRIPTION OF AMERICAN GAME FISH CAUGHT
WITH HOOK AND LINE, METHODS OF CAPTURE, THEIR
HABITS AND HAUNTS, AND ALL REQUISITE INFORM-
ATION WHEREBY THE NOVICE CAN ACQUIRE THE
ART, AND ENJOY THE DELIGHTFUL RECRE-
ATION OF GOING A-FISHING.

Illustrated.

NEW YORK:
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KIT. CLARKE.

PREFACE.

THIS book is written for the benefit of the man whose angling education, to his great misfortune, has been neglected, and who desires to acquire a knowledge of the most delightful, health-bringing and harmless recreation in existence.

The "old-timer" who knows it all will meet only plainly told, familiar facts.

Technical phrases and rhetorical pyrotechnics are studiously avoided, as they are of no use in the practical pursuit of catching fish.

The book means business—that's all.

THE AUTHOR.

NEW YORK, March, 1892.

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THE PRACTICAL ANGLER.

GOING A-FISHING.

THE first and most important requisite in going a-fishing is to become imbued with that praiseworthy and potent virtue, perseverance, a well-balanced cargo of which will prove simply priceless. It is cheap, it is handy, and in no other pursuit will an energetic display of its sublime qualities give more satisfactory results.

The next requisite is contentment, that marvelously potent force which enables and encourages a man to sit upon a very hard rock a dozen hours, with a single bite, a single fish, and a light heart. The man who can display this example of patience and content will not only catch fish, but thereby add healthy and happy years to the period of his existence in this world.

Angling may fairly be divided into three methods, each radically different, and each requiring dissimilar utensils in its pursuit.

The first, and usually most productive, is bait fishing, by which process palatable food

is placed before the fish in the water, near the bottom.

The second is by trolling or trailing either natural or artificial food near the surface, or in mid-water; and the third is by tossing food or artificial bait upon the surface of the water, and in which various daintily made and colored decoys of feather and hair, called "flies," are principally employed.

THE BAIT.

But, although the gentle art is thus exercised, all its methods are employed toward a common end: the presentation of food, or its counterfeit, in a manner to inveigle the finny warriors from their element. Therefore, a most important requisite in catching fish lies in the possession and proper use of appropriate bait.

One may be favored with the finest and costliest tackle, the most suitable season and felicitous weather, yet meet with but poor success unless he shall have fitting bait.

In any fishing where the lure is sunk beneath the surface of the water the bait must be fresh. Nothing that lives has a more acute sense of smell than fish, and the meanest of the tribe will refuse a tainted bait.

I have seen fish that were totally blind

madly rush at pieces of meat thrown into the water, and win their full share of a meal in a wild struggle against their more fortunate, keen-sighted relatives, while nothing but their powerful sense of smell guided them aright.

It must be remembered that quite as much diversion is afforded in bait fishing as can be derived from casting the fly. The latter is the most artistic, as well as the cleanest, while the enjoyment of the sport is enhanced and of longer duration, because very light tackle is used. When, however, the bait rod is of light weight, the pleasure derived from its employment equals any other method of angling.

The fish, after being hooked, is equally anxious to sever its intimacy with the incumbrance, and fights with unbiased desperation to escape.

It does not stop to cogitate on the sinfulness of man or the quality of lure, be it fly or worm, that has brought such a weighty affliction upon its welfare, but wants to get rid of it on any terms, and gives open battle until the end—either liberty or the frying-pan.

In bait fishing the angler will find the thrill of a sharp bite drive through his nervous system like an electric shock, an exact counterpart of the sensation derived from a pronounced "rise"; but the shock follows the

unseen bite in the first instance, while the "rise" is clearly seen before any "howling joy" is felt.

The subsequent proceedings in both cases are the same, save that in bait fishing the struggle is likely to be of shorter duration. This is because the baited hook may be partially swallowed and fastened in the gills, the breathing apparatus, causing the fish to succumb more speedily, while the fly always becomes fixed in the inert flesh of the mouth, leaving the physical system uninjured, and prolonging the fish's ability to give battle.

A fish suffers no physical pain from being hooked in the mouth, its nervous organization being almost *nil*, and, as the nerves are the seat of all pain, it follows that no torture is inflicted in the capture.

There is one bait which every game fish will seize, if in the least hungry, and that is the meek and lowly angle-worm, native to a vegetable soil throughout the country.

In the wonderful economy of nature the worm plays its part, yet it is very doubtful if it can perform any more important service to mankind than to become a lure for the finny fighters of our waters.

From the moment the brook trout is cast upon its own resources it learns the value of

the worm as a *menu*, for every heavy rain brings vast numbers from the soil and sweeps them into the brooks, where they soon disappear into the maws of the hungry little trout. Thus fish from infancy become acquainted with the toothsome worm, and when one is placed in the water in a natural manner it rarely misses being seized.

Any kind of fresh meat makes good bait, such as beef, veal, mutton, pork, or fish, which should be cut into slices not too large for the fish to seize, and impaled upon the hook in a manner to conceal that pointed implement as much as possible. It is not essential that the point of the hook be covered; indeed, it is advisable to leave the point uncovered, as it will better penetrate the mouth of the fish in the event of a bite.

If a line dangling through the water and holding the hook and a glistening sinker does not prevent fish from biting, the exposed point of a hook will not do so.

The larger fish, however, are more generally attracted by live bait, such as minnows of all kinds, frogs, grasshoppers, shrimp, small eels, and mice. These should be placed upon the hook carefully, in order that they may live as long as possible, but often they prove quite as killing when dead, providing they are fresh.

If live bait cannot be procured, artificial baits can be had made of rubber, and colored to imitate perfectly either minnows, frogs, crickets, worms, grasshoppers, or indeed any insect. These are rather rigid, and not by any means as good as "the original Jacobs"; but still they are an excellent substitute in an emergency, and have often caused serious trouble for sundry and various bass and pickerel.

The different baits, with methods of procuring them, will be found fully described in the chapter especially devoted to the subject.

THE ROD.

Tackle is a secondary consideration if the mere purpose of catching fish is entertained, for a hickory rod and a pin hook will sometimes gain this mercenary end; but tackle is of the utmost importance if one seeks the recreation for its greatest pleasure and excitement.

The legendary farmer's lad and his grewsome bean-pole had been held up for the admiration of mankind during many years. He practiced successfully with his hand derrick until the city chap with fine tackle, and the knowledge how to use it, appeared at the brookside, and then the farmer's lad promptly

retired to the seclusion of the barn-yard, and has never since been heard from.

It is well for the novice to begin with a low-priced equipment; but this does not necessarily mean poor tackle of the two-dollar-dry-goods-store-split-bamboo-rod iniquity—the most imposing example of deceptive trickery extant.

A reliable and serviceable outfit can be purchased at any of the regular tackle stores, at a moderate expense, that will serve all purposes until the learner has advanced to a more proficient stage, when he will naturally begin to seek the costlier and daintiest tools. Experience will soon direct him into the channel wherein the larger enjoyment lies.

It is prudent, indeed essential, to purchase only from established dealers in fishing tackle, in which event the buyer may rely upon receiving honest treatment, for the regular dealer knows just what he is selling, and has a reputation to maintain upon which his prosperity depends. If the notion, hardware, and dry-goods houses are patronized, the chances are that inferior, if not useless, trash will be secured; for these energetic merchants, having absolutely no personal knowledge of fishing tackle, sell merely for profit, and “everything goes.” Shun the dry-goods store leader and

the poor, gaily decorated bamboo rod, for any wooden rod will prove a better investment, and will serve until the split-bamboo stage is gained by experience ; then buy the very best your means will compass. A rod with the butt, or first joint (under the hand), of ash, middle joint and tip of lancewood, is about as good as any made of ordinary wood. It is strong, light, pliable, and serviceable, and will cost from \$5 to \$10, according to its quality and finish.

Bear in mind that in fishing with bait a rod from 8 to 9 feet in length, weighing not over 8 ounces, and a little stiff, will be about the proper thing, while in fly fishing 9 feet in length and from 6 to 7 ounces in weight, limber or pliant, will do the work required. An ounce in added weight appears but a trifle to the imagination, but when the muscles of the arm are kept at a high tension for hours in fly casting, that added ounce seems very much heavier.

A good lancewood rod is not only elastic, but exceedingly tough, and will undergo an immense amount of hard work, bending, retrieving, and pulling until the author of its labor is exhausted ; but it cannot be doubled at a right angle without breaking. Indeed, it will rarely be broken except through being handled recklessly and carelessly.

It will be noted that various sizes and weights of rods are given in this book for use in seeking different fish, and hence the idea may prevail that it is essential for a person to store up an endless array of these useful appendages, or else forego the sport. No greater error could possibly be made. I have given weights and sizes of rods that will afford the most satisfaction in battling with the finny fighters, such as will best meet the diversified action of the several species of game fish described.

This is scarcely necessary in regard to lines, as it is always best to make use of the smallest line possible; but it may be added that if a person is seeking a rod for general use—one that will serve in bait fishing for trout, black bass, weakfish, and all others of medium size—one of split bamboo, about 9 feet in length and weighing between $7\frac{1}{2}$ and $8\frac{1}{2}$ ounces, will come very near being the best attainable.

It should not be too stiff; indeed, I never advocate the use of a rigid rod for any purposes except trolling and bait casting, and neither should it be too flexible, such as is required in fly fishing. A happy intermediate condition should be attained—just bend enough to give with the pull of a fish, just stiff enough to hold up when a “strike” is made.

THE REEL.

The object of the reel is to "play" a fish, to bring it to net, and to reel the line for casting. There are two kinds of reels, the single-action click and the multiplier. The former should have a narrow spool, obviating the necessity of guiding the line, for with each revolution it takes up the line slowly and gradually, while the drag of the click lets it out sufficiently to meet the balkiest trout's exertions.

It is, therefore, the best reel to use in fly fishing, while for bait fishing a multiplying reel will serve best. It is requisite in bait fishing, especially in "minnow casting," "skittering," and other methods elsewhere described, to cast to a distance, and for this purpose a reel must give line freely.

One revolution of the handle, by a system of cog-wheels, causes the spool holding the line to revolve four times, a single evolution of the handle of a quadruple multiplying reel taking up a foot of line. It will thus be seen that if a large fish takes the bait his outward rush can be met by giving line freely, and the return can also be promptly met, and slack line avoided, by taking up line upon the reel with equal promptitude.

The one great danger resulting from the use of the multiplier is an overrunning line; that

is, the reel will revolve with such velocity as to keep running after the strain has ceased, and thus entangle the line upon the reel.

This can be avoided by keeping the thumb against the spool, which is made wide, and pressing upon it the instant a slack appears. For this reason, the reel is on the rod above the hand when bait fishing.

All good reels are supplied with a click and a drag, either or both of which can be brought into instant use when desired, and both bear upon the spool, causing it to revolve with some difficulty, and hence bringing a strain to bear upon the struggling fish.

A serviceable reel cannot be bought for less than \$5 and up to \$50, while the material of its composition, such as rubber, aluminum, brass, nickel, silver, etc., is quite a matter of individual fancy.

It may be added that an ordinary click reel cannot well be used in bait casting, but the multiplying reel can be used in all kinds of fishing when one becomes acquainted with its workings.

For many years I have made constant use of the multiplying reel in all kinds of angling, and, although I have experimented with pretty much every description of reel made in this country, as well as the clumsy "winches"

used in England, I have never yet been able to find one that afforded me the satisfaction derived from the multiplier.

A superior tool of this description is costly at first, but cheap in the end, as it will serve a lifetime and can scarcely get out of good working order under fair treatment.

I have seen reels in the New York tackle stores as handsome in appearance and as perfect in action as the heart of the most accomplished expert could desire, and doubtless they would afford the greatest satisfaction in use. I have had a great many reels sent to me for examination and trial, of which I must say the majority were superlatively good in every feature; but somehow, after trial, they were carefully laid aside, and the old multiplier was again enthroned.

THE LINE.

There is no choice in lines, there being but one perfect fishing line made—that of braided silk, covered with an exceedingly even and smooth enamel composition, and sold for about seven cents per yard. Nothing more perfect has ever been invented to meet a demand than this line, for it is strong, durable, pliable, will not kink, slides through the guides easily, and can be had in any size and length.

Twenty-five to thirty yards, however, will be quite long enough for ordinary purposes. Be careful, in selecting a silk line, to choose the hard-enameled, smooth-coated American-made examples, as many of inferior quality are imported, and can readily be distinguished by their stiffness, stickiness, cheapness, and "badness."

Formerly the best lines were made of twisted hair, to which silk threads were added, increasing their strength. Then the cotton and linen lines, either twisted or braided, came into use; but, except for special purposes, these have been superseded by the American enameled and waterproofed silk line.

Europe may surpass us in one or two little things, but it cannot begin to equal us in the manufacture of fishing lines.

The "Cuttyhunk" lines, used principally in salt-water angling, are twisted, and made of foreign flax, in thickness ranging from nine to twenty-one threads, and sometimes 1,000 feet in length.

The enameled braided-silk lines are made only by complicated machinery, and, like American watches, also made entirely by machinery, are absolutely perfect in construction.

Cotton and grass lines are little used nowadays in angling.

THE LEADER.

The gut forming the leader, as well as the snell to which hooks are attached, is made in Spain from a secretion found in the silk-worm, and reaches this country in bundles or hanks of twelve dozen pieces, from twelve to sixteen inches long. Each strand has been secured at the sacrifice of one of the insects, which, had it been permitted to live, would have exhausted the secretion in spinning a cocoon of silk.

It is fine, round, strong, and as near invisible as anything known and used for this purpose. The lengths of gut, as it is erroneously called, are dipped in vinegar and softened, and are then tied in suitable lengths to form leaders. These should always be tested before using by attaching a dead weight of at least one pound, and slowly lifting. Any leader that will bear this strain without breaking will perform its required service faithfully.

The practice of using leaders nine feet long and even longer, except in salmon fishing, is a thing to be avoided; indeed, it is advocated only by empirical anglers. Such a leader would make the landing of a large trout a

matter of great difficulty, if not utterly impossible, as the knot by which leader and line are connected would catch at the ring on the tip of the rod, and so prevent the fish being brought near enough to net.

It is a good plan to have your leaders measure less than two-thirds the length of your rod, whatever its size may be. A twisted leader, or one made of double gut, should never be used under any circumstances, for one of single gut will hold any fish, and when a break occurs it is the rod that will suffer, and usually this result ensues from a too vigorous "strike."

In selecting gut leaders draw the fibre between the fingers, and, if any roughness is discovered, discard it at once. The gut should be perfectly round, clear, smooth, and sound, with a loop at each end, one for the line and the other for the tail fly or bait hook.

THE HOOK.

The hook known as the "Sproat," to my view, is the best fish hook made, because of its bend and shape, and because it is made upon scientific principles. The direction of its point is always toward the lever giving it force; that is, the point is directed to the spot connecting it with the line, and gives it a cen-

tral draught. It has a straight bend, a short barb, is beautifully tempered, and when it strikes fish-meat it invariably gets there and stays there.

The hooks with the points curved or turned aside, such as the "Kirby" and the square end "Sneck," although good in their way, are inferior to the "Sproat," because the points turn away from the line which applies the force required to penetrate the flesh.

Next to the "Sproat" I prefer the "Limerick" hook, and then the "O'Shaughnessey." The latter, however, is made of heavier wire, and both have a longer point and a narrower bend, while neither has the curved or crooked point.

FLOATS.

In bait fishing from any fixed object floats are often used. These are made of basswood or cork in various shapes and colors, and attached to the line, allowing sufficient line beneath to keep the hook in mid-water or near bottom, as may be desired. The least nibble will at once be detected by the action of the float, while a pronounced bite will instantly carry it beneath the water.

Care should be taken not to allow more line to dangle beneath the float than the length of the rod, else it cannot be wound upon the

reel, the float preventing the line from passing the ring at the tip of the rod. Any length of line can be payed out from the hand when a rod is not in use, and bait may be sent to a long distance by means of a float—a practice that sometimes proves quite effective, especially on a clear day.

OTHER UTENSILS.

In seeking large fish a “gaff” should always be within reach. This is a large steel hook, without barb, used in impaling a big fish after it has been played to exhaustion, and bringing it safely from the water.

For smaller fish landing nets should be utilized. They are made in various sizes, and of cotton, linen, and silk, with numberless patent contrivances for folding and packing. The net should be attached to a handle from four to five feet in length, and should be from 15 to 18 inches in width at the mouth, and from 18 to 22 inches in depth.

A willow basket, held by a strap over the shoulder, in which to carry fish, should always be worn, which, with an excellent landing net, will be found fully described in the chapter on “Brook Trout.”

As has been said, weights, sizes, and dis-

tinctive qualities of rods are given as will afford the greatest sport in a struggle with the various fish, but it is not essential that one should possess each of these rods.

It is requisite, however, that a person fishing with fly and bait should own at least two rods, the light, elastic fly-casting rod, and the middle weight, more firm, but not stiff bait rod.

If the more ponderous fish, such as the striped bass and mascalonge, are sought, another short and stout rod will be needed, but for all ordinary purposes the two rods above mentioned will meet all demands.

The above are the essentials required in fishing; the many convenient and useful "side issues" will make themselves apparent quickly after one becomes engaged in the art, and it needs but a passing interest to make a person its admirer and lover as long as he lives.

THE SPOTTED SEA TROUT.

Weight, 1 to 6 pounds.

ATLANTIC COAST, FROM HATTERAS TO KEY WEST.

BAIT.

IT often occurs that good fishing may be convenient and plenty of tackle within reach, but that main desideratum, bait, cannot readily be procured. Sometimes it happens that one may be upon a body of water inhabited by countless hungry fish anxious for a meal, while the meal is beyond the reach of both angler and quarry.

And, again, the very water in question may be teeming with the most appropriate bait, yet inaccessible to the big fish, but within reach of the angler if he knows how to secure it.

More especially is this so in the case of minnows and other small fish, which, knowing their danger, seek the security afforded by shallow inlets, brush, overhanging trees, and other safe hiding-places. The larger fish rarely venture into such surroundings, and the little fellows are comparatively free from danger.

All game fish prefer live minnows as a steady diet, and for good reasons, as it would be difficult to find a better meal in any fish flesh

than is afforded by the black striped minnow so abundant in many of our streams. The little red chub plentifully found in the West is also an excellent pan-fish, as are many others; and all are superior, indeed, the very best bait that can be placed in the water to tempt the bass, mascalonge, and other finny combatants.

If a quantity of minnows is desired, the best method is to secure a small meshed net or mosquito bar, six feet square, attach hickory bows diagonally, and tie a rope to the bows where they meet in the centre. Throw the rope across the limb of a tree projecting over the water and allow the net to sink to the bottom at a depth not exceeding three feet.

Remaining quiet a few moments, the shore end of the rope is pulled, the net lifted, quietly, of course, and a plentiful supply of minnows will be the result.

A big fish is occasionally taken by this method, as such are often in the vicinity where minnows abound, for business purposes only.

If a few minnows are desired, they can generally be picked up with a very small hook attached to an old leader, and baited with a small bit of worm or meat. Pull a boat into the brush, finding an opening into the water to drop the hook. Make fast and rest a few

moments, and there will be no difficulty in catching as much bait as may be required.

If, however, the little fellows "fight shy," and but one or two, or perhaps half a dozen, are caught, place them in a bottle of water, cork it up and sink it in the water directly under the spot in which your bait is playing. In a moment all the fish in the vicinity will be on a tour of investigation, and you will be kept busy lifting them out.

If a light willow wand is cut and used as a rod some little pleasure can be derived in this pursuit, and once in a while a hot skirmish with a pound fish will ensue.

The pretty silver-side minnow of the streams is readily taken in this manner, and is a splendid bait, but difficult to keep alive any length of time, and in order to prove most efficacious minnows should be kept alive.

In boat fishing this can readily be done by placing them in a pail and changing the water occasionally, or by the use of a perforated double pail, lifting the inner pail and placing it in the water beside the boat when anchored.

An excellent method for keeping minnows alive consists of a rubber bulb and two feet of small tubing, the end of which is placed in a pail of water. Pressure on the bulb forces

air into the water, thus aerating it and giving life to the minnows.

A light wooden frame, top and bottom of thin wood, with an opening or door in the top, the sides of wire-cloth nailed to the frame, makes an excellent car for keeping minnows and large fish alive. It can be made any depth, but should be weighted and sunk as deep as possible, a rope being attached to bring it to hand when desired.

In all kinds of still fishing the minnow should be hooked through the rim or outer edge of both lips, the hook passing from the bottom upward. Some pass the hook through the back beneath the dorsal fin, being careful not to puncture the backbone; but by this method the sinker will often cause the minnow to swim upside-down, a rather unusual condition which rarely occurs when hooked through the lips. It will live quite as long when hooked by either method, but will prove a better bait when hooked through the lips, as minnows invariably go down the throat of a fish head first.

One of the best baits for black bass, especially when the fish inhabit running waters, is the Helgramite or Dobson, known also under at least forty other names in as many localities. It is a deep black, about two inches

in length, with a row of "feelers" down each side, and is found under logs and stones in brooks and swift rivers. It can be kept alive for days in a small box with damp grass. It should be hooked in the joint just back of the head.

Live grasshoppers are an excellent bait for trout and bass, and can readily be caught by the use of a net of mosquito bar with a handle attached. In quiet nooks of a stream it will attract trout of a large size. The grasshopper should be allowed to float on the surface, no sinker being used.

Angle-worms will attract any fish, and can be dug up in rich soil almost anywhere. If, however, one does not care to dig they can readily be brought from beneath the soil by liberally sprinkling the surface with salt water, dissolving two or three pounds of salt in a pail of water. The ground heavily coated with this preparation will instantly be covered with an army of crawlers that merely require picking up. If they are to be kept some time, place them in a box of earth, pouring a handful of cornmeal upon the top, and over this pour a quart of milk, leaving the box open or uncovered.

Raw beef is one of the best baits in use for general fishing, and in the spring, before

frost leaves the ground and worms can be secured, it is the best that can be had for trout. After being in the water a few moments, it becomes white and very attractive.

Small pieces of pork, mutton, and slices of the white meat of fish form an excellent bait at times, but all meat used for this purpose should be fresh.

The shedder crab, used in salt-water fishing, is found among the seaweed at low water. It has a soft shell, which is quite thin and easily removed, leaving a thin, yellowish, and rather tough skin. This is lined by a white flesh, which is cut into pieces, forming four or five baits, placing each upon the hook to show as much of the white meat as is possible. It is by far the best bait that can be utilized in salt-water still-fishing. It can be bought at the markets in New York, as can any other bait, at a moderate expense.

Soft-shell clams are a good salt-water bait, the eye or hard portions only being used, the soft part and the shells being thrown away. Oysters, treated in the same manner, are also serviceable—and costly.

Sandworms are the product of dark sand upon the seashore, and are taken from beneath rocks at the ebb of the tide. They grow to a length of 12 to 15 inches, are of a dark red

color, fringed with "crawlers" on both sides, and have pinchers that will bite rather forcibly. Keep them in a box with a little sand or damp seaweed. One worm will bait two hooks, but they should only be used while alive, as fish will not touch the dead worm. If a whole worm is used, pass the hook through the middle, allowing three inches of each end to wriggle.

Shrimp can be caught in any quantity in the still nooks of a salt river by the use of a landing net covered with mosquito tarlatan. Keep them in a box of wet sawdust, where they will live all day. Hook them from end to end, tail foremost.

Shrimp are a good salt-water bait.

Frogs can be readily caught by attaching a small piece of red flannel to a hook, and casting it within reach of the "beast." They will keep alive for several days by placing them in a box of wet moss. Frogs from one to one and a half inches long are the proper size, and it does not appear to make much difference if they are hooked through the lips or the legs.

Trolling baits consist principally of spoons and minnows, and when the latter cannot be had conveniently artificial minnows are used. They are made in all sizes, of silk, rubber, sole-skin, and metal, variegated in color,

mounted with hooks and always ready for business.

Spoons are made of metal, silver or gold plated, in all styles and sizes. Some are smooth, others fluted or hammered, yet with one end in view—to present a glittering appearance. All spoons should have a swivel attached, and the hooks should be concealed by feathers. They should always be made with a bent snap at the end of the shank, in order that a broken hook may readily be replaced. They are usually made with a set of three hooks attached, connected back to back in grapnel fashion. I believe two hooks are better, as they are equally sure to fasten securely, generally in the lower jaw, and are much more readily removed. Besides, it permits the use of larger and stronger hooks, a matter of importance when big fish are interviewed.

All insects have their artificial counterpart, and can be bought at any tackle store. They are usually made of rubber and colored to imitate nature, or, as in case of the mouse, covered with fur. Among such are frogs, helgramite, grasshoppers, crickets, shrimp, worms, caterpillars, wasps, bees, potato-bugs, gnats, beetles, moths, etc.

The variety of artificial flies is simply end-

less. In color, size, and shape any fastidious fish can doubtless have its daintiest wants supplied; but the one predominating difficulty is to hit upon the particular "want" in demand. It can only be discovered by trying, and "if at first you don't succeed, try, try again." Although the angler may require but a dozen flies, yet it is always advisable to keep a well-supplied fly book near by. They may never be needed, but then, should the occasion arise, they will be wanted with all your might.

Besides, no little gratification is derived from the display of a crowded fly book, and on a cold winter's night a heap of comfort and pleasure is obtained from the mere mechanical process of "straightening out those nice flies."

Moths are very destructive in a fly book, and invariably attack it unless prevented, but they can be vanquished, and further inroads obviated by making use of the receipts given at the end of this book.

FLY CASTING AND FLY FISHING.

THE recreation of fishing is greatly enhanced, bringing a larger compensation and a more lingering excitement, when the method known as fly casting is practiced.

Pages of profound sentiment have enriched many volumes upon this subject, while the process has been minutely and graphically described times beyond compute ; yet there is but a single method to follow which will enable a person to perfectly acquire a knowledge of this highest development of the angler's art, and that is actual practice.

Every volume yet printed upon, or which refers to, the subject has made the same assertion, and then proceeded, as I shall do here, the best I can, toward giving the learner an idea how to begin.

In one respect alone, if for no other equally good reason, it is immeasurably superior to all other kinds of angling, and that is its cleanliness. It avoids the use of uncleanly and annoying bait, such as worms, frogs, and minnows, and a pair of delicate kid gloves need hardly become soiled because of its practice.

Fifteen years ago the favorite rod for this purpose was eleven or twelve feet in length, and weighed about three-fourths of a pound. At present the popular rod is not over ten feet in length, and will average but six ounces in weight. The object in using such a light rod is principally to avoid fatigue; for in bait fishing one usually remains seated in a boat, where it requires but little effort to hold a rod suspended above the water.

In fly fishing, however, the hand and arm are continually kept in a studied motion. Therefore, every ounce in weight that can be elided lengthens and adds to one's pleasure.

Experience has also proven that weight in material neither catches nor kills fish, and that a heavy fish will succumb to the strain of a light rod as surely, if not quite as readily, as if the heavier and more cumbersome tool is used.

Although the fly rod of to-day is but half the weight of that in use a few years ago, yet the angler of the present time will place his flies fully twice the distance reached by the adepts of the last generation, and will enjoy the recreation from sunrise to sunset with unalloyed pleasure, while a single hour's fishing with the ponderous and oppressive relic of other days would fatigue the muscles of the arm and compel a temporary rest.

An elastic, pliant rod, regardless of wood or weight, a rod that is limber, yet quick of action, is the proper rod for trout fishing, and when one becomes acquainted with the manner of laying out forty feet of line smoothly and straight he will thereafter seek lightness in the tool.

When a man casts thirty feet of line his flies drop nearly forty feet distant, and this is more than will generally be required upon a stream.

Adopt the rod that suits you, but wait until you find it, which may not occur until you have tried a great many. It is an easy matter to walk into a tackle-shop and select a rod that may seem to meet your idea; but the same rod, when put to its task encumbered with reel, line, and flies, may prove "a horse of another color."

Not long ago I was fishing upon the famous Brodhead, in Pennsylvania, where I met a gentleman with a rod as heavy and unwieldy as anything of the kind I had ever seen. It bore evidence of having been home-made, and by dint of long service had become painfully "set," or bent. The butt was of ash, the second or middle joint was of hickory, and the tip of lancewood.

I was not a little surprised to learn that it

was a fly-casting rod made and used by that foremost among Quaker anglers, Thaddeus Norris, and his name still appeared burned into the hand-piece. About the time this rod was made a revolution had taken place in the manufacture and use of angling implements, and this was an example of the new departure.

It is enough to make a man shiver merely to think of the frightful weapons which preceded this tool. That which followed it, however, the casting rod of to-day, is the rod *par excellence* of all angling ages, the one superlatively fine thing of its kind, and it will be a matter of great difficulty to improve it.

I have killed many trout of four and five pounds in weight upon a rod weighing five ounces, and this, too, in swift and turbulent waters.

With such a tool one is enabled to cast steadily for hours, while the muscles of the hand and arm will scarcely note the effort.

Doubtless there are many good rods built of various woods, such as lancewood, greenheart, etc., but the very best material for fishing rods is the Indian bamboo, rent into six triangular pieces, glued together and wound with silk. Such rods, when well made, in strength, elasticity, and durability are unequalled.

A split-bamboo rod, of the best quality, will cost from \$25 to \$30, and will "stand by" for years. One such rod in my possession has labored faithfully, and sometimes heavily, for twelve years, and the total amount expended upon it has not exceeded twenty-five cents, this being for its annual coat of varnish.

Be careful to select only the hexagonal, or square-edged bamboo rod, as the great strength of this material lies in the fibre upon its outside. Split-bamboo rods that are round have had this enamel shaved off, and must of necessity sacrifice much of their strength.

A point of great importance in the selection of a rod is to find one that fits the purchaser—one that just suits; and this will not prove a very easy matter. The difference in fishing rods is monumental. When the right rod is secured, never part company with it. You may try a car-load of others, but the friendly hang of the old rod will never again be found. The right rod, too, can never be correctly chosen in the store where it is sold.

It is amusing to step into a tackle-shop and observe the methods displayed in the selection of a rod. It will be carefully jointed. The purchaser grasps the butt and forthwith proceeds to cut a swath in the surrounding atmosphere. Oh, yes, it bends all right; it

hangs elegantly ; it feels light ; and, why, of course, it looks just too beautiful. The mere sight of it ought to paralyze the fish. But it won't. When you reach the brook and "rig up" for business, you will find it may not balance well ; it may be too weak in the back, or too pliant, or too stiff, or too slow in its spring, or—well, it don't suit you any way.

Therefore, in purchasing an expensive rod, an agreement should be made to the effect that if on trial the rod proves unsatisfactory it will be exchanged, always providing it is uninjured. By repeating this process you may eventually draw the coveted prize, in spite of the fact that the man who sold you the rod has been considerably annoyed. However, when you are well satisfied, the dealer will find himself repaid for his trouble in profits resulting from the kind words you can bestow upon your treasure.

Should you become the owner of a good rod, take care of it. Don't toss it in a corner or down in the cellar, but lay it away in a dry, cool place, unjointed and at full length. At the close of the fishing season clean the rod thoroughly with fine pumice-stone and a piece of chamois, but avoid chafing the silk windings. Then with a flat hair brush apply a coat of thin coach varnish, and suspend each

joint by a string until dry. Apply a second coat and suspend for a week. Then clean the metal parts with sweet oil and rotten-stone, and put it away for the winter.

Surely, when you have reached the split-bamboo stage of proficiency, and expended twenty-five or thirty dollars for a rod, you will at least be careful of the dainty tool. You certainly will be while angling; yet more rods are broken by absolute carelessness than in any other manner. Laying it upon the piazza for wayfarers to step upon, or allowing the tip to run against a tree, or some similar example of utter neglect, means a broken rod, sooner or later, and the consequent era of ill feeling and an alarming array of animated language.

Fly casting and fly fishing are not one and the same thing, by any means. Formerly it was customary, usually during the month of May, to hold fly-casting tournaments upon the mere in Central Park, and some pretty powerful casting has been witnessed upon these occasions; but such "goings on," such slashing in the air and upon the water would not only fail to induce a "rise," but would be very sure to send every trout in the vicinity scurrying down stream as fast as they could get away.

Long casts are imposing and showy, and exhibit the results of patient and constant practice, but they are not intended to catch fish, and will fail of this purpose, even should a fish by any accident hook itself. Long before the line would come under the control of the angler the fish would have voided the hook and escaped.

The art of casting flies, therefore, need be acquired solely for the purpose of gracefully placing a deceptive food before the most cunning of fish, and for the sole purpose of playing an "April fool's" trick upon the sagacious spotted inhabitants of our brooks, and long casts will not be needed in the effort.

To know how to speed the fly through the air, and let it fall gently and naturally at the edge of a little eddy forty feet away; to hold it there like a thing of life; to see the deluded trout rush and seize the lure; to hook and handle the nimble fish until brought to its natural end—the landing net—this is fly fishing.

"To keep it there" is one of the secrets of the art.

Did you ever stand upon the banks of a stream and see a living fly resting upon the waters perfectly still? Not often, and neither should the forgery be permitted to remain

quiet, but should always be kept "on the move."

Keep the artificial fly fluttering upon the surface of the water, and, if possible, let it sail with the current. If a fly remains immovable in one place, while the current sweeps along, its anomalous position will be discovered instantly by the wary trout, for the fish knows as well as you do that such a condition is unnatural, and lets it severely alone.

When the weather is pleasant and there is no wind, take your rod and wander away to the banks of a purling brook. Rig your tackle, loop a fly upon the end, which we will call the tail fly, and fasten another to the leader two feet from the "tail" fly, which we will call the "dropper." Step upon a rock, unreel fifteen feet of line and let the current float it down stream. When its full length has gone down, raise the tip of your rod slowly until the "dropper" just touches the water. There, the whole secret of fly casting lies in tossing your flies so they will alight upon the water in this position, and but little more line will ever be required to do effective work.

While the flies are down stream give your rod a lively inclination backward—a sharp, steady jerk—until the tip is above and a trifle back of your head. This will lift the

line from the water and carry it back of you, and, when it lies out straight behind you, send the rod forward quickly, and the line will follow, while the flies fall upon the water because they can fall nowhere else. As they fall upon the water raise your tip to guide them, and draw them toward you to keep them dancing upon the surface.

Do not let your line touch the water when the flies fall in the forward cast, if you can avoid it, and never, under any circumstances, in the backward cast.

Keep your flies in the air behind you and upon the water in front of you, and, when you are drawing them toward you, do not let the rod come nearer than an angle of forty-five degrees before retrieving and making another cast.

If the tip of the rod is over your head, and your flies are on the water, you would, in case a fish should "rise," either miss the fish or, if hooked, break the rod. Besides, the line cannot be retrieved to make another cast while the tip is above the head.

Practice this for some time until you have confidence, then invite some "old-timer" to go out with you and see how you can cast a fly.

He will readily oblige you—for they are all

big-hearted—and it will touch the tenderest cockles of his heart merely to look upon a fly rod. He will advise and coach you, watch and correct your errors, and bring you nearer to perfection in half an hour than the reading of forty books could possibly accomplish toward this desired end.

When you have learned to cast flies with some little skill, try to catch a trout.

You will discover that casting flies and catching trout are not by any means identical.

You may read in books that the instant you see a “rise,” strike. Don’t do it—at least not yet. For the present, when you get a “rise,” wait an instant until you feel your fish, then a light “strike,” a short twist of the wrist will fasten the hook in the flesh of the mouth securely.

You are but a beginner, and your enthusiasm may possibly cause you to forget the delicate nature of your apparatus.

If you “strike” hard you are likely to break your rod, or if the fish is small you are liable to send it sailing through the air over into the adjoining county.

Therefore “strike” gently, just hard enough to impale the hook and keep a taut line, playing the fish in the water until it turns over exhausted. If the fish pulls very hard, give

him line, but make him work hard for every inch.

The most difficult thing to describe, yet an essential feature in fishing, is the "strike." When fishing a stream, and the line and flies are held taut by the current, the trout itself will often accomplish the "strike"—in other words, the fish seizes the hook, and instantly rushes away with its prey, thus forcing the point of the hook into the flesh.

This is the precise object of the "strike," to force the hook into the flesh of the mouth, and is accomplished by a very slight jerk, or twist of the wrist.

From the instant the "strike" is made until the fish is landed, the line must be kept straight, or taut, and give and take must be the order of the hour.

From this moment—the instant the "strike" is made—the value of a pliant rod is appreciated, and to observe its splendid qualities you have but to hold it up straight and allow the fish to fight.

Whatever direction the fish may seek, the rod will follow, and when it comes toward you the rod will straighten up. Should the fish pull hard, very hard, the faithful little rod will bend until it forms an arch like the upper half of the letter O.

Then, and not until then, when the rod is bent to its limit of endurance, give the fish line from the reel, and thus protect the rod from breaking.

If, however, you gave the reel freedom when the fish was hooked, enough line, doubtless, went off at the first rush of the fish to prevent the necessity of giving more.

It is always safe in "striking" to give the reel its freedom. This course will prevent damage, will hook the fish, and indeed is one of the most forcible reasons for using the single-action click reel in fly fishing. If a quadruple-multiplying reel received its freedom in "striking," the most serious consequences would follow.

Perhaps you have heard of the beautiful and perfect arch formed by the pliant rod while playing a trout in the water. If you desire to make these arches a study, fasten your fly to a fence post and pull; but if you are fishing don't let the beautiful arch worry you. As long as a fish is hooked and pulls, you will necessarily hold your rod up and play the fish, and the graceful bend in the rod will remain as long as the fish remains. When the fish escapes the bend will promptly disappear, if the rod is any good whatever.

As a general thing, if the fish runs deep or makes for shelter, it is securely hooked ; but if it keeps near the surface of the water, floundering as it were, it is but lightly hooked and is endeavoring to rid itself of the incumbrance. Under these conditions, if there is room, give the fish line, and plenty of it, playing it carefully until exhausted. If near stumps, rocks, or logs, the fish is liable to run around or under one, in which event the line must be held taut and the rod perfectly still. The fish may then by its struggles free the line from entanglement. If it does not accomplish this you will not be able to do so, and not only will the game be lost, but the leader and flies also. However, it is always best to strain your tackle to its limit before allowing a fish to gain the coveted retreat.

In such a predicament—that is to say, after you have hooked and had lots of fun with a balky fish, and it has departed—all you need to do is to exclaim : “ There now ! ” and continue casting for another victim.

You may be tempted to use bad words. Don't do it. Swallow your bubbling bad sentiments cheerfully, if possible, but somehow under any circumstances. Pretty soon you will become inured to the loss of a fish or two. It will become easier to your feelings,

and you will be master of the angler's greatest virtue, patience.

The patient angler is invariably the successful angler.

In fishing a stream it is most essential that clear ground lies behind as well as before the angler, else in making the backward cast the flies are liable to fasten upon the limb of a tree or bush, and disaster result. Many leaders and flies are lost and many fine rods snapped in twain by carelessness in this respect.

An artistic outfit of tackle will tend to success, while clumsy lines, big knots, and "gawky" flies will surely prove the reverse. Neither does it require an endless array of costly flies to "catch on," but a few only, and usually those of standard patterns, small in size, will suffice.

The selection of flies is not a matter of very great importance, although I am well aware that some excellent books have been written upon the subject, and many prolix schedules of flies given, to guide the angler in making a choice. Seasons, conditions of weather and water, time of day, location, and various other matters must be thoroughly considered, it is alleged, in choosing flies, and splendid reasons are elaborately propounded while the

main factor in the matter is quietly overlooked.

The truth is that a trout, if hungry, precisely like the angler, will "go" for anything.

If satiated with food, again like the good angler, it will be difficult to tempt him with anything. I have time and again cast upon pools where trout could be plainly seen and met no rise, although an endless array of flies were offered. The next day, in the same spot, most any sort of a fly would prove killing. When I go fishing the following will be found in my book, and when they do not draw I am satisfied none others will succeed. This is my list, and I believe they will serve equally well on any water. Besides they are old favorites, and can be purchased anywhere :

Grey Hackle, Brown Hackle, Grizzly King, Professor, Montreal, Black Gnat, Cowdung, Coachman, White Miller, Alder, Queen of the Water, May-fly, and a few midge-flies, very small and dark in color.

For use on brooks the fly should be tied on a No. 12 sproat hook, and for rivers and lakes on a No. 6 or 7 hook. Light flies in the morning and evening and on cloudy days, and dark flies in bright weather, are the most effective.

I see no benefit to be derived from the use of more than one fly; indeed, I am quite sure

one fly will prove more successful than if more are tied to the leader. A single fly, falling and fluttering upon the water, presents a natural appearance, and can be controlled easily, while in using a string of multi-colored flies some must inevitably conduct themselves with no little impropriety.

It can scarcely be avoided, as only one fly can be kept under control, no matter how expert a hand may guide the rod.

I have been told that the use of a natural fly—that is, an artificial fly resembling the living insect—seen upon the water when angling, would always prove killing; but I have not found it so. I have used the exact artificial counterpart of the May-fly when the waters were dotted with the living *ephemera*, and generally with poor success; but when the fly was exchanged for a gaudier counterfeit the fish would attack it vigorously and continuously. This has occurred to me on many occasions, and I merely relate the fact, being utterly unable to advance any reason for the phenomenon.

If more than one fly is used on such waters as the Rangeley lakes in Maine, Lake Edward, Canada, and others inhabited by very large fish, disaster is a possible and probable result. Trout are taken here very often weighing up

to seven and eight pounds, and one such fish is about all that can be managed. If three flies are attached to the leader, and one of these big fish should seize each—an event within easy range of possibility—some portion of the tackle is liable to break, no matter how skillfully it may be handled.

It is advisable and far more convenient to purchase flies at stores in preference to making them, although it has become a trifle stylish to be able to say: "I made that fly at home." It requires considerable practice before one becomes an adept at making flies; indeed, most all the home-made flies I have seen have been clumsy to a degree. Of course, if one has time that requires killing, fly-making is a pleasant vocation.

The silk lines made by American manufacturers are pre-eminently the best in the world. They are carefully and evenly braided of pure silk, and then enameled with linseed-oil and paraffine, thus waterproofing the fibre and making a surface as smooth as glass. They render from the reel and pass through guide rings with perfect freedom, and can only be made to kink with difficulty, while a tangle of any kind can readily be released.

They are exceedingly strong and durable when used in fresh water, but salt water soon

destroys them, as it will any other line. It is therefore advisable to use a linen line when fishing in salt water, if expense is to be considered, as these silken lines cost about two and a half cents per foot. They are expensive but good, and the only appropriate line fit to use in fly casting, not only because of the smoothness of finish, but for the important advantage of their weight.

A light line cannot be cast well—indeed, it can hardly be controlled; but the material used in waterproofing and enameling the silk adds the required weight and makes them comparatively easy to cast.

They are made either level throughout or with ends tapered, the taper beginning from six to ten feet from the end and becoming smaller until it is scarcely heavier than the gut leader to which it is fastened.

Various excuses have been advanced on behalf of the tapered line, but I have never been able to discover any advantage in its use, and the impression seems to gain ground that there is nothing in it, and that the line level throughout is the best.

If the angler will make it a practice never to waste line in casting, that is, to cast only what is required to catch fish, he will find a level line serves every purpose; and, besides, it

will last for years after the tapered portion has rotted.

All lines made of linen or cotton will swell after being wet, and unless carefully dried will speedily rot. This cannot readily occur to our enameled lines, yet they should be drawn through a piece of flannel after being used for a time, if only upon the principle that a good thing deserves attention and protection.

In selecting leaders for fly casting choose only the finest, those perfectly round, and dyed a mist color. Those with a loop at each end and one in the middle can be had at any tackle-store. One end is fastened to the line, and a fly in each loop, although three flies are sometimes used.

The gut used in making leaders can readily be purchased and tied to suit one's own ideas, but the complete leaders, artistically tied in any length, can be secured at any tackle-shop at reasonable prices, and in quantities to suit.

A small tin box should always be carried, one-half an inch thick and three inches in diameter, in which two pieces of felt are placed. The felt should be thoroughly soaked in water, and the leaders, or those to be used on the following day, should be placed between the felt and allowed to remain over night. In the morning, when fastened to the line, they will

straighten out perfectly, otherwise they will kink and curve and bend until they are straightened out by the water in which they are cast. The box can be carried in the pocket, and, if a new leader is desired, one is always ready. Soaking over night in a cup of water will serve the same purpose.

Always examine the leader carefully before using, and also after having been used for a period, and when any damaged spots or frayed edges are discovered, discard it for a new one.

When going a-fishing always keep in view the sound advice given by the colored gentleman to his companion on a hen-inspecting expedition: "Lay low in the high grass." In other words, keep as quiet as possible. The trout is a wary fish, as are all others, and will scamper off at the least indication of danger. A strange shadow upon the water will send them scurrying away for dear life.

On the other hand, if approached quietly and no cause for alarm given, the trout is the very incarnation of courage, and will seize a fly within a few feet of the hand that casts it.

If fishing from the shore keep in the deepest shadows as much as possible, and when a promising pool is found, sit down behind a bunch of alders, make yourself comfortable, light your pipe and smoke away five minutes

of time. Then, with scarcely a movement, send your flies softly and quietly to the spot, and your chances for a "strike" are about perfect. It should be noted that, as fish cannot see out of the water, any color of garment may be worn, and, as stated, rubber stockings coming up to the armpits are best for wading a stream. In the summer-time, however, when the cold water has run off, little harm will arise from an occasional dip in the water without rubber coverings for the legs if woollen underclothes and stockings are worn. No danger will be incurred from the wetting; it is the cooling process, and the chill which ensues, that causes trouble.

Therefore, when the feet and legs have become wet, *keep them wet* until starting for home, when a brisk walk or run will excite the circulation of the blood and avert danger until dry clothing can be secured.

I have stumbled into deep holes and filled my rubbers with cold, spring-time snow-water, and have allowed it to remain there for hours. The result was that the temperature of the blood and the water soon assimilated, and, aside from the inconvenient, heavy weight, I was quite comfortable, and no disagreeable results followed.

I have always pursued this course, believing

that turning out the water would chill the skin, if not the blood. It is curious, too, how quickly, after the first sensation of coldness passes away, one becomes used to this condition of affairs. However, with both boot-legs full of water, locomotion, to say the least, requires an effort and careful sailing.

The one great annoyance in angling is those undesirable pests, mosquitoes and black-flies.

They are not so troublesome upon running water as upon lakes and ponds, where, like the calmers in Verne's book, "they can be counted by millions."

The best method to circumvent these petty tormentors is to wear a head-net made of fine tarlatan, and cover the hands with a pair of old dog-skin gloves.

Lotions to rub upon the flesh will also prove efficacious, several excellent receipts for making which will be found at the end of this volume.

THE BROOK TROUT.

Weight, 8 ounces to 3 pounds.

NORTHERN STATES AND CANADA.

THE BROOK TROUT.

Salmo fontinalis.

THE trout, by which is meant the spotted and dainty little "salmon of the fountain" that is found in the brooks of our country, is the prettiest fish in existence. Ichthyologists have divided the trout family into more than a score of species, and embarrassed it with the hardest kind of Latin names, yet after all, according to the scientists, it is not a trout, but just a plain, ordinary charr.

The distinction between the true trout and the charr is principally a matter of dentition; but the generous angler is delighted to battle with any of the family, regardless of teeth, and quite willing the professors should remain at home evolving more species and harder names. Indeed, it was purely a question of teeth which robbed our trout of the appropriate and beautiful name—*salmo fontinalis*—bestowed upon it by Prof. Mitchell fifty years ago.

The brook trout has a long and very grace-

ful body, with brown, irregular markings on a greenish back, growing lighter upon the sides, with a white abdomen which assumes a reddish tint during the breeding season. It has blue and yellow spots upon the sides, and is exquisitely dotted with bright vermilion specks of the size of a pin's head. It has a large, symmetrical head, big and tough mouth, and a brown spotted tail, broad and almost square across the end.

The trout is sought more diligently than any other fish we have, probably because it inhabits a wider range of water than any other, being found from Maine to California. It has become somewhat scarce in the brooks situated near cities, all of which are being continually beaten by anglers, but is still found fairly numerous in more distant streams.

Since breeding fish by artificial methods has been perfected, many barren waters have been stocked and now afford splendid sport. Planting artificially hatched fish in streams is of recent invention, and may safely be adjudged one of the greatest triumphs of modern science. If politicians would abate their personal deification a trifle, and devote a little energy and a trifle of the people's money toward the propagation of the finny tribe, our scanty waters would soon teem with the best

food-fish, and the wealth of our country thereby vastly enhanced.

A trout of one pound in weight is above the average. Such a fish assumes a sort of leadership, monopolizing the choicest feeding-grounds and deepest holes in the stream. In the eddies, below falls, and in such places where the natural current carries the most food, the largest trout are most likely to be found.

The pugnacity of the trout is simply monumental. He is a fighter direct from Fightsville, will hold his own against tremendous odds, and will not hesitate to devour his brethren and offspring. I have taken trout of a pound in weight, and found the tail of a six-inch trout projecting from the mouth of the captured finny cannibal.

An occasional "old stager" is rescued from streams that will reach two and even three pounds in weight, while in certain favored localities in Maine and Canada this size is greatly exceeded. I have taken trout weighing eight pounds, and have seen them even larger. These big fellows, however, although naturally strong and stubborn, do not afford the sport and excitement which the nimble two-pounder will furnish.

The trout is the poet's fish, and the only

inhabitant of the waters worthy a poet's song ; it will live only in the purest and coldest water, always fit to quench man's thirst, and the surroundings are usually of the most primitive nature.

It is, as has been said, a most voracious fish, and hence will bite at anything resembling food, and often that which resembles nothing under the sun—if in a biting mood. If otherwise, it can hardly be tempted by any sort of lure.

The experienced angler of to-day uses a rod $8\frac{1}{2}$ feet in length, and weighing about 5 ounces ; but for others a rod of the same length, weighing $6\frac{1}{2}$ to 7 ounces, will prove more satisfactory. A light click reel, G-silk enameled line, three-foot gut leader and No. 5 or 6 sproat-hooks, a bait-box, and a willow basket hung from the shoulders, will complete the outfit required in brook fishing. Attach a split shot, four or five inches above the hook, to sink the bait.

A live minnow, not over two inches in length, impaled through both lips, will generally attract the largest fish ; but the minnow is difficult to carry along a stream, and the next best bait is the angle-worm. It should be impaled upon the hook, leaving a greater portion of each end to wriggle in the water,

As one moves down stream this bait should be kept just beneath the surface of the water, from 35 to 40 feet ahead, and it should be reeled in occasionally and examined to see that it is in good condition. The action of the current and meeting obstructions soon breaks the bait into pieces, and, although these pieces often secure a fish, it is always best to ornament the hook with an entire worm. Two worms upon the hook, leaving four nice dangling ends, is generally an irresistible bait; while in fly fishing two and sometimes three hooks are admissible, no more than one hook and no "float" should ever be used in trout fishing with bait.

In fishing streams it is advisable to wear a pair of light rubber wading-stockings reaching nearly to the arms.

The feet should first be covered with a pair of light woolen hose, over which draw the rubber stockings, and over the rubbers draw a pair of heavy woolen hose. Then put on a pair of canvas shoes with hob-nailed soles—the kind that lace from the toes to the instep. Do not wear shoes with holes cut into them to let water run out, as sand and pebbles enter the holes, speedily wear through the rubber stockings, and blister the feet. Those open along the entire top, being secured by the lac-

ings, permit water to escape readily, and foreign substances cannot enter.

A protection to the rubbers against stumps, etc., will be found in a pair of overalls, the bottom being tied with a cord. The above equipment may appear cumbersome, but after being worn a few moments the clumsy and inconvenient sensation disappears, and the angler can cross and recross the brook, step into the deeper parts at will, and, above all, wade down the middle of the brook fishing in all directions. In this position he is "monarch of all he surveys," and his chances for success are greatly enhanced, for he can guide his lure ahead down stream into every nook, over ripples, behind rocks, under projections and logs, and such other places as the fish occupy, always having the current at his aid and command. Wading, however, must be quietly and carefully accomplished, every step being taken with the utmost caution, in order not to disturb the fish lying beyond.

It should be noted that trout always lay with their head up-stream, the position not only being easier, but any signs of an approaching meal being thus readily discovered.

Fishing up-stream is a matter of much difficulty, especially in a swift current, for not alone must one continually struggle against

the heavy water, but it is a source of constant annoyance to have the bait or flies coming directly back to the spot upon which you are standing.

Besides, a trout, when hooked, will invariably run down-stream, seeming to know full well that it cannot battle successfully against both current and the hook.

The only redeeming feature of up-stream fishing is that one makes a rear attack, so to speak, upon the enemy, but the reward rarely repays the effort.

A single day's fishing upon a brook will reveal many peculiarities of incident and accident, and more information will be gathered by this method than from all the books upon the subject in existence.

Two important points should always be kept in mind, viz.: keep elaborately quiet, and fish every inch of water, especially near both shores.

If one keeps in the middle of the stream in wading down, and follows the above advice, he will disturb very few fish, for, except occasionally, the trout are in the deep holes near the banks, lying under the shade of a stump, rock, or other projection, or just around a bend in the stream.

All bait, while in the water, should be kept

moving. This applies to every lure, for it is unnatural, indeed impossible, for any disconnected object to remain perfectly still in a current, and the trout are sufficiently wise to at once suspect and usually avoid such an insipid decoy.

A willow basket to hold fish should be carried upon the back, held by a shoulder-strap, while a gossamer rubber shoulder-cape may be tied beneath the basket. It weighs but three or four ounces, is inexpensive, and as cloudy days not only indicate good fishing as well as rain, the cape may prove most welcome when most needed. During a rainstorm, however, it is just as well to cease fishing, as few are caught at such a time.

These conditions apply to fly fishing, save that the rod should be lighter and more pliant, as described fully in the chapter on "Fly Casting." Two flies are generally attached to the leader, which should be six feet in length; but sometimes three flies are attached, and hence three trout may be hooked at one cast.

Three of the little fellows usually found in brooks—those up to a pound in weight—can readily be handled if one has had experience, but if such an event occurs to the novice he is advised to hold the rod steady and allow the fish to oppose and struggle against each

other until exhausted, and then, quietly playing them to shore, "grab short" on the line and run them up on dry land.

If flies are cast with a stiff rod, such as is generally used in bait fishing, the gut snell to which the fly is attached will be pretty sure to break when a "strike" is vigorously made, and if it does not break it will be a difficult matter to play the fish. The bend in a pliant rod will give the fish sufficient play for ordinary purposes, except when a heavy fish makes a strong rush, when line is given from the reel, and, of course, re-wound as the fish runs or is brought in.

Cast your flies directly ahead at first, covering your wading-ground, and behind every rock, bush, log, stump, or other projection upon either shore, and guide them in and out with the current until all the water has been gone over at least three times. If a fish rises and misses the hook, cast over the same spot again, for a trout will rise repeatedly unless becoming alarmed. If, however, a fish has been pricked, any further effort to secure it will be wasted. Move along a few steps and try another place, making two or three casts over every likely spot.

If you know the fish are lying in any particular pool, and do not rise, change your flies.

Sometimes it may require several complete changes of flies before the right one is found. You know the fish are there, and hence it is advisable to labor in such places for a time rather than to seek others of which you have no certain knowledge.

If, however, half a dozen changes of flies are made and no fish caught, give it up and move along, as it is doubtful if they will take any fly at this time.

Try the pool again later in the day, or upon another day, and eventually you are liable to make a heavy "rescue" from the spot where you have met many failures.

When trout have chosen a hole or pool in a stream, they will invariably remain in it until caught or driven away, and in the latter event they are sure to return to the old homestead.

When your flies first touch the water allow them to rest an instant, as the current will give them a gentle and natural motion; then, with a light movement of the rod, direct them over the spot aimed at. Long casts upon brooks are generally useless, and usually impossible because of surrounding impediments, and hence a cast of twenty to thirty feet is all that will be required. With this amount of line any ordinary stream can be thoroughly worked with prospects of success.

The morning and evening of cloudy, still, and warm days are the best for fly casting, for winds interfere with casts, and on cold days the fish rarely rise to the fly.

As before stated, trout are usually found in the deep holes; but this is subject to conditions, and especially so in small and rapid streams. Here they are often found in shallow and insignificant spots, where they are lying in wait for food. Sometimes they are hiding in the crevice of a rock with but two or three inches of water above them, and some large fish are occasionally enticed from such places.

The angler will occasionally cast his flies in pools where trout can be seen continually jumping, yet will not take a fly. I have met such incidents, and have changed flies twenty times, but failed of success. Afterward, when relating the circumstance, wise-heads asserted that the fish were merely jumping in play—just having a little fun.

I could never believe that trout rise for a frolic, and after investigation I found they always had their mouths wide open when these alleged sportive leaps were made. Hence I concluded they were after a small, almost invisible, insect, perhaps the “no-see-’em” midge of the Indians. The next time I met

these conditions I was prepared with a few very small dun-colored English midge-flies—the smallest artificial fly known—and they have invariably proved a winning card.

Sometimes a very large trout will seize the smallest fly, and then the fish must be handled with infinite care, or it will be lost. These midge-hooks are scarcely one-third of an inch long, and necessarily their hold is very fragile, yet with a very limber rod they will serve the purpose admirably.

There is one important essential in fly fishing for trout, to wit: never take your eye from the flies, for unless the "strike" is made the instant the fish takes the hook, it will cast it out and escape. Occasionally, if the line is held taut, as it should always be, a fish will close his mouth upon the hook at a proper angle and fasten himself. If a fish rises while the line is slack, there is very little chance of its being hooked.

A landing net of oiled linen, from twelve to fourteen inches wide at the mouth, with a handle not less than five feet in length, will be found essential, not only in landing fish, but in feeling the way ahead, and prevent roiling the water when the way is felt with the feet. It will also serve well as a steadying

rod in a strong current, and searches deep holes to be avoided.

The handle of my landing net is made of hollow bamboo, into which passes a tube made of light tin, one end capped and soldered. This carries an extra tip, while a cork closes the other end. A four-inch spike screws into the end of the bamboo handle, and so I have a landing net, a wading staff and an extra and always dry tip ready for use in case of an accident.

In landing trout, as well as all other fish, keep half of the net immersed in the water, draw the fish over the net and lift it up quickly. Never hold the net above the water, and when the fish is near make a reckless dive to scoop it in. Such a gymnastical experiment puts new and astonishing vigor into the most exhausted fish, and unless the angler has a well-balanced head a serious accident may ensue. More trouble arises from this operation than in anything else attending angling, but if the above manœuvre is slowly and carefully performed both tackle and fish are quite secure.

The reel in fly casting should always be placed below the hand-grasp, and underneath the rod, because in this position it affords an easy balance to the rod and requires the exer-

tion of little muscular power in making casts. The line is under absolute control, as it passes from the reel to the first guide-ring between the fingers, and it can thus be tightened instantly if a vigorous strike is to be made, while the strain upon the rod can readily be reduced by slipping line from the reel.

There is one precept which should ever be held by the angler, and that is never to kill a trout wantonly. The breath of life was never instilled into a more beautiful creature or a more heroic and honorable adversary, and to destroy such a sublime object, save for one purpose, is an egregious sin. That sole exception is to supply food to the human race.

If the fish is not intended for this purpose, conduct the struggle to the end, prove your superior skill, then gently remove the relentless hook from the flesh of your courageous antagonist and return it to its element.

Perform this gracious and righteous deed, and then note what a thoroughly contented sensation will permeate your system.

THE BLACK BASS.

Weight, 1 to 6 pounds.

NORTHERN RIVERS AND LAKES.

THE BLACK BASS.

Micropterus Dolomieu.

THE black bass, although not a very handsome fish, is most energetic and courageous, and affords the angler no little pleasure and excitement, more especially when taken with light tackle. It was formerly considered a distinctively Western product, but has been successfully transplanted, and is now found generally dispersed among Eastern waters.

Its first appearance east of the Alleghenies was in 1854, a few having been placed in the Potomac River at Cumberland, Md., by William W. Shriver, who brought them from Wheeling, W. Va., in a perforated can sunk in the water-tank of a locomotive on the Baltimore & Ohio Railroad.

It is a marvelously productive fish. A few young, placed in suitable waters, will, in the course of a few years, stock it to repletion. It is essentially a good liver, and will greedily devour any and every kind of food, while in its own waters it "rules the roost." It will attack

and fight most any fish it may meet, and a pickerel four times the size of the bass will speedily succumb in a finny encounter.

A dozen bass placed in a lake teeming with pickerel will generally exterminate the latter. Occasionally, however, a few pickerel manage to gain a scanty existence for a time, but eventually they all run the same course, and fall victims to the bronze-back terrier. For the bass is a terrier in every sense of the word, and when he feels the prick of the hook he will fly into the air and shake himself as fiercely as does a terrier dog in killing a rat. His object in thus leaping is to void the hook, and the angler's utmost skill is taxed to prevent it. At all other times, save when being landed, the bass is a steady and strong fighter, and a taut line must of necessity be held upon him.

In color the bass is of a dark bronze green, varying in shade in different localities, with a white belly, and in outline it is short and chunky, and very far removed from presenting anything like a graceful appearance. It has a very large and very tough mouth, and is a very bold biter. It never nibbles at a bait, but rushes upon it with the energy of a bulldog, and it will tug and jerk and pull until disabled. Even when apparently exhausted,

it will invoke its most deceitful and successful trick to secure its freedom. When being brought to net, with belly upturned as if played out, and when close to the boat, while the angler feels he has a "sure thing," the seemingly exhausted fish will suddenly transform into the liveliest sort of a live fish, and is sure to make a final tremendous rush for liberty. This last "break" must be promptly met, or the fish will escape, as indeed he usually does; far more are lost by this closing manoeuvre than at any other time after being hooked.

Ichthyologists divide the black bass into two species, and give each a distinct name—the small mouth and the large mouth—the trivial discrimination of a slight difference in the position of the eye being the important distinction in classification, and in order to distinguish the dissimilitude it is necessary to invoke the use of the square, the microscope, and possibly the sextant.

However, the angler who may seek diversion upon the waters instead of among books will find his entire attention exacted in handling either species, regardless of class distinctions, and will probably find considerable satisfaction and but little difference in the game qualities of either.

For bait fishing from a boat use an 8-foot rod, multiplying reel, G-size silk line, 3-foot leader, and 2/0-hook. A live minnow, frog, worm, crawfish, grasshopper, or helgramite makes good bait, and when these cannot be procured, exact imitations of these and various other insects will prove effective. These baits are made of soft rubber, accurately colored, are pliable, with hooks attached, and can be purchased at any tackle-shop at a moderate expense.

In using a live minnow or small frog, pass the hook through both lips, and allow the little fellow to swim off some distance from the boat. The minnow or frog often carry away 15 or 20 yards of line, and, swimming about with difficulty, appear as if crippled, and thus prove an attractive lure. As, however, the line is never taut, it must be closely guarded, or few bass will be caught, while many frogs and minnows will be plucked off.

In using other bait—and the bass will take most any bait, but like all game fish prefers that which is alive—attach a sinker a foot above the hook, and heavy enough to keep the bait near bottom. When a bite is felt—and you will feel it promptly, for the bass never bites gingerly—and the hook fastened to the mouth by a “strike,” the fish will at

once proceed to make matters interesting, if not exceedingly lively. This skirmish will be maintained by the fish until tired, and when this condition is reached the angler will stir up his antagonist by working the rod right and left, forcing the fish to follow until exhausted, and then bring him to net. Be careful, however, of the final frantic rush noted previously. It is sure to come, just as you think the fish is secure, and you must be prepared to give all the line needed. A little more play, a little more worry, and the bronze-backed warrior will meet the fate of a hero—the victim of a more skilled and powerful strategist.

If the bass runs under your boat, which is often attempted, strike the bottom of the boat with the net handle or a stick. The noise, sounding like a huge drum in the water, will scare the fish away. If he rushes to the opposite side, give him line, carrying the rod around the end of the boat.

In fishing with bait the most likely places are around the edges of weeds, stumps, and rocks, where the fish generally lie concealed; but, as quickly as a fish is hooked, have your boat pulled into clear water, else the fish may run into the reeds, or around a stump, the line become entangled, and both fish and line be sacrificed.

It should be remembered that fish always take live bait head first, and hence the hook should impale the bait in or near the head. When the bass discovers a minnow it goes at it like a locomotive. It seizes the bait and carries it a few feet before the impetus of the rush is overcome. Then it stops and begins to swallow the minnow. In a few seconds the line will begin to move away; then, and not until then, "strike" and fasten the hook. If a "strike" is made the instant the first heavy jerk is felt, the hook will be pulled away from the mouth of the bass. The minnow should be kept midway in the water, as this is its natural position; but crawfish live on the bottom, and should be kept there.

A light, pliant rod, six-foot gut leader, and two or three large, bright flies are requisite in fly fishing for bass. Keep your boat away, and cast toward shore, around rocks, stumps, etc. If the bass do not rise, let your flies sink, and give them an occasional short jerk, until close to the boat, when you will retrieve them and make another cast. The proper flies, in endless variety, can be had at any of the tackle-stores by merely asking for bass flies. Among the most popular are the "Furgerson," "Red Ibis," "Henshall," "Seth Green," "Oriole," "Lord Baltimore," "Pro-

fessor," "Grizzly King," "Montreal," "Coachman," "Brown Hackle," and "Cheney," tied upon Nos. 1 or 2 hooks.

These are all large, showy, and gaudy flies, and resemble nothing else upon earth. They are simply a mass of gay colors, and why the bass will attack and attempt to bolt them cannot be conjectured; but they do, and with great vigor and courage. Perhaps, like the legendary red rag flaunted before a bull, the gay fly provokes their resentment, and they rush upon it in exasperation. Three flies are usually attached to the leader, about eighteen inches apart, the brightest and gaudiest being the "dropper," or the one nearest to the rod.

The most essential feature in fly casting for bass, as well as for all other fish, is to maintain a rigid line, for very often a fish will hook itself that would escape being fastened if the line were slack. Besides, it would be a matter of difficulty to hook a fish effectually, as much of the effort in "striking" would be exhausted in taking up the slack line before the force of the "strike" would take effect upon the hook.

The bass does not by any means attack the fly with the freedom of the trout, for, although both are bottom feeders, the latter is a far more free and brazen surface feeder. Both

are naturally afraid of the angler, and unquestionably for very good reasons.

If you were a two-pound fish, snugly ensconced in a quiet, retired spot, and a two-hundred-pound monster, just one hundred times larger than yourself, should loom into sight and begin to flay the water with an immense log right over your sequestered nook, what would you do?

It takes no little courage to attack a morsel of food under such a frowning danger, and where a member of the human race would "get up and dust," a bass will heroically take his chances and rush like a tiger at the mouthful of food.

Occasionally a bass takes the fly gingerly, rising from below and seizing the hook, while but the slightest ripple is made in the water; at other times a vicious rush occurs. In either case the "strike" must be made instantly, else the fish will quickly eject the fly. If the flies are sunk beneath the water, "strike" the instant the lightest touch is noted.

When a bass is hooked, play it upon the rod until exhausted; that is, allow the pull of the fish to be continuous upon the rod, holding the tool up straight. This keeps a bend in the rod, which gives and takes with every movement of the fish, save when it pulls too

hard, when line is given inch by inch from the reel.

Don't hurry the bass ; let it tug, and pull, and skirmish until worn out. You can stand it as well as the fish. When it breaks water (leaps into the air), drop the tip of the rod, thus giving slack line ; but the instant the fish drops into the water raise your rod and tighten the line. If your line is held taut when the bass breaks, the fish will throw its full weight on the line, and is liable to smash something. This feat is accomplished by the black bass with no little skill and agility, and with the most profound success, for nine times out of ten it escapes unless "headed off" by the giving of slack line in the "nick of time."

Trolling with a No. 4 feathered spoon or artificial flies often lures many bass to their end, the latter being a particularly attractive bait in large waters. From 30 to 60 feet of line are trailed behind the boat, a stiff, short rod and a multiplying reel being in hand. The boatman pulls slowly, and, a light sinker being used, the glittering spoon twirls near the surface of the water, and, being kept moving, attracts the attention of the fish, which rushes at the lure with tremendous force, seizes the decoy, and inevitably impales

one of the three hooks in its mouth. Few fish are ever lost by this method, and it proves particularly successful because the boat is constantly moving and hence more likely to find the feeding-grounds. A ripple upon the waters and a cloudy sky overhead will add greatly to the chances of a good catch.

A most excellent method is trolling with flies, in the practice of which a nine-foot gut leader is used, to which four flies are attached two feet apart, using a diverse selection of the large flies previously mentioned, and two sinkers fastened to the leader—one near the end and the other between the two flies farthest from the end. The sinkers should be sufficiently heavy to keep the flies submerged about two feet beneath the top of the water. When a bass takes one of the upper hooks his gyrations in the water will give a most peculiar and alluring action to the other flies, and very often two fish will be hooked.

I remember once at Lake Gogebic, in Northern Michigan, hooking a large bass on my upper fly, and playing him until I had hooked three more bass, and safely landed all. The four fish weighed a trifle over 12 pounds, and I had little trouble in handling them, as they were contending against each other far more than against myself. Under the circumstances,

they were permitted to exhaust themselves in a fraternal, but very vigorous, combat before being landed.

It is essential to possess only the very best tackle in bass, as well as all other angling, for one can never tell when all its good virtues will be called into action. Had the leader been weak upon the above occasion, the fish, in their mad struggle, would not only have decamped, but would have invoked an immense quantity of "hard feelin's."

Trolling with the minnow is a most effective method of taking the bass, it making little difference if the minnow be dead or alive. The same rod, reel, line, and leader used in trolling with the spoon will answer, but a No. 1 or 1/0 Sproat hook should be used. The hook is passed through the lips bottom upward, the snell pulled through and the hook fastened in the flesh of the minnow beneath the dorsal fin—the fin upon the back of all fish. A half-ounce sinker is attached to the leader three feet from the hook, and ten to fifteen yards of line are slowly trailed behind the boat. Passing the hook through the lips of the minnow and into its back gives a bend to its body, and while being drawn through the water causes it to spin in the most lively manner.

Trolling will generally afford the best results if the curve of the shore is followed, in water from five to twelve feet in depth, or around reeds, grasses, rocks, etc. When a fish is hooked while trolling it should at once be reeled in to within thirty feet of the boat, in order that its movements may be more thoroughly under control, as a fish at the end of a long line cannot possibly be properly managed.

In all kinds of trolling always insert a brass swivel between the line and leader, to prevent either from twisting and kinking.

In minnow casting for bass a rod eight feet in length, rather stiff, and weighing eight ounces, a quadruple-multiplying reel, and the finest waterproofed silk line should be used. A swivel is fastened to the end of the line and the snelled hook attached to the swivel, no leader being requisite, while a sinker, from one to two ounces in weight, is tied to the line just above the swivel. The hook is passed through both lips of the minnow, bottom upward, and the line is reeled up until about two feet only hangs from the tip of the rod. It is then revolved or swung in a circle above the head until proper velocity is reached, when an outward inclination of the rod will send the bait to a great distance—often over a hundred feet. The minnow is allowed to re-

main an instant, when it is slowly reeled until it is brought back to hand and the cast repeated.

This method of bass fishing should be carefully practiced, and especial attention given to the control of the reel, the thumb always being held against the spool to prevent over-running. When a bass takes the minnow the angler should always allow at least five seconds to pass before striking, in order that the bait may be turned by the fish, for minnows are always swallowed head first. This process of turning can be readily felt by the angler, and a few slight jerks will clearly signify what is going on. When the little jerks cease, "strike," for the turning process has been accomplished, and the head of the minnow, as well as the hook, are on their journey into bass-land.

The best conditions of weather for bass fishing are a cloudy sky and rippling waters. The cloudy sky may be absent, and the sun may shine brilliantly, but ripples upon the water, or even pronounced waves, are absolutely essential. It will be time and labor wasted to seek bass on still waters.

During the early morning and late evening hours most fish are on a skirmish for provender, and hence these are the most profitable hours to go a-fishing.

THE MASCALONGE.

Lucius Masquinongy.

THE mascalonge is the largest and the handsomest of the pike family, and is a blood relation of the illustrious salmon tribe. It is found only in American waters, and when it is found the interview is likely to become indelibly impressed upon the memory of the interviewer.

It has been taken measuring six feet in length and weighing seventy pounds. In color it is of a silvery gray, with a white belly, and its back and sides are dotted with brownish spots. It has a long, flat head, a very large mouth filled to its capacity with long and sharp teeth, and by nature it is one of the most voracious and vicious fishes that exist.

It is emphatically the freebooter of our fresh waters, and is found in the St. Lawrence and Mississippi Rivers, the fresh-water lakes of the North, the Eagle Waters of Wisconsin, and in many Canadian lakes and rivers. It usually lies concealed in the grass at the edge of lily-pods and reeds and near inlets, watch-

THE MASCALONGE.

Weight, 8 to 40 pounds.

ST. LAWRENCE RIVER, CANADA, AND THE NORTHWEST.

ing for food, and it will attack anything that may come in its way.

A short, heavy rod, a reel with 150 yards of strong line, and a No. 8 spoon are the utensils generally used in trolling for the mascalonge. Let out about 50 feet of line and direct the spoon around the edge of lily-pods, reeds, rocky points, etc., keeping it near the top of the water. To one of the hooks attach a strip of raw meat half an inch thick and four or five inches long, allowing it to trail behind the spoon. As a general thing the mascalonge will seize the bait and go down to swallow it. Do not "strike" at once.

I lost several fine fish by this process before I learned to wait until I felt the fish pull. Then I made a hard "strike," fastened the hook, and enjoyed "heaps" of fun, although not all my fish were saved. No, the mascalonge is not secure until he is thoroughly well killed. When the fish is hooked, pull for deep water and give it room, for in a moment it will shoot into the air, shake itself like a tiger in a wild effort to cast out the hook, and then, falling into the water, it will lay back and pull to the limit of its great strength.

It will struggle, and tear, and jerk, and fight until exhausted, and then, when brought to boat, if the fish is large, be sure either to

shoot it or hit it on the head before gaffing and lifting into the boat. If this is not done the fish will hammer around and raise the most savage sort of rumpus, mixing up the contents of the boat in the wildest confusion, not to mention its talented faculty of neatly biting off a finger or two, which it will undertake to accomplish with neatness and dispatch if the opportunity is presented.

At the Eagle Waters the boatmen have a curious habit of pulling the mascalonge to its end—that is, when the fish is hooked the boat is at once directed away from the reeds and shoal water into deep water, and the oars are plied very fast, and the fish dragged with open mouth until drowned. It thus becomes merely a trial of endurance, a case of exceedingly hard work and not much sport, while the chances are that something will give and the fish escape.

“Skittering” is a successful method used in taking mascalonge, a chub, or other small fish, from six to eight inches in length, being hooked through the lips, and a short stiff rod in the hands of the angler. The boatman rows about the edge of weed plots at a distance of twenty-five or thirty feet, while the bait is tossed upon the water just within the borderline of the grasses. It is then manipulated

by little jerks upon the surface, and when attacked the mascalonge leaves the water, seizing the bait as it goes down. The fish is allowed an instant to turn the bait in order to swallow it by the head, and when a pull is felt a sharp "strike" fastens the hook, and the struggle begins.

This method is successfully practiced in fishing for bass, pike, and pickerel. Ringed hooks, from Nos. 5 to 8, with a fine copper wire snell, should be used in "skittering" for mascalonge and pike.

At Planting Ground Lake, in Wisconsin, during August, 1886, a gentleman from Cambridge, Mass., was "skittering," and hooked a small wall-eyed pike. Before it could be brought to boat it was seized by a mascalonge, which dragged it down and began to bolt the little fish. In a short time the ruction began, and after an exciting struggle the big fish was killed, the gaff being handled by myself. The mascalonge weighed thirty-six pounds and the pike five pounds.

It is difficult to guess what the mascalonge will not attack when it is hungry, for, like the warrior of old, "it fears no foe," and nothing edible can escape its rapacious maw—a duck, a rat, a turtle, or one of its own offspring meeting with an equally favorable and prompt reception.

I have spoken above of the habit this fish displays in leaping from the water and shaking itself while in the air. This was done by every mascalonge I took in the Eagle Waters of Wisconsin, where, in one day, I landed thirteen, weighing from eight to thirty pounds. I am advised, however, that the mascalonge of the St. Lawrence basin does not exhibit this striking peculiarity, and, having never met one in these waters, I am unable to assert to the contrary.

The mascalonge should never be forced or hurried after being hooked. If he wants to pull and tug, allow him to do so. Let him enjoy himself, as you will be doing also, for it is his last jubilee. If he goes to the bottom and sulks, let him sulk, keeping a taut line. A gentle snub may start him, and when he starts be ready to reel in. Don't give him slack line and permit him to throw out the hook—a trick all game fish invariably try.

When a mascalonge first seizes the hook it will feel as if you had struck a log. Let out a yard or two of line carefully. Then "strike" sharply, and after a strong rush the fish will allow you to tow him along meekly for a little while. Then he will try to overrun the line, in which event reel in promptly. Don't allow any slack in the line under any circumstances.

Your boatman will know that he must constantly row while a fish is on the hook, but row slowly, and he will also know that when a mascalonge is being landed it must never be allowed to touch the boat or oar until it is killed. The moment this fish touches the boat, although seemingly exhausted, it will instantly revive and make a terrific and generally successful plunge for liberty and the pursuit of other fish.

There is one method of killing this noble fish, little pursued, yet offering an opportunity for the display of caution, patience, and skill with the rifle rarely seen. The sportsman seeks a comfortable nook on the limb of a tree, overhanging or near by favorite waters, and waits sometimes for hours until one of the big fellows slowly rolls up to the surface to sun himself. Only the largest of the species practice this pastime, and the incident requires but a second, during which period the fatal bullet must speed unerringly to its mark or the opportunity is lost.

The mascalonge can be taken at any time after the ice leaves, but the months of May, June, and September are the most favorable—at least the best fish are taken during those months. The flesh is white and hard, and one of the very best to grace the table.

THE SALMON.

Salmo salar.

THIS stately fish, the representative game fish of Europe and America, is found only in the rivers of the Atlantic coast north of the State of Maine, and is not plentiful even there.

It has a bluish back, dull, silvery sides, and a whitish belly, and is captured solely with the artificial fly. It has often been said and printed that the salmon will take no bait but the fly; but this is an error, as it will readily "nab" most any bait. The live and artificial minnow, the glittering spoon and the meek and lively worm often prove a deadly lure. However, it is not considered sportsmanlike to make use of these baits, and hence nothing but the fly is now utilized in salmon waters.

These waters, too, are operated upon solely by the owners and their friends, by which is meant that nearly all the salmon streams, especially those lying in Canada and the maritime provinces, are leased at a heavy expense by admirers of the sport.

THE SALMON.

Weight, 7 to 40 pounds.

NEW BRUNSWICK AND CANADIAN RIVERS.

Taking salmon with the fly is the superlative of angling, and those who have an opportunity to enjoy it, and are unacquainted with the art, cannot possibly do better than to carefully digest "The American Salmon Fisherman," by Henry P. Wells, and "The Salmon Fisher," by Charles Hallock.

It will require more than an afternoon's practice to become a salmon angler, and I do not believe there are twenty men in this country who may justly be called experts in this superb art, although there are plenty whose experience enables them to emerge safely from such an encounter.

Of all the mysteries and the beauties of an angler's existence, that appertaining to the hooking, the handling, and the landing of the stately and puissant salmon is by far the most difficult to acquire.

No inhabitant of the waters can be compared to this fish in strategic and game qualities, save the brook trout, and that is simply an infantile salmon. Magnify the skill required to surmount the half-pound little "salmon of the fountain" to the same fish weighing 25 pounds, and a distant idea may be had of the excitement afforded and the skill required in struggling with and overcoming the bigger trout.

Hallock says: "No fish that swims is the peer of the salmon, and no angling experience or pastime carries with it the exciting episodes, aspects, and vicissitudes of salmon fishing. The tarpum is a John L. Sullivan among fishes, a slugger and a smasher of lines and hooks, filled with ponderosity, brute force, and violence; he is a runaway horse with the bits in his mouth; a tearing *toros* of the bull-ring. As for striped-bass fishing, it is a glowing theme of the sounding sea and surf—a symphony of 'what the wild waves are saying.' But, bless me! there are more sides to salmon fishing than there are facets to a cut gem or patterns to a kaleidoscope."

It is advisable always to have the best implements in angling, and especially important in salmon fishing.

A poor rod, like a bad cold, should be gotten rid of as speedily as possible, for both are fully capable of leading to dire results.

The best rod, to my view, for salmon angling is made of the incomparable split bamboo, in three joints, measuring 16 feet in length and weighing 16 ounces—an ounce to the foot; the reel a quadruple multiplier; the line of enameled silk, at least 400 feet in length.

The flies used are the most garish and

gaudy obtainable, and just why the wary and vigilant salmon will seize such a flaming object, to the utter neglect of those of sombre and more natural hue, is an unexplained mystery.

Nothing brighter or more tawdry in color could be devised than such artificial flies as the "Prince William of Orange," the "Butcher," "Jock Scott," "Silver Doctor," or "Silver Gray," yet no more promising decoy can be placed before this noble fish. All are a mass of gaudy-colored feathers, in which bright yellow predominates, but in the aggregate totally unlike anything else in existence.

In placing the line upon the reel great care must be exercised to avoid knots and kinks, lest it catch in the guide rings when a fish is hooked, in which event disaster is sure to follow.

When a salmon takes the hook and starts off he is determined to go somewhere in a great big hurry, and the fish will get there, too, unless the artist at the rod wields it skillfully. At such a juncture a kink in the line will facilitate the departure of the fish, as I can testify; for such an event, owing to carelessness, occurred to me on the Godbout River, and thereby I lost the heaviest salmon I have ever hooked. From that day no line

has ever gone upon my reel without the absolute certainty that no kinks encumbered its entire length.

The salmon does not rush at the fly with the wild vigor and courage of the trout, but rises slowly, deliberately, and fastidiously, opens his mouth to its limit, and just bolts the fly as if intent upon gulping everything in sight. Sometimes, however, he will merely suck in the bait, leaving scarcely a sign above the water, yet the merest little boil will attract the instant attention of the angler, who knows what it indicates.

When the fish has taken the lure he falls down to his couch upon the bottom slowly and with profound dignity.

If the angler "strikes" when the head of the fish is seen, as is done in trout fishing, he simply pulls the hook away, and the chance, like the fish, is "a goner," for the salmon rarely rises twice to the same fly.

When the salmon has taken the fly, give him room, yielding sufficient line to let him reach bottom, as he does head-foremost. Then give the tip of the rod a slight jerk upward—just enough to stiffen the line. This will fasten the hook in the mouth, and the subsequent proceedings are liable to be exhilarating, for the fish will rush away down-

stream like a race-horse, and strength, skill, and eternal vigilance alone will conquer.

An hour of such a struggle will tire the angler and the fish, and when the latter turns up his silvery sides he is led to the shore, where the "gaff" in the hands of an assistant ends the combat.

The salmon rod, being long and heavy, cannot be wielded with one hand, as is done with the light fly rod, but both hands and the muscular system of the entire body are brought into play, while the fly is cast with careful deliberation. It is kept upon or near the surface of the water for some little time, and if upon a swift river the power of the current will move it sufficiently to serve all purposes.

The leap of the salmon is simply a powerful effort to escape from the danger to life which he feels to be impending, and this leap is often preceded by what is called "sulking." The fish will lay upon bottom perfectly quiet, often for several minutes. During this period a taut line must be held, until a slight shake or tremor is felt; then look out for a "break." It is a sign that the fish is about to undertake his crowning effort for liberty, and forthwith he starts for the surface, and with lightning rapidity shoots into the air.

At this instant, when the fish is above

water, lower the tip of the rod, for if the line is held tightly the fish will throw his entire weight upon it, and something is sure to break. The moment the fish touches the water again the tip is raised and the taut line resumed. A salmon will repeat these leaps, and the angler must ever be on the alert to properly meet them.

The salmon is never killed until landed, hit upon the head, and laid upon the grass. Often, at the very last moment, when seemingly exhausted, with his white sides turned up and about to be struck by the "gaff," he will suddenly make a terrific rush, and unless the angler is prepared for the manœuvre, the fish will escape. More salmon have been lost at this crisis than in any other manner.

The "gaff" is a large, barbless hook much like the bent tooth used in a horse-rake. It is securely fastened to a handle from four to five feet in length, and when salmon and other large fish are played to exhaustion they are brought within reach of an assistant, who places the "gaff" underneath the fish, and by a quick movement impales the hook in the flesh and lifts the quarry ashore. It is important that the best tempered steel be used in the "gaff," else it may give or straighten when a heavy fish is lifted, and thus, being

wounded unto death, the fish escapes only to die afterward.

Fly casting for salmon is the same in process as is pursued in trout fishing, save that the labor is magnified, and that, while only a single hand is required in operating the light rod, both hands will be needed in manipulating the heavy salmon rod. In this pursuit all the paraphernalia, rod, reel, line, and flies, are heavier and stronger, as are necessitated by the greater size and power of the fish sought.

The angler acquainted with the methods of fly casting for trout will experience little difficulty in acquiring the art of salmon fishing, it being simply an advance to a higher grade in the same general division of science, and to which a correspondingly greater degree of physical labor is attached. In short, salmon fishing is hard work.

THE WININNISH;

OR, LAND-LOCKED SALMON.

THIS splendid fish, one of the most valiant, if not the foremost among finny fighters, is found only in Lake St. John and its confluent waters, and only during recent years has it received the attention its great merits as a game fish deserves.

Lake St. John, a sheet of water averaging twenty-five miles in width, lies two hundred miles due north from Quebec, and is reached by rail from that city. The opening of the railroad, and the consequent accessibility of the wininnish waters, have brought this superior fish prominently before the public.

In form it is exceedingly graceful, silvery white in color, with pronounced, irregular black spots, in shape like a Maltese cross, on head, back, and sides, and rarely exceeds five pounds in weight.

In early June it is taken freely in all the large rivers emptying into the lake, but after

THE WININNISH.

Weight, 1 to 7 pounds.

LAKE ST. JOHN, CANADA.

July 1 it is found plentifully at the Discharge, the outlet of the lake and the source of the Saguenay River.

The trains land the tourist on the western shore, from whence, by steamer, it is less than a three-hours' pleasant journey, if the waters be agreeable, to the Discharge.

The tackle required for winnish is the same as is used for trout in large waters; but trout flies will not answer, the best being salmon patterns, very gaudy, tied upon Nos. 4 or 5 Sproat hooks. The "Silver Doctor" and the "Jock Scott" are among the best; but a fly which I had specially made proved almost infallible. It has a black body silver tinselled, gay red hackle, and lemon-yellow wings.

The winnish, when hooked, will gyrate in every direction, and rush into the air repeatedly, shaking itself viciously, often turning complete somersaults in wild efforts to rid itself of the hook. Its powers of endurance are great, and its strength and courage are most remarkable. A three-pounder will keep the angler on the *qui vive* for half an hour.

It exhibits all the *finesse* of the trout, the bull-dog qualities of the black bass, and the strength of a fish twice its size, due doubtless to its huge fin system, the caudal fin (the

tail) being the broadest found in any fresh-water fish.

It has a rich, pink flesh, by far more palatable than salmon or trout, and is very delicate, often becoming flabby and soft within a few hours after capture. For this reason it is almost impossible to convey the fish to distant points and have it reach its destination in good condition.

The only method by which I have been enabled to bring this delicate fish to New York in good form has been through the use of "Preservaline," which is sold at all tackle-stores. A pound of this white powder was dissolved in a pail of water, and the cleaned fish were immersed in the solution one hour. They were then packed in damp moss without ice, and came home in perfect condition.

In fly casting among the rapids and pools of the Grand Discharge, birch-bark canoes alone are used, and a good canoeist is essential at each end of the craft to guide and control it among the turbulent waters.

Under these circumstances the sport becomes doubly exciting, as the best fish are taken at the edge of the most rapid water, where they require careful handling, and must be played into still water before being landed.

The average weight of the fish is two

pounds, although they are often taken up to four and occasionally five pounds.

It will readily take bait, for which purpose pieces of fresh beef and pork, about an inch square, are used, with a No. 2 Sproat hook and a short and stiff rod. When thus hooked it gives the same battle as when caught on a fly; but, the pliant rod being absent, the sport is of much shorter duration, and not by any means so enjoyable.

The accessible rivers emptying into Lake St. John, in which this fish is taken, are the Metabatchouan, Ouatchouan, and Ashuapmouchan. It would, however, be fruitless to visit them at any time except between May 25 and June 15, the best time being between June 1 and 10.

Half a dozen winnish taken during an outing will be a good day's sport, and will fully satisfy the most enthusiastic angler.

The man who enjoys his morning's slumber can lay abed until noon, and then rise, dine, start off and be in "the nick of time," for the afternoon hours, between 2 and 5 o'clock, will prove the most successful in fly casting.

Neither will "distance lend enchantment," for the fish will rise close to the boat or shore as readily as if long casts are made.

The winnish takes the fly much as does

the salmon, but with a little more alacrity, and, instead of seeking bottom, starts off at once upon a wild skirmish. Should it miss the fly at the first rise, it will repeat the effort time and again until it has secured the subtle and tricky prize.

Morning and evening are the favorable hours for bait fishing, and then even the abominable spoon, the favorite lure of the pike family, will often prove killing—it would be better to say attractive, for the spoon is killing under all conditions; it is one of the deadliest and most merciless devices ever invented for destroying fish life, and its use is justifiable only in the case of the unprincipled mascalonge and its flat-nosed relatives.

I consider the man who takes any of the illustrious salmon family with a spoon one of the meanest creatures yet invented, and entirely unfit to mingle in a respectable community.

On an island at the Grand Discharge there is a hotel, and about two miles below there is a comfortable public camp.

Near this camp, in fact within a few rods, some of the finest pools on the river can be fished.

The boatman or guides are either Montagnais Indians or Canadians, speaking the native

French, and the language of either is an equally comprehensive mystery. Occasionally one will be found speaking a little English, and it will be advisable to secure such a man, if possible, for self-evident reasons.

A peculiar fact regarding the winninish, and which is seen in no other game fish, is its habit of swimming near the surface of the water, especially below eddies where the white foam is formed, exposing its dorsal fin. Dozens of big fins can plainly be seen protruding through the thick foam, yet comparatively few fish are taken here.

I have labored for hours in such places, and have tossed all kinds of flies around and among them, but with futile efforts. They seemed to be out merely for a little holiday, and in no mood to dally with the fly.

The best success will be found upon the edge of the eddies and in the midst of swift and boiling waters.

The land-locked salmon, found in several of the lakes in Maine, is doubtless the winninish, but the latter is not a land-locked salmon, for it has open and easy access to the sea by way of the Saguenay and St. Lawrence rivers. That it makes the journey, as does the salmon, is unknown, but that the winninish is a

stronger and more courageous warrior than its land-locked brother is undeniable.

The structure and fin system of the two fish are identical, but a slight variation in color has been noted, and this, I believe, is the only difference. The winninish is unquestionably a more violent, impetuous, and obstinate fighter, which superlative virtues, from an angler's point of view, may doubtless be attributed to the fact that a great portion of its existence is passed amidst the most turbulent and rebellious waters imaginable.

The Grand Discharge of Lake St. John is some fifteen miles in length, varies in width, is studded thickly with huge rocks and little islands, and the waters are in a continual state of seething and boiling fermentation. A fish inhabiting such a home must of necessity be possessed of great muscular power; indeed, must eventually become a veritable finny athlete, and of a truth such is the winninish.

In the Maine lakes in which the land-locked salmon is found, the fish attains a much larger size than in Lake St. John, having been taken weighing twenty pounds, the largest authenticated winninish weighing a trifle over eight pounds.

During the past five years I have spent many weeks upon the inflowing rivers of Lake

St. John and at the Discharge, and have myself landed and seen many winninish taken with hook and line, as well as in gill-nets, but have never seen a specimen reaching five pounds in avoirdupois weight.

A rather interesting law permits the citizens of the State of Maine to take land-locked salmon from Sebago Lake after February 1, but non-residents can only fish in those waters after May 1. As the best time to enjoy this sport occurs immediately after the breaking up of the ice, it would seem that outsiders are placed at a disadvantage; but the fact is the best success is had after May 1, because the ice rarely disappears previously.

The salmon are taken with bait, such as smelt, shiners, and small herring. The hook is passed into the mouth of the bait and forced through the side near the tail; a sinker is attached, and the bait is dragged behind the boat. By this method of inserting the hook the bait is prevented from spinning, but moves in a natural manner. The bait should have the lips closed and fastened with a thread, which is tied to the leader.

The Fish Commissioners of Maine have planted the land-locked salmon in the Androscoggin or Rangeley lakes, in which water it has thrived. I have taken them with salmon-

flies in the rapid water below the middle dam, and here their deportment was the exact counterpart of the winnish caught in the Grand Discharge.

The angler casting lure upon these waters, the Androscoggin lakes, must discard five-ounce rods and similar light paraphernalia, for big trout are often taken here—veritable speckled brook-trout, up to seven and eight pounds in weight.

They were once the grandest trout-waters in the world, but for various well-known reasons were becoming depleted, when the authorities began to move by enforcing laws and stocking with trout and “land-locks.”

The result is now seen in the record of trout and salmon that are annually encouraged to “come home with a fellow.”

THE LAKE TROUT.

Weight, 3 to 20 pounds.

NORTHERN LAKES.

THE LAKE TROUT.

Salvelinus namaycush.

THIS splendid fish, a close relation to the brook trout, is found in many lakes of the Northern States, but in larger numbers and of greater size in Lakes Superior and Michigan. It is also found in the smaller lakes of Canada, Nova Scotia, and New Brunswick, and in different sections it is known by different names, such as lunge, tuladi, lake salmon, lake trout, and salmon trout.

It is of a grayish white color, dappled with brown spots, reticulated back, rich pink flesh, and weighs from 3 to 25 pounds. The color of this fish, however, differs greatly in different localities, varying from a light gray to a dark brown, and it is sometimes found with the vermilion spots seen in the brook trout, a peculiarity exhibited by no other fish in our waters.

It is taken by deep trolling with the spoon or spinning minnow, and will occasionally rise to the fly.

A short, stiff rod is necessary, with at least 100 yards of line, to which a leader 9 feet in length should be attached, and a sinker sufficiently heavy to keep the bait within a few feet of the bottom. The hook should be at least 10 feet from the sinker, or a heavier sinker, weighing at least half a pound, should be attached to the end of the line, and 10 feet above the sinker a gut leader with the hook should be fastened to the main line.

Thus, in trolling, the sinker can feel bottom while the hooks are trailing in clear water.

As the salmon trout will take a large bait, and plenty of it, trolling with a 6 or 8 inch chub or other small fish will prove most attractive. In using such a bait "gang" hooks are requisite.

A "gang" hook is composed of three hooks—Nos. 4 or 5 for this fish—tied back to back, like a grapnel. Three of these "gangs" are attached to a heavy gut leader about 2 inches apart, and a single hook is fastened about 3 inches above the "gang." The single hook is passed through the lips of the bait; one of the hooks of a "gang" passes through the back; a bend is then made in the anterior portion of the bait, and a hook of another "gang" passed through near the tail, allowing one "gang" to trail behind the bait. Put a brass

swivel between the main line and the leader, and one between the leader and the hooks, to prevent the spinning bait from twisting the leader and line.

In slowly trolling the bent bait will spin merrily, and prove a most attractive lure for this fish, as well as for most other large fish ; but the "gang" hook is an example of modern barbarity, and should never be used when any single hook will serve the purpose. The fish that attacks it rarely escapes, for, in its struggles the hooks are swept about its head promiscuously, and one or more are pretty sure to fasten securely.

The boat should be kept in motion slowly from the moment the line is payed out, or else the leader will become twisted around the main line.

Always be careful in attaching bait to keep it as natural as possible. Don't bruise, scrape, or cut a minnow used for bait in any fishing if it can be avoided. A natural appearance of the bait will always enhance the chances of success.

The tackle, line, and hooks especially, should be strong, as one of these fish weighing 20 pounds can do some very tall pulling ; but it is not much of a strategist, and main strength will soon cause it to succumb.

The fish of this species caught in the smaller lakes invariably exhibit more strength and greater powers of endurance than those taken in the large lakes, and are a much better fish for the table. None of them are very particular regarding their food, and will devour anything and everything that may come in their way. This, however, applies as well to nearly all of the finny tribe.

THE PIKE.

Weight, 2 to 15 pounds.

NORTHERN RIVERS AND LAKES.

THE PIKE.

Lucius lucius.

BUILT much like his near relative, the mascalonge, but with a dark green back and white belly, a powerful jaw, lined with long, sharp teeth, the pike is not only a superb game fish, but one of the greatest pirates that plows fresh waters. He will eat, and continue eating, until the last meal will project from his mouth; and even then, should an attractive morsel of food appear within range, the pike will make an effort to crowd it in. It will devour and digest its own weight every day, an assertion which, judging the fish from its well-known ravenous nature, is doubtless true.

The pike, like the mascalonge, will lurk in the lily-pods and among weeds, perfectly motionless, waiting the appearance of its prey; but, unlike the mascalonge, it will venture into shallow water or hide beneath projecting rocks for the same purpose, and often attacks its victim at the very feet of the angler.

The pike is ripe for capture during May

and June, and especially so if caught through the ice from our northern waters, throughout which it is liberally dispersed.

It is not at all fastidious, and will take most any baited hook; a piece of beef, pork, or fish, a frog, mouse, grub, worms, or a bright-colored rag will prove equally attractive, but the glitter of a heavily-feathered trolling-spoon will invariably prove the most effective.

A spinning bait used in trolling will generally prove a killing lure for this ferocious fish. A "gang" hook is used, composed of an array of hooks fastened to a wire snell. The lip of the minnow is fastened to the upper hook, the hook being passed through both lips; another hook is passed through the back beneath the dorsal fin. A slight bend or curve is then made in the body of the bait, and one of the hooks is passed through the tail. A swivel is used between the leader and line, and a sinker heavy enough to keep the bait just below the surface of the water.

In trolling, the curve in the body of the minnow will cause it to spin or revolve in the water, and is sure to attract any predatory fish in its vicinity. A fish taking this bait rarely escapes, unless through breakage in the tackle, for the little minnow is completely

encircled with hooks, and some of them are pretty sure to fasten securely. The struggles of a balky fish will only serve to impale more hooks, and the capture is a certainty.

This deadly hook will prove efficacious in fishing for black bass, mascalonge, and all other fish that take a bait, and has proven killing in taking the enormous spotted trout of the Rangeley lakes in Maine. Hundreds of trout weighing five pounds and upward have been caught by this method in the waters named; indeed, so deadly is the effect of the "gang" hook that in many localities laws have been framed prohibiting their use.

Laws, however, upon the statute-books are one thing, and quite another upon the secure waters of a lonely wilderness, and hence scarcely a day passes that does not see them infringed upon with impunity. The fact of the matter is that the use of the "gang" is simply barbarous, and an angler, whose nature should ever be gentle and honorable, will never permit himself to make use of it any more than he would make use of dynamite to destroy his finny opponents. Both are equally deadly and disgraceful methods of catching or killing fish.

One of the best baits to attract big pike is a small rat, hooked through the ear, and al-

lowed to swim away some distance. If any pike is in the vicinity the rat will promptly be seized.

In trolling for pike the angler will find that 40 or 50 feet of trailing line will be sufficient, and the most promising localities are close to the edge of weed patches and lily-pods. Often 20 feet of line will be enough, as in following the curves of the grassy plots short lines can be better guided and entanglements in the grass avoided. When a fish is hooked, the boatman will at once pull away from the grass into deep water, and a clear field obtained for the ensuing struggle.

As the pike sometimes reaches a weight of fifteen pounds and upward, it is essential that strong tackle be used, especially in trolling or skittering, both methods being much in vogue and quite successful.

WALL-EYED PIKE.

Weight, 1 to 15 pounds.

NORTHERN AND SOUTHERN INLAND WATERS.

THE WALL-EYED PIKE.

Stizostedium vitreum.

THIS fish, found principally in the clear waters of our Northwest, is of an olive green upon the back, lighter sides, and white belly. It often reaches a weight of ten pounds, and is best taken with live bait, such as minnows, crawfish, etc., but has occasionally been known to attack the artificial fly.

It will make a splendid battle, however, when taken with bait, and if light tackle is used great pleasure can be derived in its capture. It is a symmetrical fish in outline, but the white or dead eye gives it an odd and ghostly appearance when caught.

In fishing for the wall-eyed pike the same tackle required in bait-fishing for black bass will answer, as well as the same spoon when trolling; but a piece of the white meat cut from the belly of a fish will probably induce the wall-eyed pike to grab a little quicker and a little harder than any other bait.

A peculiarity of this fish is that it cannot or will not make any particular spot its favorite haunt, especially in large waters, but is continually wandering from place to place, and the location where it may be captured one day will prove barren the next. Sometimes it will be found in deep water, then in shoal water, and often at the mouth of a creek.

During May and June it is often taken in great numbers, but later, owing to its nomadic habits, it is not so readily found. In portions of the country, especially along the Ohio River, this fish is known as the salmon; but the name is erroneous, as indeed is that of pike, for it is clearly a perch.

THE PICKEREEL.

Weight, 2 to 7 pounds.

EASTERN AND SOUTHERN STATES.

THE PICKEREL.

Lucius reticulatus.

IN form, but in this respect only, the pickerel much resembles the mascalonge, and is generally found in the same waters, as well as in grassy streams and ponds and sluggish and marshy waters from the Atlantic Ocean to the basin of the Mississippi River.

In color the side tints of the pickerel are yellowish, while the back is of a greenish hue. It has a long, flat head and an excellent array of teeth, while its digestive qualities are simply monumental.

In ponds and still waters it seldom exceeds one pound in weight, and is so interlaced with a varied assortment of bones as hardly to be worth the trouble of cleaning and cooking.

In large and running waters it reaches a greater weight, having been taken as heavy as ten pounds.

Skittering—a method of catching fish described heretofore—will often inveigle the pickerel, but when the fish attacks the bait, it

must be given line and allowed to carry the hook to the bottom, when it proceeds slowly to swallow its find. When the fish feels the prick of the hook, it naturally makes a "break," and it is only necessary to keep a taut line, for, after a short pull, it can readily be landed. It has a habit of pulling hard but sluggishly when hooked, but gives up easily, performing its liveliest capers after having been rescued from its element.

It cannot be called a game fish, as it possesses no quality whatever meriting the appellation, and is only mentioned here because of its general distribution in the North, and because of its being a member of the *Lucius* family.

The best method of taking pickerel is by trolling with a No. 5 spoon, one of the hooks having a small strip of pork attached, which trails behind. The fish, when hooked, makes a single rush, and can then be pulled in almost as readily as if it were inanimate. It has exceedingly sharp teeth and a strong jaw, and hence it is advisable to avoid "monkeying" with its mouth.

The pond pickerel will sometimes take a red fly, and, when thus caught, affords a moment's sport, but generally it will take any and everything presenting an eatable appearance.

The pickerel is a most destructive fish, and will devour vast quantities of the spawn and fingerlings of its own and other species; indeed, it is so voracious as to have merited the assertion of being "mere machines for the assimilation of other organisms."

Some years ago Lake Umbagog, lying in the State of New Hampshire, and the most westerly of the series of waters known as the Rangeley Lakes, was famous for its large trout. It was one of the most prolific trout waters in the world, as I can testify, having myself taken many heavy fish from its deep holes and at the outlet of Rapid River; but on an evil day a half dozen pickerel were placed in the lake, and now a trout is rarely to be found. Their disappearance is entirely due to the presence of the scandalous pickerel, which, it is said, were placed in the lake through a spirit of revenge.

THE YELLOW PERCH.

Perca flavescens.

THE perch has yellow sides, with vertical black or dark bands over the back and down the sides, and bright, orange fins. It is found throughout the fresh waters of the Northern States, takes bait freely, occasionally being inveigled by a bright red or other gaudy fly. It will average one pound in weight, although in the large lakes it is often found weighing two and three pounds. It is a good table-fish, and with very light tackle will give some little battle, but it is not considered worth any special effort to capture.

It is of interest to know that the yellow perch is generally dispersed throughout the fresh waters of the world, and in our country is frequently found in company with the black bass and wall-eyed pike, and, in proportion as to size, is equally voracious.

Its brilliant colors make it an especially desirable fish in parlor aquariums, where it is often seen.

THE YELLOW PERCH.

Weight, 8 ounces to 3 pounds.

ALL INLAND WATERS, EXCEPT THE SOUTHWEST.

A very fine line should be used in perch fishing, with a sinker attached a few inches above the hook sufficiently heavy to keep the bait about a foot from bottom. If two hooks are used, they should be attached to the leader about one foot apart, a small minnow being impaled upon the lower and a worm or piece of meat to the upper hook.

The proper size of hook is Nos. 2 or 3. A float can be used in perch fishing, as it takes bait voraciously, and one needs but sit in his boat and keep his eyes on the float. If it goes down, it means a fish. However, I do not advocate and never use a float, as it is not only the laziest kind of angling, but all the pleasure of feeling the nibble, the bite, and the "strike" are lost.

The great enjoyment to be derived from angling when the rod thrills with a bite and at once communicates with every nerve in a man's body is all lost in fishing with a float. It is far better, far more satisfying and gratifying, to hold the rod in the hand and wait for the "music of the reel" or the quiver of a nibble, than to sit like a phantom and patiently watch the antics of an inanimate, gaudily-painted bite-telephone.

THE BULLHEAD OR CATFISH.

Amiurus melas.

THIS excellent table-fish is found in every portion of the country east of the Rocky Mountains, especially in ponds and sluggish waters, where it attains a size of from one to two pounds. It will take any kind of bait sunk to the bottom, and, while it does not display much courage in the water, it requires no little skill to successfully grapple with it when landed.

This is because it is possessed of sharp spines and a very pointed "horn" projecting from each side of the mouth. These, upon being rigidly erected, are capable of inflicting painful wounds.

The bullhead or catfish will eat anything, and invariably bolts the bait, thus making it no light matter to disgorge the hook and avoid its pointed and prickly protuberances.

In the Ohio and Mississippi rivers it often exceeds one hundred pounds in weight, and in Florida, where its flesh is exceedingly well

flavored, it averages ten pounds in weight. It lives on the bottom, and, being a bottom-feeder, the bait used must be sunk deep.

Any hook will serve, and any bait, such as a worm, piece of meat, fish, or even a red rag. When landed and the hook liberated, the fish may be tossed into a bag, kept a few hours, and when home is reached it may be thrown into a tub of water, when it will prove as lively as ever, its tenacity of life being most remarkable.

The salt-water catfish, found on the Atlantic coast from Hatteras to Florida, weighs from two to twelve pounds, its play being very gamy and much like that of the channel bass, described in the chapter on Florida fishing. The eggs of this fish are of a beautiful golden yellow, of the size of and bunched like grapes, and it is asserted that the mother-fish takes the eggs in her mouth and protects them thus until they are hatched.

The bullhead is not a game fish, and finds place here because of its being the favorite of our earliest angling days.

THE STRIPED BASS.

Roccus lineatus.

THE bravest, the strongest, the most sanguinary of all salt-water fish taken with hook and line is the noble striped bass. Particularly handsome, exceedingly palatable, an awful fighter, undaunted in courage, the striped bass unquestionably is the gamest among the finny denizens of our Atlantic estuaries.

It has a long and symmetrical body, with a light rise or hump above the shoulder, and has from six to eight dark brown or black lines along each side from head to tail. These dark lateral markings form a striking contrast to the predominating silvery white body, and give the fish a most distinctive identification.

The head is one-fourth the size of the body, well rounded, the mouth very large, with powerful jaws, while the eyes are big and bold—a perfect index of the character of the fish.

It is taken along the Atlantic coast from the St. Lawrence to the St. John's rivers, and often ascends creeks and rivers in quest of

THE STRIPED BASS.

Weight, 1 to 40 pounds.

ATLANTIC COAST; AND RIVERS FROM CAPE COD TO SOUTH CAROLINA.

food. These are the smaller fish, in weight from one to four pounds ; but large specimens, up to monsters of fifty pounds in weight, are taken at the outer edge of the surf along rocky coasts, where they seek squids, crabs, shrimps, and other sources of nourishment.

It is a most ravenous feeder, and, like all of its species, particularly fond of finny food. It has been known to gather a large number of minnows into a school, slowly drive them into a corner, and then pick them up one by one with the utmost grace and despatch until all have gone past the portals of that ponderous jaw.

It requires practice to acquire the art of surf-fishing, which is done by standing upon the shore, either upon a rock or any favorable eminence, and casting the bait into the surf a distance of from sixty to one hundred and fifty feet. For this purpose the best bait is a slice of menhaden, impaled upon the hook and made fast by a piece of fine cord. Being soft and oily, the bait would be thrown off the hook unless tied securely.

For tackle use an 8-foot, stiff rod, a large multiplying reel, and a linen line of 18 strands not less than 150 yards in length. The bait is cast into the surf, and the angler awaits results. If any bass are in the vicinity the

oily substance is pretty sure to win attention, and the first thing the man on shore knows of a bite will be a heavy tug and a most terrific whirr and click of his reel. It will be give and take until the fish is exhausted, and the man nearly so, when the reel brings the fish to shore, where an assistant gaffs and lands the quarry.

The first "break" of a bass is simply terrific; he seems to be going somewhere, and going in an awful state of precipitation. During this rush the rod should be held as perpendicularly as possible, in order to make the fish work hard, for hard work is exhausting.

The bass has probably observed that it is dragging a heavy load, and suddenly shoots in an opposite direction, or perhaps directly toward the angler. Here the reel must promptly perform its duty in taking up line.

Great care must be taken to prevent the line from running over and becoming entangled upon the reel—a danger always imminent when a multiplying reel is in use.

When the fish is going fast and the reel humming, a sudden turn of the fish permits the "spool" to keep running, the loose line passes under and around the "spool," a tangle follows, and the chances are that the quarry will escape. To prevent this the thumb is

used, and the instant the fish ceases to pull it is brought hard against the reel and its running stopped. The use of the thumbstall, which can be had in either worsted, rubber, or leather, prevents the thumb from being injured, or cut by the line, when brought in contact with the swiftly moving reel.

The services of a competent assistant or guide are absolutely essential, not only in securing and affixing bait, selecting "good places," and in various other particulars, but most important of all in gaffing and landing a big fish, for many noble bass are hooked and played to exhaustion, only to be given freedom at the last and trying moment—when being landed.

Large striped bass rarely ascend the creeks and rivers, and hence ordinary weakfish tackle will serve the purpose, while the best bait to use is the red or blood-worm, which can be purchased at any of the markets at 25 cents per dozen. One worm will make two baits, impaled upon No. 3 Sproat hooks.

The hooks should have a strong single-gut snell, a brass swivel forming the connection between the snell and the 3-foot leader, and a half-ounce lead sinker should be attached midway between the hook and where line and leader connect. In using two hooks they

should be fastened about 18 inches apart, the sinker always above both hooks.

I mention blood-worms because they have always been very successful on my hooks, but there are many baits which the striped bass will take freely, among them shedder-crab, small eels, shrimps, and pieces of raw beef and menhaden.

Some anglers use a heavy leaden running sinker, 3 ounces in weight—one with a hole through it. Pass the line through the sinker, and tie a knot so it will not run over upon the leader; attach the baited hook, and cast to a distance, allowing the sinker to rest upon the bottom until a bite is felt.

This is an excellent method in waters where a current exists, and such is always the best place for bass. The bait will constantly move in the current, the line runs freely through the sinker, and the slightest nibble will be felt instantly. In the rivers striped bass are on a bottom skirmish for food, especially small crabs, and hence this method is quite successful, yet the angler may consider himself fortunate if he does not catch five eels to every bass.

In still fishing the chances are enhanced by attaching two, sometimes three, baited hooks to the leader; but this often proves annoying,

especially when a fish has taken the lower bait, and when landing you are striving to save the fish and at the same time dodging an array of reckless hooks that are pretty sure to fasten themselves to the anchor rope or something else. For this reason I use but a single hook in any kind of bottom fishing.

A rising tide is invariably the best time for still fishing, and when it is at the flood this noble fish will take the fly with avidity, and fight like a tiger.

The best flies to use are those of brightest colors, and of the size used in fishing for black bass. Bright red, red and yellow, green and white, and red and white will give the best results, and often better success will be had by allowing the fly to sink a foot or two beneath the waters, and giving it short jerks. Along the edge of shore and over flats that the flood has covered are the proper places to cast flies for striped bass, as they will rarely be taken by this method in deep waters.

The striped bass will live in either fresh or salt water, and spawn in both, and of course is taken in both.

It is a marvelously productive fish, more than half a million eggs having been found in a female of fair size; while the young develop

speedily, yet in comparison with other fish the number caught is surprisingly small.

They are in season pretty much all the year, and are generally found in the markets, because their flesh is always solid and finely flavored. During the months of August, September, and October they are taken in all the bays, creeks, and rivers along the coast, and in October and November, along with the first wintry frost, trolling will prove successful.

At any of the boat-houses between 86th Street and 125th Street, along the East River, in New York, good boats and trustworthy boatmen and bait can be had at moderate prices, and a day's trolling will result in some excellent sport.

A No. 4 spoon is generally used, but this bait will prove far more effective if a strip of beef or a fat worm is attached to one of the hooks and allowed to follow the trail of the spoon.

Twenty-five yards of trailing-line will be found sufficient, with a sinker heavy enough to keep the bait from one to two feet beneath the surface of the water. Some splendid fish are taken in trolling about the upper end of Blackwell's Island and in Hell Gate, but a good boatman is necessary—one

who understands the tides, and especially the currents and eddies, in the vicinity.

A fish closely resembling the striped bass is found in our western lakes and rivers, and is locally called the white bass. It feeds upon minnows, takes bait with avidity, is a good fighter, and rarely exceeds three pounds in weight. This fish is often mistaken for the striped bass, and indeed it can scarcely be distinguished from its illustrious and greater counterpart; but it does not even remotely compare in game qualities with the striped bass of our salt waters.

THE WEAKFISH.

Cynoscion regale.

PERHAPS the handsomest fish taken in our salt waters with hook and line is the squeeteague, known at different localities along the Atlantic coast as "Yellow Fins," "Drummers," "Weakfish," and "Trout." It is utterly impossible to describe the beautiful variegated colors seen in the weakfish when lifted from the water, the tints of green, yellow, and purple blending, vanishing, and reappearing continuously, while a vermilion hue will be dancing along the lateral line and pearly-silver shadows about the back and head.

It has a white belly, a sharp and long head, a big mouth with sharp teeth in the upper jaw. It is a member of the drum family, a rapid swimmer, and a surface feeder.

The striped bass, like Sothorn's famous bird of a feather, "flocks all alone by itself"; but the weakfish rambles in vast schools, and is taken by market fishermen in great numbers, a single catch of 250,000 pounds being on record. These immense schools, however, are com-

THE WEAKFISH.

Weight, 1 to 6 pounds.

ATLANTIC COAST.

posed of the smaller fish, rarely exceeding two pounds in weight, and averaging one pound. As the weakfish grows larger it will form into small coteries, and go on foraging expeditions; and these big fellows, in this vicinity, are called "tide runners," and have been taken up to ten pounds in weight.

It is found along our coast from Hatteras north in abundance from June to September, and when fresh from the water is a superb pan-fish, but in a very short time the flesh becomes soft and flabby and loses its flavor.

The angler will find more sport in taking the squeteague than in any other of our salt-water fish, but because of the great numbers taken its value as a game fish does not seem to be appreciated.

It is emphatically a light-tackle fish, and never "monkeys" with a bait, but makes a rush, a mighty grab, a powerful tug, and for a short time struggles with all the energy and strategy of the brook trout; but its play is not of long duration and it soon becomes exhausted.

A light, pliant rod is doubly essential, as the weakfish has a soft and very tender mouth, and, unless handled with great care, the hook will tear from the flesh and the fish escape.

I have had a bamboo rod made especially for this fish, eight feet long, five ounces in weight, and in two joints. It is very pliant, plays the fish gingerly, and has proven "the very ticket." I use a fine linen line, as salt water plays havoc with the silk line, a three-foot gut leader, No. 2/0 Sproat hook, and a light sinker, never over one-half ounce in weight. This keeps the bait near the surface, where the weakfish are mostly taken.

The very best bait to use is the white meat of shedder-crab, attached to the hook in small pieces about an inch in diameter; but shrimps, clams, menhaden, and often a piece of beef or pork will entice the "yellow fins."

Allow the tide to carry the line thirty or forty feet from the boat, and then reel it in a yard at a time, repeating the process, but always keeping the bait near the surface.

When a weakfish bites, you will know it right away. Give it room, for its first dash is vigorous, and it may carry off ten or fifteen yards of line. It bites with such energy that it is quite sure to hook itself, and by giving it line promptly, but not a slack line, the chances of the flesh being torn by the hook are necessarily lessened.

Here, and in all similar cases, the value of the light and pliant rod is self-evident. It

gives and takes with the fish, while a rush or inshoot can be controlled readily from the reel.

As the weakfish come in with the tide, the most favorable time is when the water is rising, and the most favorable place to cast anchor is at the outer edge of an oyster-bed.

For "tide-runners," fish along the edges of channels and tide-races, in deep water, where rocks and sand shelves form ledges. Here the little fry congregate for security, and are sought by the big and hungry weakfish. Use a two-ounce sinker, and fish deep, anchoring above the shelf in shoal water.

Charles Hallock, that most accomplished sportsman, says: "But there is another mode, still, of taking weakfish, of which, verily, many an old fisherman wotteth not. Attention, all! Take a 'cat-rigged' boat, a craft with mainsail only and mast stepped well forward, one that works quickly, for quick work is required, and go to Fire Island Inlet at half ebb. At half ebb, or when the tide is running out like a mill-race, is the only time to take them. Should you attempt the experiment on the flood, you would lose your boat and your life. Let there be a stiff quartering breeze, and now, with a steady helm and a good rap full, bear right down on the beach, mounting the very crest of the waves that in ten seconds

more will break into shivers on the sand. Keep a quick eye, a steady nerve, and a ready hand. You will take the edge of the swift current where it pours out of the inlet. Fear not the mounting 'combers' or the breaking foam; the tide will bear you back and keep you off the shingle. Right here at the mouth of the inlet the action of the tide is constantly washing out the sand, and as it is borne down on the current, it presently sinks by its own specific gravity and gradually piles up until it forms a little ledge a foot high or more, just as the driving snow in winter is borne over the crest of a drift until it forms a counter-scarp, with an apron hanging over the abrupt and perpendicular verge. Right under the edge of this ledge the small fry congregate and the 'tide-runners' forage for food. Here throw your 'squid.' Just now is the critical instant. In two seconds you will either be pounding on the beach or surging down on the impetuous current of the strong ebb tide. The breeze is blowing fresh. Up mounts your boat on the glassy billow, whose crest is foaming just two rods in front. A false move now is ruinous. Ready about, hard down your helm! *Now!* while she shakes, toss your 'squid' into the deep, green brine. There! you have him! Keep her away and haul in lively. Hurrah! a four-pounder!"

THE BLUEFISH.

Weight, 1 to 8 pounds.

ATLANTIC COAST.

THE BLUEFISH.

Pomatomus Saltatrix.

AMONG carnivorous fish the bluefish easily takes rank as one of the most savage and voracious. In this respect it is a perfect fiend, and long after its appetite has been satiated it will pursue and destroy its finny brethren, evidently out of unadulterated "cussedness." It will run *en masse* into great schools of fat and oily moss-bunkers, cutting right and left with its pointed teeth, taking from each victim but a single round bite, and leaving the waters strewn with mutilated bodies.

The path of the bluefish is thus exposed to the fishermen, who note the presence of the gulls feeding upon floating bodies of the dead 'bunkers, and preparations are at once made to "rake them in."

Armed as the bluefish is with the sharpest teeth, and with a jaw of tremendous strength, it can and does bite with frightful effect, and when caught and landed great care must be exercised lest the jaws close upon a finger.

It is the wickedest, most vicious and uncivilized fish that swims, and one of the juiciest and most palatable of table-fish.

It has a greenish-white belly, deepening into a steel blue toward the back, has very small fins, a large head, and a most symmetrical, rakish body, and it is found along portions of our entire Atlantic coast during all seasons of the year.

Trolling from a yacht, with a "squid" for bait, affords great pleasure. The "squid" is a bone, ivory, or white metal bait from three to five inches long, with a stout hook impaled, and from twenty to fifty yards of linen line are trailed. A leader, two feet in length, made of copper wire, should intervene between the hook and line, and a swivel between the line and the leader. Unless the wire leader is employed, the first bluefish hooked will promptly bite the line and carry off the hook. A pair of heavy woolen gloves should be worn, as the fish is an awful fighter, and can pull with such vigor as will readily cause the line to cut to the bone.

It is advisable always to fasten the end of the line to the boat when trolling with a hand-line, in order that it may not be lost should it slip from the grasp.

When the bluefish strikes the hook he does

it with awful force, and fights with a fierceness unequalled by any of the finny tribe. He exhibits the courage, strength, and deviltry of a wild tiger, running deep, breaking water, rushing from side to side, and always pulling and jerking with his entire energy. Sometimes he will make a wild break, start off as if shot from a cannon, and try to overrun the hook.

“Chumming” is usually the most successful method of luring these pirates of the sea, and simply means feeding the waters with pieces of cut-up menhaden, the oil from which floats upon the surface and attracts the bluefish from all directions. It is a disagreeable and dirty process, but the skipper will perform it with grace, and the result will prove its utility.

A yacht, with skipper, can be engaged at any of the towns on the south shore of Long Island at from \$5 to \$10 per day, and the skipper will furnish menhaden for “chumming” if notified in advance.

When “chumming,” either a “squid” or a piece of menhaden may be used as bait, and trailed in the line of the oily streak upon the surface.

The best enjoyment in bluefishing may be had by using an eight-foot stiff rod, a multi-

plying reel, with one hundred yards of line, and a piece of menhaden fastened (tied) to the hook. When the fish bites he will make a terrific rush, throwing himself out of the water, often turning a complete somersault. It will tear about in the most riotous manner, and tug, and pull, and skirmish until lifted into the boat, and then it will keep up the wildest sort of a racket, a regular war-dance, until hit in the head and permanently soothed.

A profitable method of "chumming" is to go to Fire Island inlet, engage a row-boat, and cast anchor in the inlet on a rising tide. Cut up and toss the small pieces of menhaden into the strong current, following with the hook baited with the same oily substance. Pretty soon you will have as much excitement as you care to endure, avoiding the continuous effort to keep upon your feet in a yacht, and giving all your attention where it will be required—to the bull-dog at the other end of your line. For still fishing, "chumming" at Fire Island inlet affords more sport than can be derived with hook and line along our entire coast, for it will tax all the angler's skill to struggle with and safely land a ten-pounder, while with the hand-line it becomes principally a matter of tug at both ends.

If a yacht is employed, unless you are a

good sailor, an exceedingly good one at that, do not venture outside upon the ocean, else you are pretty sure to undergo the most lively attack of seasickness, which is nowhere bred with such promptness as in a cat-rigged boat. If you can stand it, however, the sport outside is superb, as the fish run larger and the battle becomes correspondingly gayer.

The bluefish appears in our waters about the first of June, coming from the South, where the winter months are passed. The early fish are usually smaller than those appearing in midsummer, averaging 3 pounds in weight. They remain until October, when they suddenly disappear as if by magic, and not another will be found in Northern waters until the return of spring.

During the winter months they are found in the rivers and creeks, and off the coast of North and South Carolina.

THE SHEEPSHEAD.

Archosargus probatocephalus.

ABOUT the 1st of June this splendid fish makes its appearance in our waters, but is rarely found north from the latitude of New York. Its flesh is esteemed among the best of the finny tribe, while in appearance it is far removed from a thing of beauty—indeed, it may well be called a homely fish.

It has a big head, a huge hump on the back, arching from the shoulders, and an ugly dorsal fin extending entirely along its back, which the fish can drop into a neatly-fitting groove at will. In color it is a brave bronze at the top and an equally heroic white on the belly. The eye is big and bold and beautiful, and the jaws are tremendously powerful—while both the roof and floor of its mouth are covered with flat, heavy teeth, enabling the fish to crush clams and other mollusks readily, its favorite food.

It is covered heavily with scales that rival metal polish in brilliancy, and beneath its

THE SHEEPSHEAD.

Weight, 2 to 10 pounds.

ATLANTIC COAST.

marvelously beautiful eyes it has reddish-tinted cheeks. It is found around shoals and old wrecks, and wherever barnacles and shells abound, and, baked or boiled, it is one of the most delicious fish in existence.

A nine-foot pliant rod, reel, sinker, fine line and gut leader, and No. 1 Sproat hook is the tackle required, and a clam, oyster, mussel, or shedder-crab is the best bait.

It may be added here that the shedder-crab is a bait that will be taken by any fish that can be caught with hook and line along the Atlantic coast. I have sat in a boat and constantly landed fish with this bait, while others fishing the same waters were "kicking like steers" because the fish would not touch their proffered lure.

Anchor your boat and drop the hook into the water, allowing it to sink close to bottom, even resting upon the bottom a moment. Then raise and lower it slowly, repeating this until a bite is felt. The sheepshead bites gingerly at first, indeed merely nibbles or gives a little jerk, and then you will suddenly feel a vigorous pull. Reel in and the fish will slowly and quietly come nearly to the top of the water, when—well, be ready to give him line, for when he comes within a foot or two of the surface he will make a terrific rush for bottom,

and he will go there, too. He simply can't be stopped, and you must be ready to meet his run—not much, to be sure, but enough to let him feel his native bottom. Then he will begin to fight, and keep it up until exhausted, when he can be brought to net and landed.

As above stated, the sheepshead never rushes at its food, never grabs, so to speak, but browses and nibbles as if sampling it, and hence it will not do to “strike” until the tug is felt, showing that the fish has actually taken the bait. Then “strike” sharply, and fasten the hook.

The majority of those seeking sheepshead use hand-lines; but rod and reel not only afford greater, more extended sport, but enable the angler to cast bait farther from his boat, with better prospects of success.

THE KINGFISH.

Weight, 8 ounces to 3 pounds.

ATLANTIC COAST.

THE KINGFISH.

Menticerrus nebulosus.

THIS is one of the bravest little fighters that swims—little, because it rarely exceeds five pounds in weight, and gamy enough to fully merit the honorable title by which it is known—the kingfish.

It is certainly a remarkably powerful fish, will pull and fight like “all possessed,” takes the bait with a rush and a vicious jerk, and when it feels the prick of the hook swims off with surprising rapidity.

It literally “lays low,” persistently keeping near bottom, and when it can gain no more line it will break water, and, falling back, will start off on a mad career in a different direction or in a circle.

When finally you have landed the fish, you will marvel exceedingly that your valiant antagonist weighs but a pound or two.

The kingfish has a long, tapering form, and is covered with round scales, the head and mouth being small, the latter being beneath

the upper jaw ; or, in other words, it has a flat, blunt, big nose covering a very small mouth. The back is a dark gray and red, the belly is bluish white, and the fins of various tints.

It is a midsummer fish, and is taken about the south shore of Long Island and all along the coast of New Jersey. It is rather solitary in its habits, feeds on shrimp and shedder-crab, and is found on sandy bottoms. It is essentially a bottom feeder, and, its small mouth being leathery, it rarely escapes when once hooked.

A light, pliant rod and fifty yards of fine linen line, a fine gut leader, and a No. 1 hook is the proper tackle. This is a small hook, and a correspondingly small piece of the white meat of shedder-crab will prove good bait.

During the months of August and September kingfish are most likely to be taken, although they are never found in large numbers ; but when the angler hooks and plays one to the end he will probably confess that no fish of its inches in salt water equals it in game qualities.

THE SEA-BASS.

Centropristis striatus.

THIS excellent fish, known by at least a score of different names, is found along our coast from Cape Cod to Florida. It feeds upon crabs, shrimp, and crustacea, and hence is caught only near the bottom, never coming to the top for bait.

The color of the sea-bass is a blackish blue, while the inside of the mouth is lined throughout with a brilliant yellow. It sometimes reaches a weight of three pounds, but the average will not exceed one pound. It has a very large mouth, large fins, and an equally large appetite, yet can fight less than any other fish taken with hook and line.

The ordinary flounder will offer more resistance than this fish, which allows itself to be hauled in or up with but little contention.

In the form of a chowder the hard white flesh of the sea-bass is superlatively good—good enough for anybody.

The fish is rarely sought for at present, but is occasionally taken about a foot from bottom, in water twenty or twenty-five feet deep.

THE BLACKFISH.

Hiatula onitis.

THE blackfish, or tautog, is ubiquitous in our estuaries, and is often taken from the piers in New York. It is a very humble member of the finny tribe, but heroic in its tug and pull, probably because of its very large and powerful fin system. It has a big head, a highly-arched back, and displays a varying shade of gray often pervaded with black.

It has a big eye, a small mouth, and the heaviest coating of tough scales imaginable. It sometimes reaches a weight of 10 or 12 pounds, but specimens of this size are found only in deep water, the average being about 2 pounds. The tackle used in angling for weakfish will be about right for blackfish, and shedder-crab, clams, and worms are the best bait.

A heavy sinker should be used, keeping the bait within 1 or 2 feet from bottom.

This species cannot be classed among game fish, as it never takes bait at the surface of the water.

It comes early, about April 1, and remains in the vicinity of New York until November.

THE WHITE PERCH.

Morone Americana.

THE white perch has a stumpy, compressed body, is built much like the yellow perch, and in color is a bright blue silver. It is equally at home in salt or fresh water, rarely exceeds 1 pound in weight, and when taken with a fly affords considerable sport.

It will take bait freely, the angle-worm being by far the best, while crawfish, small minnows, and pieces of meat prove attractive.

It is found in great numbers in fresh tidal rivers, on muddy bottoms, and in low water.

A short rod and line are used, and 4 or 5 hooks, fastened to the leader about a foot apart.

It travels in immense schools, and when one can drop lure into the herd it is no trouble to land as many as are wanted.

In fresh waters around wrecks and piers, in the eddies, and at the edge of currents and mouths of streams, a bright fly, with a light rod, will afford no little excitement and a large array of fish.

Its habitat is along the Atlantic coast from Hatteras to the St. Lawrence River, and in the emptying rivers and streams.

FLORIDA FISHING.

THE peninsula of Florida offers greater opportunities for angling than any other region in the United States. Nearly all the best fish found during the season along the North Atlantic coast, such as the striped bass, weakfish, sheepshead, and others, are taken in Florida waters, while many never seen in the North afford no little excitement to the angling adventurer.

The variety of fish is almost endless, and their numbers so great that one may feel sure of success at most any hour, season, or locality.

In fishing such prolific waters one can never count upon the result, and it is easily possible to find the lure seized by a shark, a tarpon of a hundred pounds in weight, or others still heavier.

The fishing is principally done from a row-boat in water from 6 to 15 feet in depth, and boats and boatmen can be had at all available resorts.

A short, stiff rod, from 8 to 9 feet in length,

THE TARPON.

Weight, 8 to 200 pounds.

COAST OF FLORIDA.

a multiplying reel with 100 yards of 13 or 15 thread linen line, 4/0-ringed Limerick hooks, or the size used in fishing for black bass, with a heavy sinker will complete the outfit, save that a landing-net, a gaff, and a revolver to shoot sharks should be in the boat.

Gut leaders are unnecessary, but a plentiful supply of hooks should be kept in the pocket, as sharks bite them off continually.

When snow and ice, abetted occasionally by the law, place the fish beyond the reach of sportsmen in the Northern States, the waters and the climate of Florida are "wide open," and the sport at its prime.

It is extraordinary to note how many old acquaintances one will lift from these waters, sailing under new names, and it may prove a little annoying to be told that the black bass is a trout, and that the weakfish is also a trout, while the striped bass becomes the rock-fish.

The heaviest fish taken with hook and line is found on the western coast of Florida, and the man who may have enjoyed the most thrilling experiences with all kinds of fish may lose his head when he battles with his first Tarpon. Its great weight—many of over 100 pounds having been taken—its great strength and powers of endurance make it one of the most difficult fish to capture; yet when landed it is

absolutely useless, for its flesh is repugnant to the palate.

It is only within the last few years that the tarpon has been considered within the range of rod and line. When landed its huge scales glisten like burnished silver, and for this reason it is often called the "silver king."

A very strong rod is requisite, about 6 feet in length, a reel holding 600 feet of 21-thread line, a huge, especially made hook attached to a cotton leader, which can be had at the tackle-stores, and which is baited with slices of fish. This is thrown into the water and allowed to rest upon the bottom until found by the quarry. Sometimes it nestles thus for hours without being molested, and at other times is at once seized, but not always by a tarpon.

When this fish does take it, a moment is allowed in which the fish swallows the bait, the hook being impaled in the throat. Then it starts off on a career of warfare without an equal in angling. As neither man nor tackle possesses the strength to control such a monster, it must be allowed to carry off all the line, during which operation the anchor is lifted, and when the end is reached the fish will proceed to tow the boat and its occupants.

It will leap from the water continually, will

rush in all directions, sometimes directly toward and up to the boat, and when finally exhausted is gaffed and landed, or killed, a line fastened to its jaws and it is towed ashore.

A relay of tackle should be kept near by, as the loss of hook and line will be an ordinary event.

The most important fish found in the waters of Florida is the Red Drum, or, as it is better known, the Channel Bass. In color it varies from a copper to brownish red, with a white belly, thick body, and big head. It has from two to six irregular black spots on the tail, large scales, and runs in weight from 5 to 40 pounds.

It comes into the rivers and bays with the tide, from May to November, and is taken with mullet bait, a piece of flesh cut from the fish of that name.

The tackle required is the same used in striped-bass fishing, save that a heavy sinker is needed, and a gut leader is not requisite; indeed, no leader is ever required in Florida while bait fishing, the hook being ringed and tied directly upon the line.

The fighting qualities of the Red Drum are of the highest standard, and when hooked it will rush off like a race-horse, making the most persistent struggle, jerking and tugging

tremendously. It is an honest fighter, however, rarely seeking to escape by trickery, and the angler needs but to "hold up his end" to play the fish to exhaustion.

The Drum can also be taken trolling with a spinning bait, and great numbers can be captured by attaching mullet bait to a hook, standing in the surf, and casting just outside of the breakers, a method largely practiced at the mouth of the St. John's River.

It has a very tough mouth, and hence the "strike" should be sharp, but when the hook is once fastened it rarely gives way.

The Salt-water Trout of Florida, sometimes called salmon in Southern waters, is a near relation to the weakfish, but more nearly resembles the Lake Trout of the Northern States. It has a dark, silvery back, growing lighter on the sides and white upon the belly, the back being covered with dark spots. It has a big mouth well furnished with very sharp teeth, is a splendid fighter, and its flesh is finely flavored. It weighs from two to seven pounds, and takes bait at all stages of water, at the bottom or near the top.

If one could be sure of the fish that will take his bait, the best tackle for this fine fighter would be the same as is used in catch-

ing weakfish ; but in Florida waters particularly one is just as liable to hook a forty-pounder as a two-pounder, and, while strong tackle will handle a small fish, light tackle would be sacrificed in the obverse case. For this reason, it is always best to be strongly rigged, as the very uncertainty of the net result is a great pleasure in itself.

The variety of fishes to be taken in Florida waters is innumerable, but one habit is peculiar to all—they will invariably seize mullet bait, and hence, when going angling, a supply of this commodity is most essential. In a day's fishing one may land a dozen warriors, every one being of a different species, but all "hefty" fighters.

Among those that are liable to be rescued from oblivion are the Red and Black Grouper, often weighing twenty pounds ; the Sheepshead ; the Cavalli—strong, active, fighting until the end, and in weight up to ten pounds ; the active Snapper, from two to six pounds ; the acrobatic Skip-jack, from three to ten pounds, and one of the rarest combatants that falls to the angler's rod ; indeed, it seems to fight in the air as much as in the water.

Pickarel and Black Bass, the latter of the big-mouth species and big in size, are found

in inland waters, as well as Perch and Bream.

For fly fishing in Florida the rod should weigh not less than seven ounces, and, as the fish are primitive in their tastes, almost any kind of fly will meet their wants.

THE RED DRUM.

Weight, 5 to 40 pounds.

COAST WATERS FROM CHESAPEAKE TO TEXAS.

ONE HUNDRED HINTS FOR ANGLERS.

WET GARMENTS.—Never sit down to rest or remain quiet with feet or legs wet. Keep the feet and legs wet and in action, thus warding off a possible chill.

WADING-SHOES.—Those made of canvas are the best. Leather shoes harden and hurt the feet.

HOB-NAILS.—The bottoms of wading-shoes should be filled with malleable iron hob-nails. Don't use steel nails, as they quickly become smooth as glass.

TAKE IT EASY.—Don't make hard work of fishing. Rest a couple of hours at noon, especially if wading.

BEHAVE WELL.—The angler is always a gentleman—a fact he will never forget when strangers are met at angling resorts or upon a stream.

GUIDES.—When you are in the wilderness and have a guide, treat him as your equal, and not as a servant. It will pay.

HOOKS.—Be careful to inspect the points of your hooks in all kinds of fishing, and see that they are sharp and perfect. If the point is dull, exchange the hook, or else file to a perfect point, for which purpose a fine file should always be carried.

TACKLE METAL.—All metal used upon tackle should be either of German silver or brass, nickel-plated.

BRIGHTENING SPOONS.—If your spoons lose their brilliancy they can be brightened by the use of a little nitrate of mercury, rubbed on with a piece of chamois.

CARRYING NETS.—Always carry a mosquito net when going fishing. It may be cumbersome, but it will prove a source of great comfort at night.

BUYING TACKLE.—Buy your fishing-tackle from regular tackle dealers. If you purchase it at dry-goods, notion, or hardware stores you will invariably get worthless trash.

A GAME FISH.—A game fish is a good biter, a good fighter, and always good to eat.

CLEAR WATER.—It is useless to cast flies upon muddy waters.

NIGHT FISHING.—Fish will take a bait or fly at night if hungry.

BOTTOM SPRINGS.—In fishing lakes endeavor to find a bottom spring. Fish always haunt such places.

GOOD FISHING WEATHER.—Cloudy days are always the best to go a-fishing. Always carry a rubber cape to prevent a “soaking.”

TO KEEP FISH ALIVE.—The best method is to carry a net about three feet long, with a swell centre, and open at one end. The fish are placed in the bag, which is then immersed in the water. These nets can be had at any tackle store.

BIG TROUT.—If fishing with a fly for large trout, keep the fly a few inches under water. It will often prove most successful. The big trout rarely come to the surface for a fly.

TO FOOL A TROUT.—A wary trout can sometimes be fooled by this trick: Take a broad maple-leaf, and with a knife slit half-way along the middle vein; suspend the hook and worm, press the leaf together, and send it downstream, and the trout is pretty sure to seize it.

SMOOTH WATER.—Perfectly smooth water rarely affords successful fly fishing. Sunrise and sunset are usually the best hours for any kind of fishing, as the fish are then looking for food.

TO KILL FISH.—Always hit a fish upon the head, between the eyes, as soon as caught. It kills at once, and hardens and preserves the flesh.

KEEP QUIET.—Don't make any more noise than possible when fishing. Fish are easily scared, and a slight tap on the bottom of a boat will send them flying.

SIGHT OF FISH.—Fish can see in the water, and very distinctly, too, but not out of it. Their sense of smell is very acute.

FISHING POSITION.—Always endeavor to fish facing the sun, thus casting your shadow backward. Fish are quickly frightened by a moving shadow.

PRESERVING WORMS.—Worms can be kept in good condition a long time by placing them in wet moss and pouring a pint of milk over them daily.

GOOD BAIT.—Raw beef is a good bait for almost any kind of fish. Small mice are good bait to catch large trout. Hook through the tail and allow the mouse to swim away.

TO CATCH FROGS.—A piece of red flannel impaled upon the hook will catch all the frogs wanted for bait fishing.

WATER-SNAKES.—Kill every water-snake possible, as they destroy many small fish and millions of eggs.

SAND - WORMS.—Sand-worms are a good bait for salt water, and are from eight to fourteen inches long. Keep them in a box with a little damp sand. Put them on the hook so they can wriggle freely.

KEEPING SHRIMP.—Shrimp can be kept alive for some time in a box of wet sawdust. Hook them through the body from tail to head.

THE BEST BAIT.—The best general bait known is the frisky and meek angle-worm. It is found principally in a rich soil, throughout the world.

TO GET ANGLE-WORMS.—Dissolve two or three pounds of salt in a pail of water, and sprinkle it liberally over the ground. The worms will wriggle out speedily.

SECURING BAIT.—Shedder-crab, as well as worms, can be bought at any of the markets in New York. The soft shell is removed, and the meat, which is white, cut into small pieces.

KEEPING BAIT ALIVE.—Frogs, crabs, etc., can be kept alive in wet moss.

TO PRESERVE FISH.—I have found “PRE-

SERVALINE" a splendid thing to preserve fish. Dissolve a pound of it in two gallons of water. Allow the cleaned fish to remain in the solution an hour or two, and they will keep fresh and sweet for many days. It is sold at fifty cents per pound.

YOUR TACKLE.—Own it yourself. Never borrow, and never lend.

PRESERVING RODS.—Varnish your rods slightly in the autumn, and hang them up. When dry lay them away on a level surface in a cool place.

BEWARE OF NAILS.—Don't support a rod against nails, or lay it upon nail-pegs. They rot lines.

BE CAREFUL.—Always dry and carefully clean a good rod, line, and reel after using.

UNJOINTING RODS.—Rub a little brown soap on the ferules before using, and the rods will unjoint readily when desired.

LOOSENING JOINTED RODS.—The tightened joints of a rod will loosen readily if held for an instant over the heat of a lamp-chimney.

TO WATERPROOF LINES.—A silk line can be made waterproof by thoroughly soaking in boiled and strained linseed-oil. Draw through a piece of chamois to smoothen the surface.

TESTING LINES.—Always test a line before fishing. It is poor policy to give a big fish the first chance to break it.

FINE LINES.—An enameled line is a work of art. After being in use all day it should be unwound from the reel, drawn between flannel, and hung in a dry place over night.

REELS.—Oil your reels occasionally with a few drops of clock-oil. Don't use watch-oil.

SALMON AND TROUT LEADERS.—Salmon-leaders should be nine feet long; trout-leaders six feet.

GUT FOR LEADERS.—You can buy gut at any tackle store, and readily make your own leaders. Soak the gut in vinegar for an hour or two, and it can be tied easily.

COLORLED LEADERS.—Those of a mist color, or such as are specially dyed to the color of the water in which they are used, are the best.

TO DYE LEADERS.—In order to dye gut leaders to the favorite "mist" color, take one drachm of ground logwood and six grains of powdered copperas, and boil in one and one-half pints of water. Immerse the leaders three minutes.

SLIDING LOOPS.—Leaders for fly casting,

made with sliding loops, will be found a great convenience.

TO DYE LEADERS.—Immerse the leaders in French writing-ink, allowing it to remain one hour. This also gives the favorite "mist" colored hue.

PREPARING LEADERS.—Carry a little tin box holding two pieces of wet felt, between which place your gut leaders. They will always be in condition to use, and the bends and kinks are avoided.

COLOR OF SNELL.—The color of the snell, to which hooks are attached, should always be of the same color as the leader.

ANGLING LITERATURE.—The angler who desires to become more proficient in the art, and to acquire a profound knowledge of our many game fishes, should own and read the following books; they are, combined, an encyclopedia of fish and fishing: "The Book of the Black Bass," by Dr. Jas. A. Henshall; "Fly Rods and Fly Tackle," by Henry P. Wells; "The Salmon Fisher," by Charles Hallock; "The Scientific Angler," by David Foster, and "Fish Hatching and Fish Catching," by Hon. Robert B. Roosevelt and Seth Green.

TROUT FLIES.—In the spring-time use the

smallest obtainable flies for trout. The "midges" are the best.

TO PROTECT ARTIFICIAL FLIES.—Dip them in kerosene oil and hang up in a dry place. Moths will never attack them.

TO PRESERVE FLY BOOKS.—Have a little muslin bag made, into which place your fly books. Twist the end and tie tightly, and, unless there are moths or moths' eggs already among the flies, none will ever get in.

MOTH PREVENTIVE.—Sprinkle naphthaline crystals among the leaves of a fly book, and moths will never trouble it.

INSECT PREVENTIVE.—Half a pint of tar, half a pint of vaseline, half an ounce oil of pennyroyal, three drops creosote; mix while hot, allow it to cool, and bottle for future use.

INSECT PREVENTIVE.—Two ounces tar and three ounces castor-oil, simmered for half an hour. Allow it to cool, and when nearly cold add one ounce oil of pennyroyal. Bottle for future use.

INSECT PREVENTIVE.—Three ounces olive-oil, two ounces oil of pennyroyal, one ounce ammonia, and one ounce glycerine. Mix cold.

INSECT PREVENTIVE.—Two ounces pine

tar, two ounces castor-oil, one ounce pennyroyal. Mix by heating.

INSECT PREVENTIVES.—The receipts given above are all excellent, and will not injure the skin. They should be applied freely and repeatedly to all exposed parts of the person, and not washed off until leaving the vicinity inhabited by mosquitoes, black flies, and other insects.

APPROXIMATE WEIGHT OF TROUT AND SALMON.

<i>Length in inches.</i>	<i>Trout.</i>		<i>Length in inches.</i>	<i>Salmon.</i>	
	lbs.	ozs.		lbs.	ozs.
8	0	4	24	5	6 $\frac{1}{4}$
9	0	4 $\frac{3}{4}$	25	6	1 $\frac{1}{2}$
10	0	6 $\frac{3}{4}$	26	6	13 $\frac{3}{4}$
11	0	9	27	7	10 $\frac{3}{4}$
12	0	11 $\frac{1}{4}$	28	8	8 $\frac{1}{2}$
13	0	14 $\frac{1}{4}$	29	9	8
14	1	0	30	10	8
15	1	1 $\frac{1}{2}$	31	11	9 $\frac{3}{4}$
16	1	10	32	12	12 $\frac{1}{2}$
17	1	15	33	14	0
18	2	6	34	15	5 $\frac{1}{4}$
19	2	12 $\frac{1}{2}$	35	16	12
20	3	4	36	18	3
21	3	12 $\frac{1}{2}$	37	19	12
22	4	5 $\frac{1}{4}$	38	21	6 $\frac{3}{4}$
23	4	15 $\frac{1}{4}$	39	23	2
24	5	10 $\frac{1}{4}$	40	24	15 $\frac{1}{2}$
25	6	5 $\frac{3}{4}$	41	27	0
26	7	2 $\frac{1}{2}$	42	29	4
27	8	0	43	31	10 $\frac{1}{2}$
28	8	15	44	33	14
29	9	14 $\frac{3}{4}$	45	36	4
30	10	15	46	39	0

LEGAL SEASONS FOR FISHING—1892.

NEARLY every State in the Union has made laws for the protection of fish. The fish mentioned below can only be caught during the period named in the various States, while taking them in any manner, save with hook and line, is prohibited :

BROOK TROUT—*Salmo fontinalis*.

California....	April 1 to Oct. 31	N. Carolina...	Jan. 1 to Oct. 15
Connecticut...	April 1 to July 1	Nova Scotia,	April 1 to Sept. 30
Iowa	April 1 to Oct. 31	Ohio.....	March 14 to Sept. 15
Maine.....	May 1 to Oct. 1	Ontario, Can.,	May 1 to Sept. 15
Manitoba...	Jan. 1 to Oct. 1	Pennsylvania,	Apr. 15 to July 15
Massachusetts,	Apr. 1 to Sept. 1	P. E. Island....	Dec. 2 to Oct. 2
Michigan...	May 1 to Aug. 31	Quebec, Can.,	Jan. 1 to Sept. 30
Minnesota...	April 1 to Sept. 15	Rhode Island,	Mar. 1 to Aug. 15
Nevada.....	April 1 to Oct. 1	Utah Ter....	June 15 to Feb. 15
N. Brunswick,	April 1 to Sept. 15	Vermont.....	May 1 to Aug. 31
N. Hampshire,	A. 15 to Sept. 15	W. Virginia..	Jan. 1 to Aug. 31
New Jersey...	April 1 to July 15	Virginia.....	April 1 to Sept. 15
New York...	April 1 to Sept. 30	Wisconsin..	April 15 to Aug. 31

SALMON—*Salmo solar*.

California....	Oct. 1 to Aug. 31	Ohio.....	March 14 to Sept. 15
Maine.....	April 1 to Sept. 15	Ontario, Can.,	May 1 to Sept. 15
Massachusetts,	May 1 to July 31	Pennsylvania,	Apr. 15 to July 15
N. Brunswick,	Feb. 1 to Aug. 15	Quebec, Can...	May 1 to Sept. 1
Nova Scotia..	Feb. 1 to Aug. 15	Rhode Island,	Ap. 15 to July 15

LAND-LOCKED SALMON—*Salmo salar*.

Maine.....	May 1 to Sept. 30	Ohio.....	March 14 to Sept. 15
Massachusetts,	Ap. 1 to Aug. 30	Quebec, Can.,	Dec. 1 to Oct. 15
Michigan.....	May 1 to Aug. 30	Vermont.....	May 1 to Aug. 30
N. Hampshire,	May 1 to Sept. 30	W. Virginia..	Jan. 1 to Aug. 30
New York.....	April 1 to Oct. 1	N. Brunswick,	Ap. 1 to Sept. 15
Nova Scotia,	April 1 to Sept. 30		

LAKE TROUT, or SALMON TROUT—*Salvelinus namaycush*.

California....April 1 to Oct. 30	Ontario, Can., Dec. 1 to Oct. 30
Iowa.....May 15 to Oct. 30	Pennsylvania, Jan. 1 to Sept. 30
Maine.....May 1 to Sept. 30	Quebec, Can., Dec. 1 to Oct. 15
Massachusetts, Ap. 1 to Aug. 30	Vermont.....May 1 to Aug. 30
N. Hampshire, Jan. 1 to Sept. 30	Wisconsin...Jan. 15 to Aug. 30
New Jersey, March 1 to Sept. 30	N. Brunswick, Ap. 1 to Sept. 15
New York...April 1 to Sept. 30	

WININNISH.

Canada, Quebec.....	Jan. 1 to Oct. 15
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BLACK BASS—*Micropterus dolomieu*, *M. salmoides*.

Connecticut, June 11 to April 30	Ontario, Can., June 15 to Ap. 15
Iowa.....May 15 to Oct. 30	Pennsylvania, June 1 to Dec. 31
Maine.....July 1 to March 30	Quebec, Can., June 15 to April 5
Massachusetts, July 1 to Oct. 30	Rhode Island..July 15 to Mar. 1
N. Hampshire, June 15 to May 1	Vermont.....June 1 to Jan. 31
New Jersey..May 30 to Nov. 30	Virginia.....July 1 to May 15
New York...May 30 to March 1	Wisconsin.....May 1 to Jan. 31

MASCALONGE—*Lucius Mascinongy*.

N. Hampshire, June 1 to Ap. 1	Quebec, Can., June 15 to Ap. 15
New York...May 30 to March 1	Wisconsin.....May 1 to Jan. 31
Ontario, Can., June 15 to Ap. 15	

PIKE AND PICKEREL—*Lucius lucius* and *L. reticulatus*.

N. Hampshire, June 1 to Ap. 1	Rhode Island, June 1 to Mar. 30
Ontario, Can., May 15 to Ap. 15	W. Virginia, June 15 to Mar. 30
Pennsylvania, June 1 to Dec. 31	

PIKE-PERCH, WALL-EYED PIKE—*Stizostedion vitreum*.

Iowa.....May 15 to Oct. 30	Pennsylvania, June 1 to Dec. 31
Manitoba....May 16 to April 16	Quebec, Can., May 15 to Ap. 15
N. Hampshire, July 1 to Ap. 30	Vermont.....June 1 to Jan. 31
New York...May 30 to March 1	Wisconsin....May 1 to Feb. 28
Ontario, Can., May 15 to Ap. 15

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Gogebic Lake, Mich. This lake is twelve miles distant and 900 feet above the waters of Lake Superior. It is fifteen miles long and one and one-half to three miles wide, and is generally conceded to afford the best black bass fishing known anywhere. Brook trout are found in tributary streams, and at certain seasons of the year very large brook trout are caught in the open lake. The Gogebic Hotel and Cottages will remain under the management of Geo. P. McAdam, who will furnish first-class accommodations for 100 guests. Fine fleet of boats, steam yacht, etc.

Twin Lakes, Wis. (Conover Railroad Station.) This popular resort will continue under the auspices of the Twin Lakes Fishing and Hunting Club. It will be open the entire season not only to Club members, but, as heretofore, for the entertainment of fishermen and their families or those in search of health and recreation. It will, during the coming season, be under the management of Geo. P. McAdam, under whose management the Gogebic Resort has been for some years so popular. Rates for board, etc., will be practically the same as heretofore, viz.: \$2.00 per day or \$10.00 per week; boats 50 cents per day; boat and guide \$2.50 per day. Several splendid lakes are accessible from Twin, viz.: Pioneer, Long, Big Sand, and Smoky Lake.

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"EAGLE WATERS," WIS. Comprises a chain of twenty-seven lakes, all easily reached by steamer or row-boat from Eagle River Railroad Station, and all offer fine sport with mascalonge, bass, and pike. Hotels, boats, guides, and steamer at Eagle River Station.

THREE LAKES, WIS. A Railroad station in proximity to the southern portion of the "Eagle Waters" chain of lakes. Hotels, boats, guides, etc.

TOMAHAWK LAKE, WIS. The Milwaukee, Lake Shore & Western Railway traverses the entire Tomahawk Lake region, passing directly along the shores of Tomahawk and Kewaquesaga Lakes. These, and other lakes in this vicinity, are noted for their fine mascalonge and bass fishing.

TROUT LAKE, WIS. Is especially noted for the great number and large size of the "land-locked salmon" that are taken from its waters. Bass are taken in this lake and mascalonge in the surrounding waters. There is a hotel on the west shore of Trout Lake, and boats and guides can be secured.

MANITOWISH RIVER, WIS. Connects quite a chain of lakes, including Rest, Manitowish, Rice, Alder, and Trout Lakes, all of which contain bass, mascalonge, and pike, and some have been fished but very little. Boats and guides can be secured at Manitowish Station, also at the dam on Rest Lake, seven miles west of Manitowish Station, at which place hotel accommodations can also be had.

TURTLE RIVER, WIS. Also connects quite a system of lakes, including Rice, Echo, Spider, Turtle, Long, and a number of others. These lakes have been fished but very little, and some not at all, so far as is known.

**** For any additional or detailed information regarding the Lake Region, or for copy of Guide-Book, Wisconsin and Michigan Game and Fish Laws, etc., address*

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