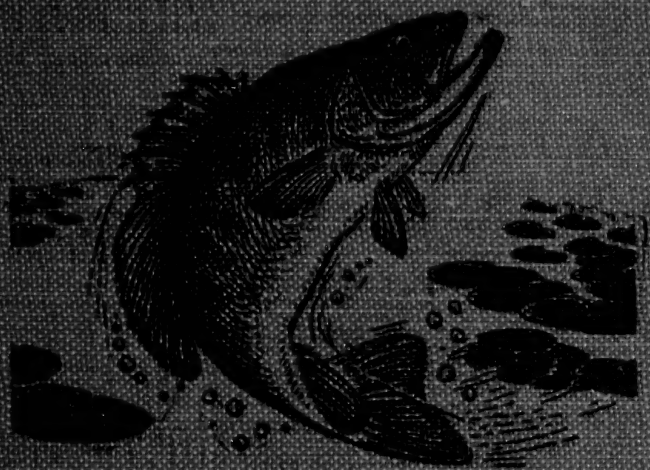


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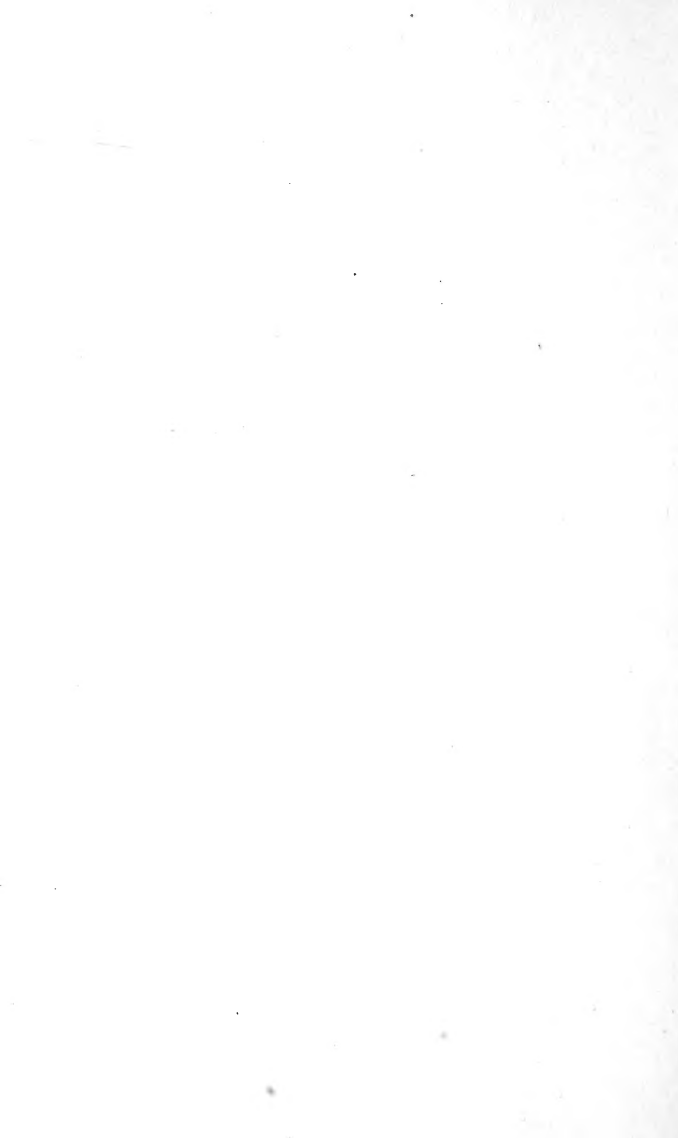
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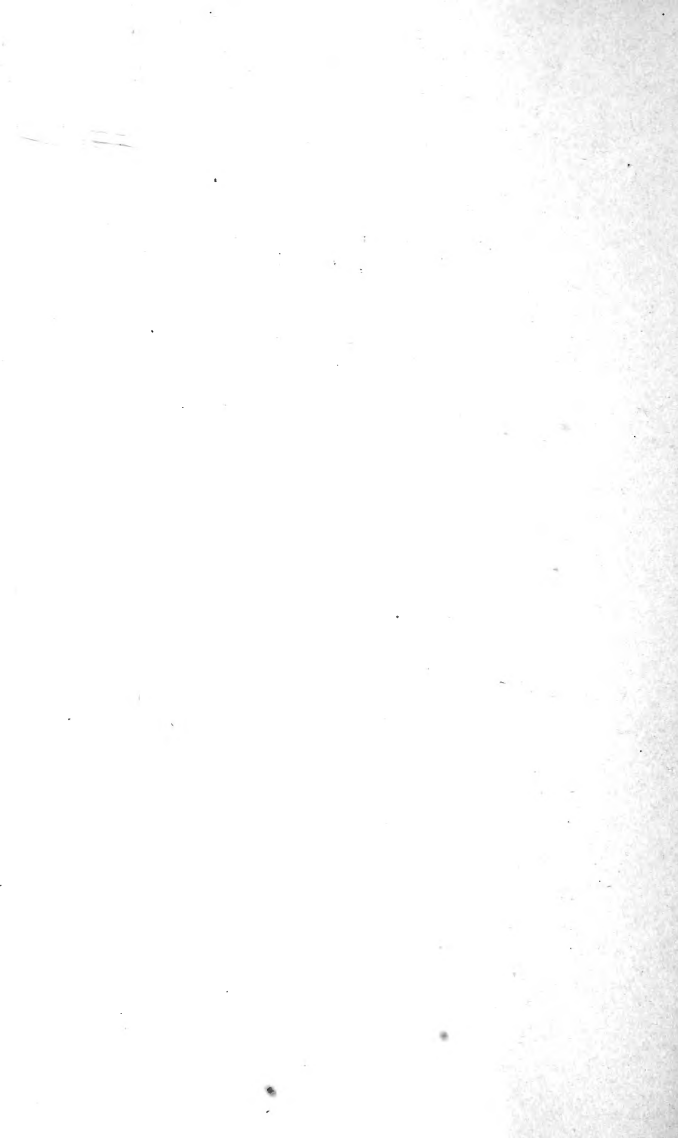
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A TREATISE ON
FRESH WATER FISH
AND FISHING

With Comments on the Haunts and Characteristics
of the Principal Game Fishes and Food
Fishes, Modes of Angling for Them,
Suitable Tackle, Etc.

By *Frederick Eugene Pond*
WILL WILDWOOD, [pseud.]

Author of "Handbook for Sportsmen", Etc.



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Cincinnati, Ohio
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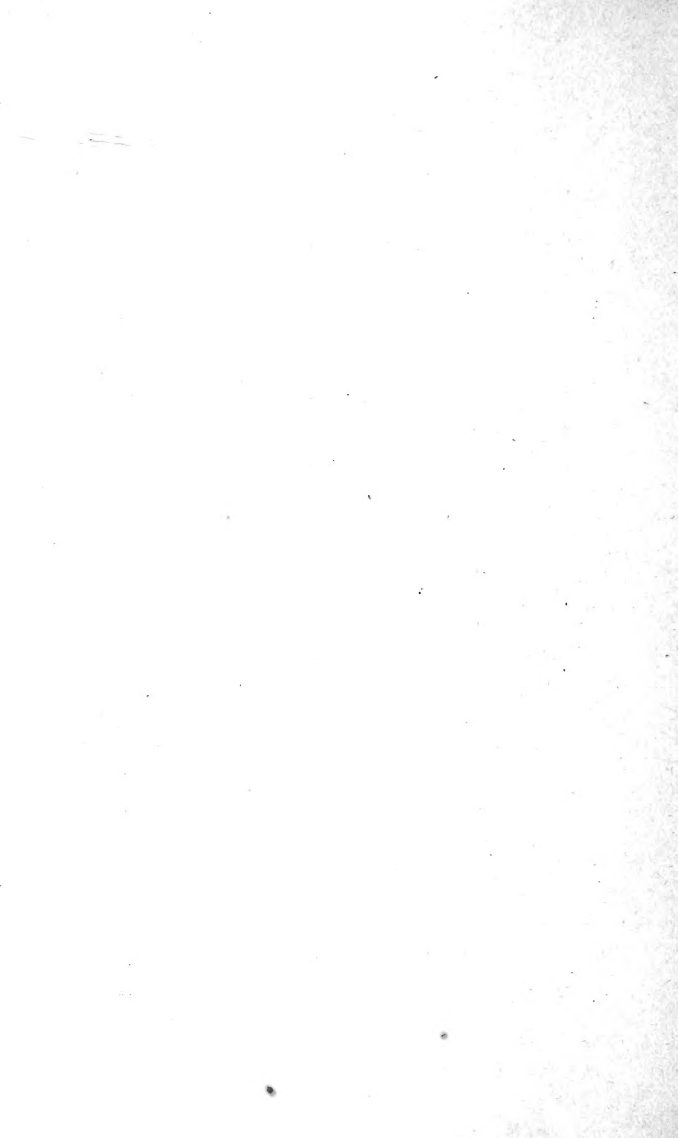
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FOREWORD

IT may be well to explain, by way of brief introduction, in presenting this little brochure on fresh water fish and fishing to the attention of American anglers, that it is not the purpose of the author and publishers to rival any of the excellent works heretofore published on this subject, nor to attempt giving anything in the nature of a thorough treatise covering all the many angles and points of interest concerning the art, and the various species of the finny family which are pursued for sport. Able as well as entertaining authors, from the time of good old Izaak Walton down to the present day, have done justice to the subject, not only as to the art of angling and the denizens of brook, river and lake, but also with reference to each of the game fishes, individually.

To attempt to give a more complete or comprehensive work on fresh water fishing than any that has ever appeared would be presumptuous and

beyond bounds of reason. The intention, therefore, is to give, in condensed form, a concise little book for ready reference, convenient in size for the pocket, and containing, it is hoped, some interesting comments worth the attention of the reader, whether at his fireside or whiling away a few moments of leisure time in the welcome shade of forest trees, near the waters where game fish lurk.

For the brief poetical selections prefacing the chapters descriptive of the various game fishes, thanks are due to those masters of the craft — notably the poet-sportsman, Isaak McLellan — who possessed the ability to cast their lines, whether of the rod or the pen, in pleasant places and in alluring manner.

WILL WILDWOOD.

FRESH WATER FISHING

“A taper rod, a slender line,
A bait to tempt the fishes,
And in the shade of oak or pine
One may the wicked world resign
And all its sinful wishes.”

“A gamy fight, a landed prize,
Perhaps a bass to mention,
And tho' the world may advertise
'Twill never out of art devise
A parallel invention.”

“Oh wearied souls that sigh for peace
And search the town, e'er failing,
Here is unwatered bliss to lease,
With interest begging to increase—
And sou'west winds prevailing.”

BEYOND doubt the fresh water anglers greatly outnumber the devotees of salt water fishing. This is due in part to the fact that the vast majority of those fond of sport with rod and line find it easy to reach near-by lakes and streams, and brooks where the trout hide, while the ocean shores of the Atlantic and Pacific are far distant from the homes of the great host of rodsters residing in the interior region of this country of “magnificent distances.” When

the trout brook or the bass lake lies within a short distance, and a day's angling may be had with little effort and very light expense, it naturally follows, even though the lure of the sea and surf be irresistible to that portion of the Waltonian fraternity possessing the financial ability to gratify the desire, the multitude must be content in taking the fishes of the inland waters.

Natural preference for fresh water fishing is a deciding factor in many cases where anglers have tried both the sea fishing and the sport of casting for game fishes of the interior. There is a charm in the infinite variety of scenery, the activity of the pastime, whether it be along some cool, rippling brook, or in a light-running fishing boat on the deep blue waters of the lake, that appeals to countless thousands of enthusiastic fishermen and the fair devotees of the sport as well, for it is logical that the gentle sex should find the gentle art of angling a suitable recreation for leisure hours and healthful outings.

EARLY ANGLING LESSONS

THE country boy and the lad of the small village, while lacking some of the advantages of the youth living in the city, should realize that the opportunities for out-door recreation in field and forest, and the lake and stream, are priceless in bringing health and vigor; delightful in giving sport unattainable to the juvenile of a large city — if he would go beyond the local parks — except through considerable expense of time and money. The country lad of the present time is not obliged, as a rule, to resort to the primitive tackle, the oft-mentioned bent pin, thread line, and alder pole of other days. Fishing tackle of simple yet serviceable form may be purchased at such small expense that the boy who takes his first lessons of the running brook, and the school of fishes, need not lack an outfit of modern make.

Probably, on the smaller farms, there are many of the hardy little lads

who "play hookey" as did those of earlier generations, but the average parents of our time are more lenient than those of long ago, when the rod of birch was too often applied without mercy to the youthful angler on his return from using a rod — not much heavier — of hickory or birch at the brook, fishing for chubs and shiners. Now, the "barefoot boy with cheek of tan" is usually given permission to go a-fishing occasionally, and "his turned-up pantaloons, and his merry whistled tunes" serve to give the true local semblance of rural recreation, celebrated in song and story. Comparatively few fathers of farmer boys adopt the old adage, "spare the rod and spoil the child," as interpreted by stern parents of the olden time. More freedom is the rule in these progressive days, and the fond father is more likely to spare money to buy the rod — with other tackle — for use in fishing.

Nothing in later life can bring the thrill of joy, of exultation, that comes to the young disciple of Walton when

hooking and landing his first fish. It may be merely a fingerling, suitable in size for bait in catching a real game fish, but the scientific cast and catch of the salmon fisher can never awaken in him such ecstasy, such keen excitement, as that of the boy who has just brought to land his first finny prize from the brook with a jerk of the fishing rod, strong enough to throw the wriggling minnow into the grass far behind him. With heart and hands trembling under the thrill of victory the fisher-boy pounces upon his prey, grasps it with firm grip to prevent the possibility of escape, and with difficulty restrains the impulse to hasten home, that he may exhibit to a proud family circle the proof of his skill as an angler. In after years the veteran of the angling fraternity looks back upon early lessons and their enjoyment, and feels that "those were the happy days."

Careful instruction in minnow-fishing is not one of the things to be considered, but words of warning to avoid falling into one of the deeper

pools, in the great excitement of the sport, may, if heeded, prevent an involuntary plunge of perhaps serious consequence. Experience is the real teacher, and the errors caused by boyish zeal are overcome by degrees; yet the calmer achievements of cool calculation are not, after all, equal to the first success, followed, perhaps, by the very first home run in the boy's sport-loving career.

If fortune favors the beginner so greatly that he can take his primary lessons along a trout stream, the development is, of course, more rapid and the joy of learning far beyond that of a continuous early course in catching other small fishes of the brook — the little rill being the natural kindergarten for fishers — lake and river fishing to follow later, on the principle of safety first. The presence of a parent as "guide, counselor and friend," is desirable, in order to prevent serious accident where deep pools exist, and fortified first by the advice, then rewarded when successful by the approval of an elder angler,

the little novice has seemingly nothing else to wish except the triumph of often making a catch. As the lessons go on the fraternal spirit exceeds the paternal, possibly, on the part of the tutor on the fishing stream.

Even during these days of the primary course there are incidental hints and helps to be given, and on the other hand, the elder angler will, at times, be surprised and delighted to find that his pupil has discovered some more or less important thing concerning the fishes not known to the preceptor — perhaps a peculiarity in the habits, or a trait of an individual fish, overlooked by the preceptor. The pleasure of teaching the tutor is something not permitted in any other school of learning, but in the fellow-craft of fishing such familiarity does not breed contempt — far from it, if properly offered.

To treat or teach of trouting is not always possible in the school of piscatory. Many, indeed most beginners, must learn their lines and run the scale in studying the common

fishes, and casting about, so to speak, for the lowly dace, the humble bullhead, or others not even remotely allied with any of the royal families of fishdom. To begin at the bottom will, after all, bring wider range of knowledge, and a simple shiner is like a flash of silver in the stream, worth more than a silver dollar to the boy as a first finny trophy, and who shall say that the bullhead battling against capture is not a fish well worth taking. True, the homely bullhead bores toward the bottom instead of leaping upward out of the water in his struggle, but there is real excitement for the juvenile fisher in landing him, and something to be learned thereby.

On the larger streams and the lakes the lessons become more varied and, to the keen devotee of the art of angling, far more attractive than those followed in casting the lines for any of the smaller denizens of the brook — the trout excepted. Fishing for perch is an excellent pastime, and the smaller members of the bass family — the crappie or strawberry bass, the

rock bass, yellow bass, etc.— all afford good sport. Then there are the various species of pike and pickerel, sometimes of large size; the pike-perch or wall-eyed pike, the black bass of popular favor, and many other fish of lesser note, yet eagerly sought for and making the spice of variety in fresh water fishing, alluring alike to novice and expert.

Pleasant memories of boyhood fishing days are recalled in the practical lines written by Isaac McLellan, the poet-sportsman, under the title of "The Little Sunfish of the Brook," a poem so realistic that the veteran angler will find therein a pen-picture of his own youthful sport with rod and line:

"I remember those gay dawnings when life was
fresh and new,
The rising mist above the vale, the skies of
heavenly blue,
The old embowering groves kiss'd by the new-
born day,
The dew-wet twinkling grass, the wayside wild-
flowers gay.

I remember well the footpaths that to the brook-
let led,
The hazel-copse that o'er the lane a leafy arbor
spread;

The meadows rolling far their billowy waves of
green,
The upland pasture-lands, the valleys so serene,
And dearest spot, the little brook that runs so wild
a race,
Its pebbles white, its yellow sand, its merry,
dimpled face.

And here my little hazel rod was swinging above
the brook,
The line was cast in rippling whirl or in the
shaded nook;
For here the spangled sun-fish were tenants of
the pool,
Now darting singly in their play, now swarming
in a school.

It may be that the angler, equipped with tackle
fine,
With silver reel and bamboo rod, and woven-
silken line,
Who takes the springing brook trout and sea bass
by the score;
Or brings to gaff the salmon, along the ocean
shore,
Hath joy ineffable, and vast success to boast,
At Adirondack lakes, or Labrador's pale coast.

But never may his victories, at brook or salty tide,
Yield joy like that of boyhood, such glory and
such pride,
Such transports as enchant him, beside the wood-
land stream,
His spoil the little sunfish, his pride the yellow
bream.

Ah, never was such glory, such ecstasy of bliss,
Or such delicious rapture, such triumphant spoil
as this!

When all the grass was spangled, with finny
leaping gems,
Gems strung like precious rubies, on supple willow
stems.

They say, my little friend, that the ripple of the
stream,
With thy vermilion beauty, may no longer gleam.
That the golden yellow sides, that shine like
sunset glow,
Or the colors intermingled in the showery rainbow,
May never more be seen where the crystal waters
glide,
The clear pellucid waters that o'er the shallows
slide.

They say thou art a pirate, a brigand that doth
slay
The eggs and young of choicer fish that in the
waters play;
I know not if such charges for outlawry be true,
But none the less my symphies shall ever be
with you."

HOME FISHING WATERS

PROBABLY the majority of anglers overlook the great advantage to be gained by the construction of a fish pond, or by converting a little lakelet of pure water into a private fish preserve. This is usually thought to be something very expensive, to be afforded only by wealthy anglers and sportsmen, or the large clubs devoted to out-door recreation. As a matter of fact, where natural conditions are favorable, the expense of making a private fish preserve is comparatively small, and it should be borne in mind that when one considers the value of the wholesome fish food thus provided, the outlay will prove a good business investment, without regard to the excellent sport the angler-owner will enjoy, near at hand. This, of course, applies to those fortunate enough to own a farm, or even a few acres of property containing a little lakelet or pond, or a small brook running through the premises. There

are many such in various portions of the country requiring merely the introduction of game and food-fish best adapted to local conditions — the species to be selected ranging from brook trout and black bass, to the ordinary pike or pickerel.

Where neither brook nor pond exists on the lands, of course the expense and difficulties increase, in some cases to such an extent as to be prohibitive, but the aid of irrigation, when applied to this purpose, may overcome seemingly great obstacles, to the advantage of the owner in other respects than the propagation of fishes. A good artesian well, with modern windmill, may be made to supply the necessary water, and the fish pond, when it is completed, can perhaps be supplied with mature fish, carefully caught by net in some nearby waters, and brought to the home preserve in a small tank or a tub, filled with fresh water, replenished once or twice enroute, if need be.

It is, of course, well understood that

when an artificial fish pond is to be made, it should be constructed so that when complete, it will be as nearly like a natural pond or lake as possible; the nearest imitation to nature always being most successful. Pure water is absolutely essential, especially in preparing a trout pond, or a fish preserve to be stocked with small-mouth black bass; and careful analysis of the water in which other fishes are to be introduced, comparing this with analysis of the waters in which those species are known to thrive, will be helpful in making the experiment.

Often, during the period of overflow of rivers in spring-time, large numbers of excellent game fishes and food fishes are carried or swim into the flooded districts adjoining the streams thus inundated, a great percentage of these becoming landlocked as the waters slowly recede, and finally dying by thousands, to become a public nuisance, possibly causing a pestilence, if prompt measures are not taken to prevent. Such

cases offer the best possible opportunities for securing liberal supplies of mature fish with which to stock the private fish ponds, or restock depleted waters in the immediate vicinity, and at the same time benefit the general public in two-fold measure.

The small streams and little lakes fed by springs afford the best natural advantages for fish breeding, and it is surprising that many of these adapted in every way to the successful propagation of good game fishes are left in the condition of waste waters, so far as fish-life is concerned. The active assistance of the state fish commission may be relied on, almost invariably; in fact, where aid or advice is asked it is usually given in such prompt and practical manner that those inclined to be skeptical learn to appreciate the value of this branch of public service.

Before making any move toward establishing a fish-pond or private preserve, the co-operation of the state fish commission should be sought, to

the extent of asking for information which will be cheerfully supplied on request. Moreover, the Division of Fisheries, Department of Agriculture, at Washington, will furnish a useful booklet on this subject, upon application. Thus informed, the land owner will be prepared to proceed intelligently, and with assurance of still further assistance from the same sources, when this becomes necessary. Such opportunities should not be neglected.

NOMENCLATURE: GAME AND FOOD FISHES

THE scientific names of common fresh water game and food fishes, as well as minnows, may be found useful for reference:

Amer. Saibling (Golden Trout). *Salvelinus aureolus*.

Bass, Black, Large-Mouth. *Micropterus salmoides*.

Bass, Black, Small-Mouth. *Micropterus dolimieu*.

Bass, Calico, (Strawberry B.) *Pomoxis sparoides*.

Bass, Rock (Red-eye). *Ambloplites rupestris*.

Bass, Strawberry (Calico B.). *Pomoxis sparoides*.

Bass, Warmouth (Google-eye). *Chaenobryttus gulosus*.

Bass, White. *Roccus chrysops*.

Blob. See Miller's Thumb.

Blue-gill (Blue sun-fish). *Lempomis pallidus*.

Bream, Blue. See Bluegill.

Bream, Copper-nosed. See Blue-gill.

Buffalo fish. *Ictiobus cyprinella*.

Buffalo, Small-Mouth. *Ictiobus bubalus*.

Bullhead. *Ameiurus nebulosus*.

Burbot. Lee Lake Lawyer.

- Carp. *Cyprinus carpio*.
 Carp, Leather, C. *Carpio coreaceous*.
 Catfish, Channel. *Ictalurus punctatus*.
 Catfish, Miss. (Great cat). *Ameirus lacustris*.
 Catfish, Mud (Yellow cat). *Leptops olivaris*.
 Catfish, White. See Channel Catfish.
 Cisco (Lake Herring). *Leucichthys artedi*.
 Cisco, Moon-eye (Lake Shiner). *Leucichthys hoyi*.
 Chub (Dace). *Semotilus atromaculatus*.
 Crappie (New Light). *Pomoxis annularis*.
 Croaker. See Drum.
 Dace (Chub). *Semotilus atromaculatus*.
 Dace, Black-nosed. *Rhinichthys atromaculatus*.
 Dace, Horned. *Semotilus atromaculatus*.
 Darter, Black-sided. *Hadropterus aspro*.
 Darter, Blue (Rainbow D.). *Etheostoma coeruleum*.
 Darter, Blue-breasted. *Etheostoma zonale*.
 Darter, Fan-tailed. *Etheostoma flabelare*.
 Darter, Green-sided. *Dilpesion blennioides*.
 Dollardee. See Blue-gill.
 Drum (Sheeps head, Croaker). *Aplodinotus grunniens*.
 Eel. *Anguilla chrysoptera*.

Fallfish. See Chub.

Frostfish (Round whitefish). *Coregonus quadrilateralis*.

Golden Shiner (Roach). *Abramis crysoleucas*.

Golden Trout. *Salvelinus aureolus*.

Herring, Lake (Cisco). *Argyrosomus artemis*.

Herring, Toothed (Mooneye). *Hiodon tergisus*.

Horned-pout. See Bullhead.

Jack Salmon. See Pike-perch.

Lake Herring. See Cisco.

Lake Lawyer (Burbot; Ling). *Lota maculosa*.

Mascalonge. *Esox estor*.

Mascalonge, Unspotted. *Esox masquinongy*.

Miller's Thumb (Blob; Muffle-jaw). *Cottus rairdi*.

Minnow, Blue-nosed. *Pimephales notatus*.

Minnow, Fat-head (Black-headed). *Pimephales promelas*.

Minnow, Mud. *Umbra limi*.

Minnow, Red-bellied. *Chrysomus erythrogaster*.

Minnow, Spring. *Fundulus diaphanus*.

Muffle-Jaw. See Miller's Thumb.

Perch, Yellow. *Perca flavescens*.

Perch, White. *Morone Americana*.

Pickrel, Banded. *Esox Americanus*.

Pickrel, Chain. *Esox reticulatus*.

Pike. *Esox estor*.

Pike-Perch. *Stizostedium vitreum*.

Pumpkin-seed. See Sunfish.

Roach (Golden Shiner). *Abramis cryseleucas*.

Sand-pike (Sauger). *Stizostedeon Canadense*.

Sand-roller (Trout-perch). *Percopsis guttatus*.

Salmon, Atlantic. *Salmo salar*.

Salmon, Land-locked. *Salmo salar sebago*.

Shad. *Alosa sapidissima*.

Shad, Hickory (Mud shad). *Dorosoma cepedianum*.

Sheepshead. See Drum.

Shiner, Big-eyed. *Notropis ariommus*.

Shiner, Lake (Moon-eye cisco). *Leucichthys hoyi*.

Shiner, Red-fin (Dace). *Notropis cornutus*.

Skip-jack. *Pomolobus chrysochloris*.

Stoneroller. *Catostomus nigricans*.

Sturgeon. *Acipenser brevirostris*.

Sturgeon, Lake. *Acipenser rubicundus*.

Sturgeon, Shovel-nose. *Schphir hynchus platyrhynchus*.

Sucker. *Catostomus commersoni*.

Sucker, Carp. *Carpiodes cyprinus*.

Sucker, Northern (Long-nosed). *Catostomus catostomus*.

Sucker, Red-horse. *Moxostoma macrolepidotum*.

Sucker, Small-headed. *Maxostoma breviceps*.

Sucker, Winter (Spotted S.). *Minytrema melanops*.

Sunfish, Blue. See Blue-gill.

Sunfish. *Eupomotis gibbosus*.

Sunfish, Green. *Lepomis cyanellus*.

Sunfish, Long-eared. *Lepomis megalotis*.

Sunny. See Sunfish.

Trout, Black-spotted (Red-throat). *Salmo mykiss*.

Trout, Brook (Speckled T.). *Salvelinus fontinalis*.

Trout, brown. *Salmo fario*.

Trout, Lake (Salmon T.). *Cristovomar namaycush*.

Trout, Mountain. See Rainbow Trout.

Trout, Rainbow. *Salmo irideus*.

Trout-Perch (Sand-roller). *Percopsis guttatus*.

Trout, Steelhead. *Salmo gairdneri*.

Tullibee (Whitefish). *Leucichthys tullibee*.

Whitefish. *Coregonus clupeiformis*.

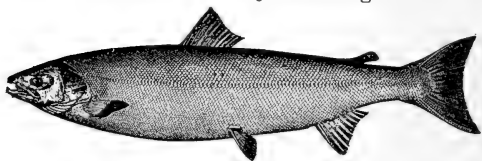
Whitefish, Labrador. *Coregonus labradoricus*.

Whitefish, Menomonee (Round W.). *Coregonus quadrilateralis*.

Whitefish, Round. See Frostfish.

THE SALMON

“Cold, these rivers, as the fountains
From the wilderness that flow,
Cold as waters of the mountains,
Gelid with the ice and snow.
There amid the soft abysses,
Or the river's spring-fresh tide,
Gleaming, flashing, leaping, diving,
Shoals of lordly salmon glide.”



Atlantic Salmon.

A RIGHT royal member of the family of game fishes is the lordly salmon, king of the freshwater species by right of size and quality as a fighter for freedom when hooked, and the prime favorite of a necessarily limited class of anglers, as salmon fishing is a branch of the sport not to be indulged in by men of small income, on account not merely of the cost of the outfit, but more particularly by reason of the expense of leasing a suitable stretch of water, employing an expert boatman, and other incidentals in keeping with the

princely pastime. Moreover, financial ability is not the only requisite, for it is not every lover of angling that is able to handle the mighty salmon, or wield the two-handed rod in a manner to do justice to himself and the nerve-testing sport.

Authorities differ as to the original habitat of the salmon, whether it has always divided its time by dwelling in salt water during a portion of the year, and ascending the rivers annually, in spring-time; or whether the entire family *Salmonidea* formerly inhabited fresh water exclusively. A studious angler-naturalist states that "the original habitat of the *Salmonidea* was in fresh water, and it is the sea salmon which has become erratic — the disturbances of the glacial period having driven them out of their primitive inland possessions. But in obedience to the law of evolution which requires posterity to pass through the same biological changes as their progenitors did, all salmon must be born and live for a time, at least, in free water; hence we find

our sea salmon coming into the rivers and spending a large portion of their time in fresh water, seeking there a change of diet and hygienic treatment against parasites and fungus."

The question is of special interest to students of ichthyology, but of greater practical interest to salmon fishers is the fact that, for whatsoever cause, the fish do visit the large streams every year, and that for the most part it is the Atlantic salmon, reaching the Canadian rivers, on which the angler must depend for his sport, while the Pacific salmon, ascending the Columbia and other large streams of the Western coast, provides the commercial supply with which the public is familiar.

Scientists thus describe the Atlantic salmon — regarded as the best game fish of the several allied species: "Body moderately elongate, symmetrical, not generally compressed; head, rather low; mouth, moderate, the maxillary reaching past the eye; scales, rather large, largest posteriorly, and silvery in appearance; col-

oration in the adult, brownish above, the sides more or less silvery, with numerous black spots on sides of head, on body, and on fins, and red patches along the sides in the males; young specimens (parrs) with about eleven dusky cross-bars, besides black spots and red patches, the color as well as form of the head and body varying much with age, food and condition; the black spots on the adult often x shaped, or x x shaped; weight, fifteen to forty pounds. North Atlantic, ascending all suitable rivers and the region north of Cape Cod; sometimes permanently land-locked in lakes, where its habits and colorations (but no specific characters) somewhat when it becomes, in America, var. *Sebago*."

It is worthy of note that some two hundred years ago the Hudson was a fine salmon stream, but the current and tide of the time combined, now leads to fortune rather than fishing, and the same is true of other large rivers along the North Atlantic coast, southward of the Canadian border,

so that anglers of the United States must be content with land-locked salmon fishing or go to the far-famed, far-off Saguenay, Restigouche, Cascapectia, St. John, or other distant rivers — literally “dear delights” — to the north of the St. Lawrence, for sport of King Solomon. During the past year salmon fishing with rod and reel has proved successful on the Pacific coast.

It may be possible that the nationwide crusade against pollution of river and the liberal attention given to all that relates to conservation, fish culture, and the restoration of public resources now lost or waning, the lowly Hudson might be so purified as to become once more, in some degree, a salmon stream, realizing the fond anticipations of the late A. N. Cheney, who gave this subject careful study and devoted to it earnest work worthy of better success than he attained while a member of the State Fish Commission. But that is another story.

To attempt to give instructions on

salmon fishing would be beyond reason, in a brief summary of the merits of this fish and the pleasure of catching. That accomplished writer and keen angler, the late Charles Hallock, in his admirable book entitled "The Salmon Fisher," has given a most entertaining as well as instructive treatise on the subject, and the same may be truthfully said of Henry P. Wells' practical work, the "American Salmon Fisherman,"—two volumes deserving high commendation to all those wishing such instruction as printed lines may afford, preliminary to casting the line and lure for the game fish referred to.

The charm of salmon fishing has been so aptly described by George Dawson that his story of the cast and capture is well worth repeating: "I had marked the spot where the fish had risen, had gathered up my flies for another cast, had dropped the fly, like a snowflake, just where I desired it to rest, when, like a flash, the same enormous head appeared, the same open jaws revealed themselves, a

swirl and a leap and a strike followed, and my first salmon was hooked with a thud! which told me as plainly as if the operation had transpired within the range of my vision, that if I lost him it would be my own fault. When thus assured, there was excitement, but no flurry. My nerves thrilled and every muscle assumed the tension of well-tempered steel, but I realized the full sublimity of the occasion, and a sort of majestic calmness took the place of the stupid unction which followed the first apparition. My untested rod bent under the pressure, in a graceful curve; my reel clicked out a livelier melody than ever came from harp or hautboy, as the astonished fish made his first dash; the tensioned line emitted Aeolian music as it stretched and stiffened under the strain to which it was subjected; and for fifty minutes there was such a giving and taking, such sulking and rushing, such leaping and tearing, such hoping and fearing, as would have 'injected life into the ribs of death,' made an anchorite

dance in very ecstasy, and caused any true angler to believe that his heart was a kettle-drum, every sinew a jew's-harp, and the whole framework of his excited nerves a full band of music. And during all this time my canoeman rendered efficient service in keeping even pace with the eccentric movements of the struggling fish. 'Hold his head up, if possible!' was the counsel given me, and 'make him work for every inch of line.' Whether, therefor, he took fifty yards or a foot, I tried to make him pull for it, and then to regain whatever was taken as soon as possible. The result was an incessant clicking of the reel, either in paying out or in taking in, with an occasional flurry and leap, which could have been no more prevented than the onrushing of a locomotive. Any attempt to have suddenly checked him by making adequate resistance would have made leader, line or rod a wreck in an instant. All that it was proper or safe to do was to give each just the amount of strain and pressure it could bear

with safety — not an ounce more nor an ounce less — and I believe that I measured the pressure so exactly that the strain upon my rod did not vary half an ounce from the first to the last of the struggle. Toward the close of the fight, when it was evident that the ‘jig was up,’ and I felt myself master of the situation, I took my stand upon a projecting point in the river, where the most favorable opportunity possible was afforded the gaffer to give the struggling fish the final death thrust, and so end the battle. It was skillfully done. The first plunge of the gaff brought him to the greensward, and there lay before me, in all his silver beauty and magnificent proportions, my first salmon. He weighed thirty pounds, measured nearly four feet in length, and was killed in fifty minutes. It is said that when good old Dr. Bethune landed *his* first salmon, ‘he caressed it as fondly as he ever caressed his first-born,’ I could only stand over mine in speechless admiration and delight — panting with fatigue, trembling in very ecstasy.”

LAND-LOCKED SALMON

“On, in our birch canoe we listless float,
Now in the sunshine, now in shadows lost,
Where great Spruce Mountain casts its inky
shade,
And the dim depths seem fathomless.

“A wild duck, startled from the cove, sweeps by;
Zigzag a kingfisher flies, shrill-screaming, past;
From up the lake come hoarse cries of a crane,
And melancholy wail of lonely loon.
All these the boatman notes with dreamy sense,
And then anon he takes his tapering rod
And casts his feather'd lures with skillful hand;
He takes the lordly salmon and the trout
That in the watery abysses float.”

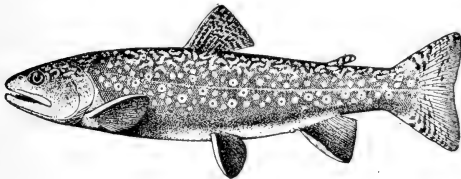
THE land-locked salmon, as the name implies, is to all intents and purposes identical with the salmon of the sea — the migratory game fish so eagerly sought as it ascends the Canadian streams of the St. Lawrence region — the species inhabiting the inland lakes differing mainly in the fact that for some reason the early progenitors remained in fresh water, and this has finally become the natural habitat. The local names applied as a rule, in Maine, to conform to the lakes in which they are found, seem confusing to the novice. A few of the titles used are the Penobscot

Salmon, Sebago Salmon, Schoodic Salmon, Lake Salmon, Lost Salmon, etc.; while in the Lake St. John and Upper Saguanay region; province of Quebec, it is voluntarily known as the Winninish, Ouananiche, and Wananishe. In his entertaining as well as instructive work, "The Leaping Ouananiche," descriptive of this game fish, its haunts, habits, and the methods of taking it with rod and line, the author, Eugene McCarthy, adopts the name given in the title of the book, wherein he proves the correctness of this, and the fact that the fish is as great an aquatic acrobat as the salmon of Canadian rivers.

For some reason the natives of Labrador, New Brunswick and Nova Scotia, call the land-locked salmon a "grayling," yet there is little if any resemblance to the delicate fish of that name. There are other appellations, less commonly used, but the foregoing are those most frequently applied when referring to this excellent game fish.

THE BROOK TROUT

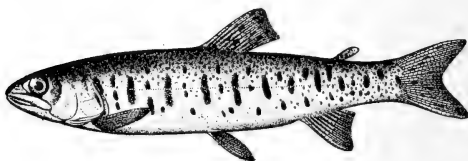
“Here where the willowy thickets wave
Their drooping tassels beneath the wave,
Their lies a deep and darken'd pool
Whose waters are crystal-clear and cool;
It is fed by many a gurgling fount
That trickles from upland pasture and mount,
And where the tree-shadows fall dense and dim,
The glittering trout securely swim.”



Brook Trout.

OF all the strictly fresh water fishes the brook trout or speckled trout of the streams throughout a great portion of the northern states, is by a majority of anglers regarded as the prince of game fish. It is the combination of rare beauty of form and color, game quality of the first order when hooked, and delicious flavor when served at table, that gives this fish — appropriately termed “the salmon of the fountain” — its place at

the head of fresh water game fishes. Volumes have been written concerning the brook trout, its haunts, habits and scientific characteristics, so that its history is an open book to those who study the subject from the angle of the printed page, but the hosts of enthusiasts fond of trout fishing find the lessons of the running brook, with



Yellowstone Trout.

the leaves overhead, more fascinating than any instruction or description given by even the most graphic writer.

The brook trout may be regarded, on the score of gameness as well as in relationship, as a small salmon, with this difference in its favor, the beautiful tints of red and gold and silver make the speckled trout far superior in appearance to the larger species in the Canadian rivers, and fortunately

for the trout fisher the science of artificial fish culture has advanced to such an extent that depleted streams are replenished, and even the brooks formerly barren of these game fish, have been stocked so that where natural advantages exist, the local, state and federal hatcheries have in many instances supplied the deficiency, to the benefit of the public in general, and the angling fraternity in particular.

In size the genuine brook trout reaches ten pounds or more, the largest specimens being found in the waters of the big rivers of Maine, the far-famed Nipigon, over the border in Canada, and the cold waters of similar streams and some of the lakes near the northern boundary of the United States. The average, of course, is much smaller, and in the ordinary trout stream a gamy specimen of one pound is a prize, while a two-pounder is of greater rarity, and a three-pound fish something to awaken the envy of all local rodsters.

Learning the art of angling for

brook trout is usually of the progressive order, upward from the primitive form of fishing with the ordinary angle worm, or "garden hackle," and rod and line of simplest style. With such tackle and lure the lad who loves the sport soon becomes quite an expert, and from catching at first the small, unwary members of the *salvelinus fontinalis* family, he acquires a degree of skill enabling him to hook and land the elusive monarchs of the brook. With increasing knowledge of the fascinating art, the Waltonian disciple naturally aspires to finer appliances, and when supplied with artificial flies, rod and line and reel of approved make, the glory of getting a rise with lure of the feather and tinsel brings the enthusiast a foretaste of the delight in store when he shall have won the coveted degree of M. A., or Master of Angling. The manner of casting is briefly described in the chapter, "How to Cast a Fly."

In trout fishing, more perhaps than in any other form of angling, great caution is the price of success, for

skill in casting counts for nothing if the trout be frightened, lurking in the depths of the pool, or hidden beneath the bank of the stream, warned of danger by vibration or some movement of the awkward fisherman. Good advice was given long ago by some fishing philosopher who declared one should show as much of his lure and as little of himself as possible. To make the fly fall lightly, to imitate nearly as possible the motion of the natural fly, to move noiselessly, to avoid casting of shadows while casting the lure, and to drop the feather hook accurately on the spot where the fish has risen or is expected to rise; these are a few of the secrets of success well known to veterans of the fraternity.

The knowledge of where to fish is as important as knowing how to fish, as it is self-evident one cannot catch trout where there are none, and experience, or reliable instruction as to the likely pools where the trout hide, must be gained in order to make a fair showing, especially in localities

overfished, the educated trout being doubly difficult to approach, and still harder to attract and bring to basket. Wisdom as to the probable haunts will prove useful, of course, but it has often been demonstrated that the man or boy knowing precisely the places where the big fellows of bright colors and suspicious nature have their abiding pools, will win in a walk — so to speak — along the banks of the brook.

Another essential point is to know when to fish — a matter worth careful consideration. Experience in this, as in other things, is the best teacher. It is an old truism that the best time to catch fish is when the fish will bite, but in this respect the finny tribe, individually, if not collectively, seems variable as the April weather during the early days of the open season for trouting. One soon learns that fishing, when the water is high and discolored from heavy rains, will prove a delusion and disappointment; that angling at mid-day, under a hot sun, is likely to be unpleasant and unsuc-

cessful; but there are many things in regard to what may be termed the "taking times" of the day, or of the season, and as to the particular stream you intend to whip in the eager race for good fishing, that can be learned only by patience and persistent study at first hand.

Having mastered, as nearly as possible, the three great problems of how, where and when, no keen devotee requires a word as to the "why" of trout fishing. Probably Sir Edgerton Brydges gave convincing analysis as any when he said of recreation with rod and gun:

"It is a mingled rapture, and we find
The bodily spirit mounting to the mind."

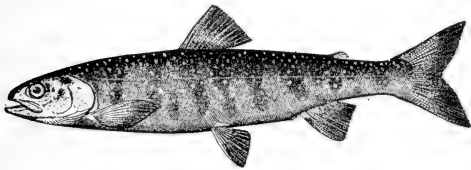
The special advocates of this branch of angling may perhaps feel inclined to alter a well-known saying, by declaring that God doubtless might have given to mankind a better pastime than that of fishing for brook trout, but it is certain that God never did. The place of honor, in the annals of angling, is usually given to this hand-

some game fish, over all fishes of fresh water — the salmon excepted, and some writers are inclined to give the latter doubtful credit in this line, from the fact that, although the sport of salmon fishing is pursued on inland waters, the sea is the habitat for the greater part of the year, therefore this royal member of the popular family of fishes is, from the viewpoint named, not strictly a rival of the bonnie brook trout.

And so, without attempting to decide the relative claims of the two species of magnificent fresh water fish, or prove the full right of the salmon to recognition as a game fish of this class, although, in truth it is seldom pursued with rod and line in the sea — the trout fisher may well go on his way rejoicing in a pastime delightful to men of fame in all walks of life from an era long previous to that of Isaak Walton, down to that of Daniel Webster, and later, of many notable Americans.

Of the famous trout lakes in Maine and the Adirondack region in north-

ern New York, where brook trout of great size were formerly taken, it must be said that while fair fishing may be had it would be unreasonable to expect to duplicate such catches at the present time, but the prestige at least remains with Parmachenee Lake and the Rangeley Lakes in the first named state, while perhaps bet-



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Saibling Trout (Long Fin Charr).

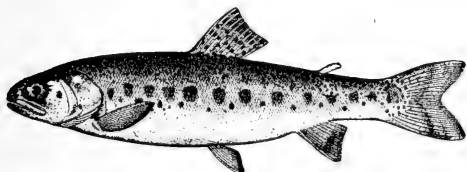
ter fishing may now be had in less celebrated waters, and this applies also to the trouting in the North Woods of New York, for the celebrity of the Ausable, the Chateaugay and Saranac region cannot bring back the splendor of the golden days of trout fishing. Fortunate indeed are those of the angling fraternity who find fair sport in home waters, and doubly blest are they who strive to maintain

the quality of the fishing by restocking the streams and aiding in stringent enforcement of the laws restricting the taking of game fishes.

Angling literature gives prominence and precedence to the brook trout. Notable among the entertaining as well as instructive books on this subject are Kit Clarke's "Where the Trout Hide," Charles Bradford's "Determined Angler and the Brook Trout," Louis Rhead's admirable treatise, O. W. Smith's "Trout Lore," and last, but by no means least, Southard's comprehensive work entitled "Trout Fly Fishing in America." Any and all of these are well worthy of a niche in the trout fisher's library.

RAINBOW TROUT

IN former years the rainbow trout, often called Mountain trout, was found only in the streams west of the Rocky Mountains, where it has long been regarded as a leader among fresh water game fishes. Some twenty years ago the rainbow trout was introduced in Eastern streams, especially the brooks and smaller rivers of New Jersey and New York, where it has



Rainbow Trout.

thrived and is now eagerly sought. In general formation and size it resembles the brook trout, and in game qualities is probably equal — some anglers claim it superior — to the speckled favorite, or “salmon of the fountain,” but in colors the western fish, with its tints suggestive of the rainbow, does not approach the

beauty of the red, gold and silver spangled trout so dear to the angler's heart.

In business life, rainbow chasing is almost certain to prove both disappointing and disastrous, while following the rainbow along the trout stream is delightful, and dear in the best sense of the word. The cobblestones of the stream are, therefore, preferable to the curb stones of Wall Street, so far, at least, as chasing the elusive rainbow is concerned. Even at the worst, a broken rod signifies less than a badly broken bank balance.

The tackle and methods employed in fishing for the mountain trout are practically identical with those used in brook trout fishing. As both species inhabit the same streams in many if not most cases, in Eastern streams, special instructions or suggestions are not required, beyond those offered with reference to the speckled trout.

Referring to the game qualities of the rainbow trout, Prof. Evermann, a close observer and keen angler,

says: "The rainbow takes the fly so readily that there is no reason for resorting to grasshoppers, salmon eggs, or other bait. It is a fish whose gameness will satisfy the most exacting of expert anglers, and whose readiness to take any proper line will please the most impatient of inexperienced amateurs."

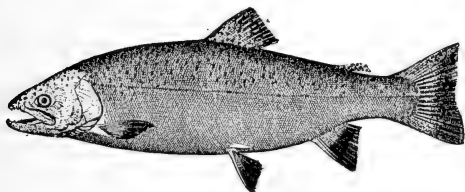
OTHER SALMON AND TROUT

OF the Pacific salmon several species exist, but most of these are known only as food fishes, ascending the large rivers, such as the Columbia, for the purpose of spawning, and usually refusing to take either live bait or artificial lures, but instances have been recorded—especially during the past year—of catching the salmon of the Pacific coast, with rod and line, in a really scientific manner. The generally recognized game fishes of the trout family, aside from those heretofore mentioned, are as follows:

Steelhead Trout

The steelhead, like the Pacific salmon, is a sea fish, visiting the rivers to spawn, but unlike the larger species, it is a game fish, does not go far out to sea, and in fresh water is a high leaper, affording good sport to anglers. Dr. Jordan, an accepted authority, gives the steelhead an honored place in the salmon family, stating that salmon trout is a suitable name for it. The fish is silvery

in color in salt water, but spots appear on it after a short time in fresh water, making it resemble more nearly a trout of the lakes. In weight, the range is from two to twenty-five pounds; the run in fall, September and October, averaging about three pounds; in winter, December and January, run ten pounds or larger,



Steel-head Trout.

those of largest size being taken at this time. The steelhead salmon do not die after spawning.

Dolly Varden Trout

This beautiful species, bedecked with large crimson dots, is found in the upper Sacramento and its tributaries, the upper Columbia, the McCloud River and tributaries; and those of the region north of Puget

Sound are of migratory habits, running to the sea, thus losing the bright colors, and resembling to some extent the steelhead. It is a fine game fish, known in California as the Dolly Varden, in Alaska as the salmon trout, and in Washington, the "bull trout." The weight varies, according to locality and conditions, the largest running up to ten pounds.

Golden Trout

Several species of the golden trout are recorded, varying little in formation and general characteristics, all showing game qualities of high order, and the rich golden tints from which the name was derived. Dr. David Starr Jordan was first to classify and describe, in scientific manner, the golden trout of the Pacific coast, small in size, but an eager biter, so much so that on account of the rather diminutive size and remarkable beauty, the catching of any was prohibited for a time shortly after identification of the several species. These are the *Salmo agwa bonita*, so named by Jor-

dan, a species found in the south fork of the Kern and its small tributaries; *Salmo whitei*, Evermann, from the stream called Soda Creek; and *Salmo Roosevelti*, taken in the Volcano Creek.

Cut-throat Trout

This species, called the cut-throat from the red dash of color below the under jaw, has a range from Alaska in the far north, to California, and eastward to Montana. It has been claimed that this is in all probability the oldest of American trout, and it is not only a handsome fish, but a vigorous fighter when hooked; usually found in swift portions of the brooks, and lending life and color to the streams as it darts through the crystal-clear waters. In form it is much like other species of trout, the head, however, being longer in proportion, and the body is fully spotted. It spawns in spring.

Lake Trout

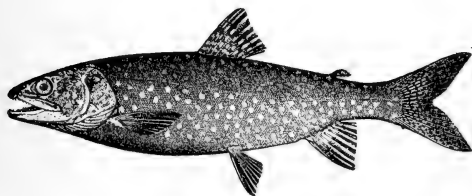
The natural habitat of the lake trout is the waters of the Great Lakes,

and other large lakes of the north. Its favorite haunts are the deep portions, from which it comes at times in quest of such food as small fish, etc., usually in early morning and at the evening hour, when the artificial fly can occasionally be used successfully. Ordinarily the best method of catching the lake trout is with medium tackle, trolling with a minnow, in deep water. For this a stiff rod is required, and heavy sinkers; although the use of these may be avoided by using a braided wire line in deep trolling, the weight of the line being sufficient to take the bait down to the necessary depth. Still-fishing with live minnows will be found successful at times. The lake trout, inhabiting also some of the large lakes of Maine, attains a weight of twenty pounds in rare instances.

Mackinaw Trout

Another species of northern trout, reaching still greater size than the one above named, is the Mackinaw trout, common in the Great Lakes,

Superior to Ontario, as well as in other big lakes of that region, particularly Lake Champlain, New York, and also in the Mackinaw River, from whence it took the name. It is found likewise in Alaska. In Lake Superior, Lake Huron, and Lake Michigan, this fish is called the Mackinaw trout; in the lakes of northern New York it is

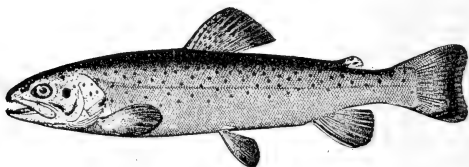


Lake (Mackinaw) Trout.

known as the lake trout. Very large specimens are sometimes taken, up to nearly ninety pounds, and a length of six feet, it is claimed. The favorite haunts are in deep water, and the successful method of fishing is trolling with copper wire line and live bait, minnows, etc.

The Brown Trout

The brown trout, a European species, introduced in American streams a number of years ago, is very hardy and has multiplied greatly, in the brooks and small rivers of a few eastern states, especially. Opinions differ with reference to its desirability or practical benefit as an addition to the



Brown Trout.

game fishes of the fresh waters of the United States, in streams where native trout naturally thrive. The brown trout is very combative, a vigorous fighter, whether in contest with trout of other species, or when hooked, therefore, although not so handsome as either the speckled brook trout or the rainbow trout, it is likely to be the survivor in a finish fight with the two native species, according to observa-

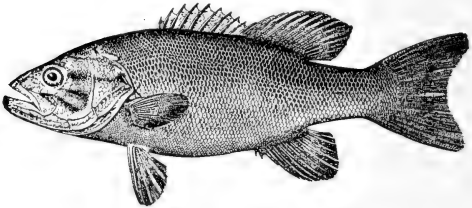
tions of anglers who have studied the problem. In streams not adapted to either speckled or rainbow trout, the brown trout would certainly be a really desirable game fish, as it rises readily to the fly, and its gameness is undeniable. It was first planted in American waters in 1883.

THE BLACK BASSES

The Small-mouth Bass

“The little-mouth has little scales,
There’s red in his handsome eye,
The scales extend on his vertical fins,
And his forehead is round and high.

“His forehead is round and high, my boys,
And he sleeps the winter through;
He likes the rocks in the summer time—
Micropterus dolomieu.”



Little-Mouth (Black) Bass.

HIGH in the list of favorite fresh water game fishes is the black bass, foremost, in fact, as viewed by that eminent angler-author, Dr. James A. Henshall, whose assertion that it is “inch for inch and pound for pound the gamest fish that swims,” has become the slogan of thousands of anglers who prefer black bass fishing to any other form of sport with rod and line. Of the fighting character of

this fish—boldness in biting, fierce resistance in fighting to the last gap—there can be no doubt, and that it is a good food fish is also true, and combination of these qualities surely entitles the black bass to a most favorable, though not necessarily a premier, position among the game fishes of America.

Classified as one of the favorite fresh water fishes, the black bass ranks on a par with the justly prized striped bass or rock-fish as to game-ness, but does not reach the size of the latter—a game fish of the first water, whether it be the sea or river, for the latter is often taken in the ocean as well as in tide-water streams.

Of the two species of black bass, possibly the small-mouth may be considered preferable, being more active than the large-mouth of extreme size which it attains in southern waters, but in the cold lakes and rivers where both are found, probably little, if any difference can be determined on the score of game qualities. The distinguishing features of the small-

mouth species are clearly set forth in the foregoing clever rhyme of Fred Mather — a fish culturist, expert angler, and angling author.

Fifty years ago the black bass was held in slight esteem by most anglers, in fact, generally considered one of the coarse species, grudgingly admitted to be fit for food, but hardly measuring up to the standard of a true game fish. The fault, evidently, lay with the fishers instead of the fish, as the method of taking then in vogue was usually of the coarse, if not clumsy kind, and skillful, scientific black bass fishing an unknown branch of the art to the multitude. A few ardent anglers of advanced ideas, it is true, studied the habits and characteristics, thus discovering the fact that the sport was remarkably attractive when properly pursued, but it remained for Dr. James A. Henshall, the recognized "Apostle of the Black Bass," to enlighten the fraternity concerning the really high rank to be accorded the closely allied species of bass, and bass fishing. Earlier

authors — authorities in their day — had little to say regarding the fish now so warm a favorite, and that mere mention was usually in disparagement of the “bronze-back knight in armor.”

The color of the bass, varying little, if any in the two species, is dark bronze green, the shading differing slightly according to the waters — lighter in the crystal-clear lakes and streams than in those of very dark, seemingly almost inky-black appearance. A two-pound black bass gives a good fight for life and liberty, while the five-pounder — near the maximum size for the small-mouth species in most of the northern waters — battles in proportion to additional weight, demonstrating to a degree Dr. Henshall's claim as to its being the gamest fish that swims.

During the season when the genuine flies are hovering over the waters, the black bass rises readily to the well-cast artificial fly, and this, of course, affords the angler the very acme of bass fishing. Live minnows are excel-

lent bait, while the frog, worm, crawfish, or helgramite are often equally attractive, and imitations of these in artificial lures are not by any means refused when the bass happens to be in a taking mood; the "plug" often proving one of the best baits obtainable.

The range of the black bass is about half nation-wide, no fresh water game fish having a much more extensive distribution, probably none so general a habitant of waters east of the Mississippi. Artificial propagation has done much with this, as with other desirable game and food fishes, to extend the distribution far beyond the original or natural range, and in nearly all waters adapted to their adoption, and not pre-empted by some species of the trout family, fish hatching has enabled anglers to revel in fish catching, with the black bass providing the sport-giving incentive. The bass are most abundant in Michigan, Minnesota, Wisconsin, New York, New Jersey, and Canada.

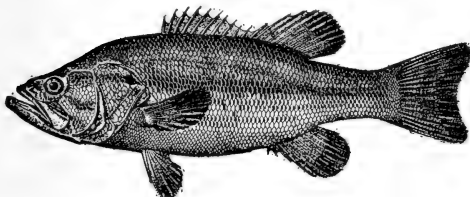
Many local names have been given

to the small-mouth black bass, the most commonly used of these appellations being Jumping Bass, Leaping Bass, Bronze-Backer, Marsh Bass, River Bass, Slough Bass, Little-Mouth Bass, Green Bass, and Spotted Bass.

Large-mouth Bass

"The big-mouth has the biggest scales,
And a pit scooped in his head,
His mouth is cut behind his eye,
In which is nary a red.

"In his eye is nary a red, my boys,
But keen and well he sees,
He has a dark stripe on his side—
Micropterus salmoides."



Big-Mouth (Black) Bass.

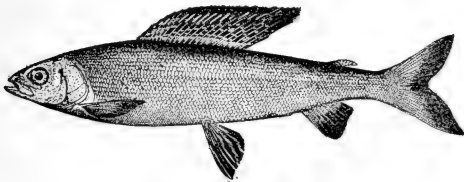
The large-mouth black bass, differing as above indicated from the small-mouth species, is found in the same waters—although it is possible the range extends farther southward—

and in a general way the methods of fishing are identical. In warmer waters the black bass is not ordinarily as active, and this applies likewise to nearly all fishes of the inland lakes and streams. Popular local names for the large-mouth bass are Oswego Bass, Moss Bass, Welshman, Green Perch, and the nicknames before mentioned in referring to the small-mouth species. Specimens weighing up to eight pounds are occasionally caught, and it is recorded that a large-mouth of twenty pounds was once taken in Florida.

THE GRAYLING

“I wind about, and in and out,
With here a blossom sailing,
And here and there a lusty trout,
And here and there a grayling.”

TH**ERE** is something ethereal almost, in the graceful form, waving dorsal of tri-color, and dainty tints of the grayling; and this deli-



Michigan Grayling.

cate appearance may seem to be in keeping with the regrettable fading away of this choice “flower of fishes,” in streams where it was once found in profusion — the rivers and brooks of Northern Michigan. Angling writers first brought the grayling of American waters to public notice about seventy years ago, and for a time there was confusion as to its

place in the family of fishes, but ichthyologists on investigation declared it to be a true type of this species, and the rush of eager anglers followed; but the real reason for its rapid disappearance is doubtless the work of sawmills in filling the streams with sawdust and other refuse fatal to fish of such delicate organism. It is stated, too, that the brook trout, inhabiting the same streams, preyed on the grayling as it became weakened by conditions mentioned, and thus hastened the destruction, so that many believe grayling fishing in Michigan is practically a thing of the past, so far as finding any considerable number is concerned.

In form the grayling is more slender than the trout, and in weight it rarely exceeds one and a half pounds, the distinguishing feature, however, being particularly its magnificent dorsal fin, extending nearly one-fourth the length of the fish, and of tri-color, dotted with purple spots, giving it the appearance of a waving banner when the grayling darts through the water

in arrow-like rushes. The body colors are delicate shades of silver gray, olive brown and pale blue. Describing this beautiful fish an authority on the subject says: "The sun's rays, lighting up the delicate olive-brown tints of the back and sides, the bluish-white of the abdomen, and the mingling of tints of rose, pale blue and purplish-pink on the fins, display a combination of colors equaled by no fish outside of the tropics."

The propagation of the grayling is attended with much difficulty, on account of the delicate organism of this fish, but fortunately for the anglers of America, Dr. James A. Henshall — best known as the highest authority on the black bass — demonstrated the fact some twelve years ago that this form of fish culture could be made successful. To make the propagation beneficial to the public, however, the placing of the young fish in the streams must be done with rare good judgment, otherwise those who make the experiment will have merely their labor for their pains.

In Montana the grayling is still found in limited numbers, and the Alaska species is reported to be quite abundant in certain streams. With the knowledge to be gained by careful study, and through the co-operation of modern fish culturists who may make a special feature of this interesting branch of the science, it is hoped this remarkably handsome game fish may yet be restored to some degree of the former abundance in the waters of Michigan, in Montana, and if possible, in other portions of the northwestern states where cold, clear, spring-fed streams provide natural conditions of apparently the most favorable kind.

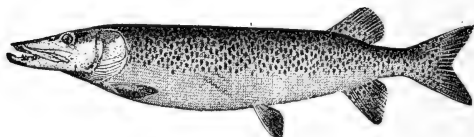
The European grayling has long been known and admired, but on this side of the Atlantic, as before stated, it was not supposed to exist, except in the far north, where, as Dr. Richardson says, with reference to its local name and appearance: "The Esquimaux title (Hewlook Powak) denoting 'wing-like fin,' alludes to its magnificent dorsal; it was in refer-

ence to the same feature that I bestowed upon it the specific appellation of *Signifier*, 'the Standard-bearer,' intending also to advert to the rank of my companion, Captain Bach, then a midshipman, who took the first specimen we saw with an artificial fly." In honor of Captain Bach, the game fish had been named Bach's Grayling, as indicated in Dr. Richardson's comment.

THE MASCALONGE OR MUSKALLONGE

“For earliest sport try the waters in May,
The mascalonge then will be leaping in play,
But better, by far, is the fishing in June,
When weirdly re-echoes the cry of the loon;
Or, if you prefer the sweet by and by,
Bring the rod and reel in sultry July.”

LARGEST and most eagerly sought of the various members of the pike family is the mascalonge of the northern lakes and rivers. This giant of the species is a game fish of high



Maskinonge.

order, not by any means ranking with the trout or the black bass in genuine game qualities, but as the tiger of the fresh waters he is credited with great fighting power and equal determination in resisting capture while strength lasts, therefore he is the acknowledged head of his clan. In the far northern portion of the United

States and in Canada, the name maskinonge is a common designation, while in other sections the term muskallunge, or mascalonge, is more frequently used. The name is from the French masque allonge (long face), and maskinonge, the Chippewa term, has nearly the same meaning.

No other game or food fish found in fresh waters of the United States approaches this king of the pikes in size. Dr. E. Sterling mentions having speared one, nearly eighty years ago, weighing eighty pounds, and in recent years specimens of forty to fifty pounds in weight have been caught in trolling, the usual method of fishing for these fish. However, the fisherman fortunate enough to hook and land one of twenty pounds is considered to be entitled to hearty congratulations.

The mascalonge closely resembles the larger pike in most respects, but can be readily identified by examination of the gill covers, the lower half of the cheek being destitute of scales in the former, while the cheek of the

pike is full of scales, and the pickerel has both cheek and gill-cover scales. The markings, also, are different to some extent, but the certain method of identification is as stated.

This species is found principally in the lakes and rivers north of the Tennessee, and to the westward of the upper Mississippi, the region near the great lakes, particularly the states adjoining Lake Superior and Lake Michigan, and the St. Lawrence River. In addition to furnishing exciting sport for the angler, the mascalonge is esteemed as a food fish, and the devotees who are especially fond of catching the "tarpon of the North" — a simile adopted doubtless by reason of the "muskie's" leap — are enthusiastic in praise of the edible qualities when served at a club banquet or wherever a good number of fishermen may assemble to feast on one big fish of good edible quality. Although strong tackle is usually deemed indispensable, skillful anglers have demonstrated that a comparatively light rod and line will be suffi-

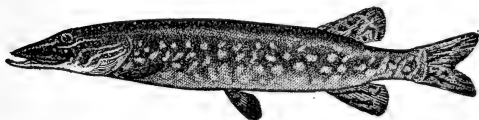
cient to bring a large mascalonge to boat or to land, as the case may be, provided judgment is used in playing the fish, and allowing no opportunity for the struggling muskie to get slack line and shake the bait from his mouth.

In trolling, the live minnow, trolling spoon, or artificial minnow, are favorite baits, and the so-called "plug" serves well as a rule. Formerly the light row-boat was the craft ordinarily used when trolling, although the Indian birch-bark canoe or the heavier dug-out could be used to advantage; but in these days of easy locomotion, a motor boat, running at carefully gauged speed, gives fishing de luxe in using the troll without effort. Where the water is deep near shore, casting from the bank sometimes gives good results, and greater skill is required in landing the fish, thereby adding to the zest, as ease of capture is not always regarded with favor by those who are able to conquer under difficult conditions.

Good localities for this sport in the northern states, are in the vicinity of Detroit, Little Falls, and Prior Lake, Minn.; Mackinac Island, Sault Ste. Marie and Seney, Mich.; Butternut, Eagle River, Phillips and Pelican, Wis. In the eastern states: Clayton, Ogdensburg, and Theresa, N. Y.; Barton and Newport, Vt., are excellent places for "lunge" fishing.

PIKE AND PICKEREL

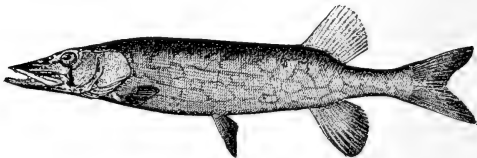
“In shallow cove, near river bank,
The pickerel-weeds grow green and rank;
In hazel-girdled, crescent bays
Speckled with isles, an endless maze,
The yellow-tinted pickerel
Lie hidden, motionless and still;
The dorsal fin, the forked tail
Scarce stir the waters, clear as air,
But jaws are open to assail
And glassy eyes all murderous stare,
But when the small fry of the lake,
The minnow and the shiner bright,
Across the limpid surface break,
Shooting like pearly sparks of light,
Then, as an Indian tiger grim
Rends antler'd stag in jungles dim,
So doth the water-tyrant slay
The helpless, unresisting prey.”



Pike.

THERE is a combination of practical truth and poetry in the foregoing well cast lines, depicting the nature of the pickerel, a member of the pike family, the two species differing very little in general characteristics. The ordinary pickerel is perhaps the best known and most widely dis-

tributed of fresh water fishes of what may be termed the intermediate branch — taking rank below the various members of the trout, the black bass, and the mascalonge species, and higher in the scale than the ordinary perch, the crappie, the sun-fish, etc. The two popular species inhabit the waters of most of the rivers and lakes in the Eastern and Western states,



Pickerel.

and to some extent in southern waters.

Confusion exists in possibly a majority of localities where these fish abound, as to identity or proper nomenclature. Both belong to the pike family, but many fishermen regard the pike-perch — usually called the “Wall-eyed pike” — as the true pike, although it is in fact a species of the perch; while the real pike is ordi-

narily known as a pickerel. The distinction of comparatively slight difference between the pike, pickerel and mascalonge is given in the chapter on the last named species, and for ready reference it may be well to repeat that the pickerel has cheek and gill cover fully grown with scales, while the pike has only the cheek covering of scales. In size the pickerel does not grow to the proportions of the great northern pike, and the larger members of the mascalonge species are generally of much greater weight than the biggest pickerel. Generally speaking, nearly all species of the pike family — excepting the mascalonge — are known as pickerel in New York and the eastern as well as some of the western states; in the middle states they are called pike, and in Virginia and southward they are usually termed “jack-fish.”

Local names of profusion and leading to confusion, exist in various sections of the country. A number of the best-known names are brook pickerel, chain pickerel, channel pickerel, com-

mon pickerel, humpback pickerel, jack pickerel, Long Island pickerel, marsh pickerel, short pickerel and trout pickerel; and of the pike — the blue pike, black pike, grass pike, gray pike, ground pike, green pike, pond pike, streaked pike and trout pike. These local names do not, of course, indicate that there are anything like the number of species mentioned, in fact, the difference is usually merely that of size, colors, and markings — which vary according to the environments, depth of water, etc. Even where the varieties are of such character as to justify classification under names of different species, the general character is much the same, and the methods of fishing differ merely as to size of the fish, and their natural food in the localities where they are caught.

In England weights and measurements are given of monster pike so large that — lacking verification — the records of thousand-pounders are regarded as fabulous fish tales, but it is doubtless true that in some in-

stances remarkably big fish of the larger species have been taken. In the United States a few cases, seemingly well authenticated, are recorded of catching specimens of the great northern pike weighing more than seventy-five pounds, or about equal to the size of the largest known mascalonge. The taking of these monster pike, even if well established, occurred so long ago, with nothing approaching such wonderful size recorded in recent years, that it would probably be safe to say the chance of catching one of similar size now is about on a par with the probability of finding a live dodo. The angler who is fortunate enough to hook and land either of the large species of pike weighing ten pounds may consider himself "high hook," as a rule, and if he catches a bigger one, he is to be envied, probably, by his associates.

Trolling is the usual method of fishing for the various species of pike and pickerel. Live minnows are attractive bait, and several kinds of artificial spinners, trolling spoons, min-

nows, etc., are used successfully in this branch of fishing. Ordinarily a boat is used to cover the best fishing grounds, and with light motor boat it is a very easy style of angling. Casting from the shore, and trolling along the banks, are also favorite methods with some who are fond of pike or pickerel fishing. The gameness of these fish is not of the highest order, as they seldom leap from the water, and do not give the royal battle of a black bass of equal weight, but instead of fighting with the tactics of genuine game fish, resort to pulling steadily on the line, until exhausted, and then yield without further resistance. In rare instances the pike and pickerel have been known to rise to the fly, but so seldom that no dependence can be placed on their so doing, and therefore the angler does not attempt fly-fishing for any of the various species, but may, by chance, take one while casting for black bass.

As a food fish the pike is fairly good, although somewhat coarse, and not nearly equal, in the opinion of

most rodsters, to the pike-perch, or "wall-eyed pike." In the cold, spring-fed lakes and streams the fish are far better food than those of the warmer waters, and, as in most other fishes, the game qualities are of higher order when found in places where cold springs furnish the fountain head or supply.

Resorts for pike and pickerel fishing are so numerous that it is hardly necessary to specify by name the noted lakes, ponds and rivers where these fishes abound. However, a few of the famous fishing resorts in this line are the St. Lawrence waters, in the Thousand Island region; the Eagle River and Eagle Waters, in Wisconsin; and the waters near Mackinac Island, in Michigan.

OTHER GAME AND FOOD FISHES

WHILE a comparatively small portion of the anglers of America have the opportunities to fish for and scientifically catch the famous game fishes, casting the artificial fly, and using the finest tackle, millions of fishers equally keen in their enjoyment of the sport of angling, find their pastime restricted to taking the common, but more or less gamy species in the nearby waters. Common fishes and common fishing, therefore, deserve something more than passing notice. The catching of what is known as an ordinary pan-fish, with a common "pole," cheap cotton line, simple hook, a cork float, and lead sinker for tackle, may bring to the fisher genuine joy as thrilling — in its way — as that of landing a salmon does to the scientific angler. Who shall decide the comparative degrees of pleasure experienced by devotees indulging in the time-honored sport, or set the relative merits of the vari-

ous methods on a scale as strictly graded as that of music?

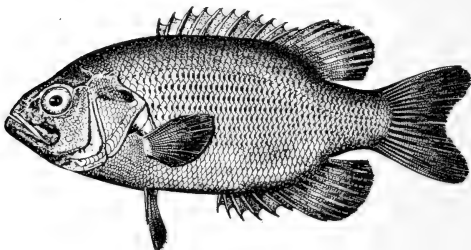
That there is the exquisite melody of an aeolian harp or of the Italian opera in the music of the reel, to the angler who thoroughly understands playing his fish to this tune, is, of course, admitted, but the lone fisherman of lesser skill — or none at all — in the higher branch of the art, is perhaps as delighted in playing a minor air, making the small fishes dance to the vibration of a taut line, and bringing them in without any accompaniment except the beating of his own heart.

The multitude of small finny members of the various common species may be said to comprise the great common school of fishes. To attend this school, to apply the rod whenever and wherever it will do the most good as a means of bringing a reasonable number "out of the wet," is really worthy the attention of all those fond of a fascinating, healthful form of study; in short, willing and anxious to follow the fixed resolve of a famous

General—"fight it out on this line if it takes all summer," using not all the time, but vacation time, holiday time, or any time that can be spared for the purpose.

Rock Bass

Throughout the wide territory included in the Great Lakes region and the Mississippi Valley this species of



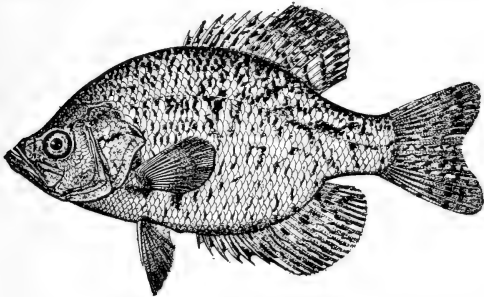
Rock Bass.

fish is especially abundant, affording fairly good sport and desirable food to hosts of rodsters. The rock bass has many local names, the best known of these being Goggle-Eye, Rock Sunfish, Red-Eye, and War-Mouth. The usual habitat is the clear waters of the rivers, lakes and ponds; the best time for taking them is during summer

and autumn. The weight ranges up to about one and a half pounds. Common baits are worms and small minnows, and the tackle about the same as that in fishing for small black bass.

Strawberry Bass

Few, if any, of the small fishes are more widely distributed or more gen-



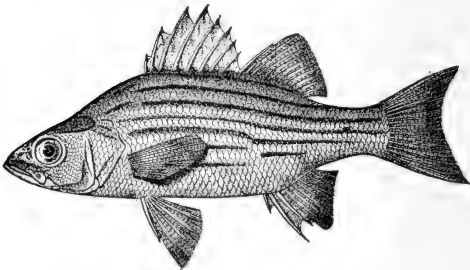
Strawberry (Calico) Bass.

erally sought than the strawberry bass, variously known as the Crappie, Calico Bass, Strawberry Perch, Grass Bass, Silver Bass, Big Fin Bass, Bank Lick Bass, Bar Fish, Razor Back, Goggle-Eyed Perch, etc. The range is much the same as that of the rock bass, and the method of fishing similar. It is found further

south, perhaps, than the rock bass, being common in the streams of the Carolinas and Georgia, as well as in other waters of that latitude. The ordinary weight of the strawberry bass is a pound or less, but large specimens are occasionally taken, weighing up to three pounds.

Yellow Bass

The yellow bass, sometimes called



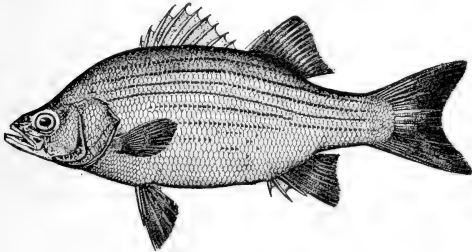
Yellow Bass.

Bar Fish, is not so common in northern waters as in southern waters; in the lower Mississippi and some of its tributaries. It takes rank with the white bass, and to some extent resembles that popular salt-water game fish,

from one to three pounds, and the best rod for this kind of fishing is the light trout rod, or a black bass bait rod of the lighter weight, using minnows for bait.

White Bass

This species, - often termed the Striped Lake Bass, resembles the striped bass of the sea more closely



White Bass.

than does the yellow bass, and is quite abundant in the Great Lakes region, also in moderate numbers is found in the Ohio River, its principal tributaries, and various streams in the south. It ordinarily inhabits the deeper parts of the rivers and lakes, and its weight is from one to three pounds. With four-ounce brook trout

rod and light tackle, using either worm or minnow for bait, good success may be had in white bass fishing during summer or autumn, wherever this species is fairly plentiful. The weight ordinarily runs from one pound to three pounds.

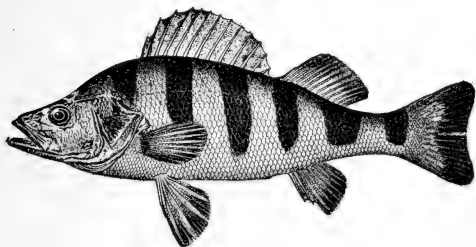
The Crappie

In southern waters, from the Ohio River to the Gulf, this species is abundant. The fish is similar in size and appearance to the Strawberry Bass, or "Northern Crappie," as it is frequently called, of lakes and streams in the northern states. Popular names for this much-sought fish, are New Light, Croppie, Bachelor, Campbellite, Sac-a-lait, Bridge Perch, Chinquapin Perch, Speckled Perch, Goggle-Eye, Shad, Tin Mouth, etc. Light rod and tackle, with worm or minnow bait, are best for this sort of fishing.

Yellow Perch

One of the best known of small fishes in the waters of the northern and eastern lakes, rivers and ponds.

Although smaller in size than the other fresh water fishes of intermediate division, the yellow perch is in some respects and in certain localities regarded as a game fish of higher order than its larger kindred, for the reason that it will rise to the fly, and sometimes affords good sport to the



Yellow Perch.

artificial fly fisherman. In fly-fishing for yellow perch, use the four-ounce fly-rod; in bait-fishing a six-ounce bait rod. Small flies — red, brown, gray and white — are used. In size the fish does not average more than a half pound, but occasionally a specimen of two and even as high as four pounds are taken. Quiet waters, covering sandy or pebbly bottom, are the favorite haunts of the yellow perch.

White Perch

This species, like the yellow perch, will sometimes rise to the fly, and is, therefore, popular with fly-fishers, the tackle used being similar to that in brook trout fishing. From the far northern waters — the lakes and streams of the St. John River and New Brunswick region — to the rivers of North Carolina and the Delaware River, the white perch is more or less abundant. It is often found in tidal streams, and in such locations a taking bait is the shrimp or small fish, while in fresh water the worm, minnow and artificial fly are attractive. In the brackish waters it is often found on the flat clay or muddy bottoms of the rather shallow places. Small flies, bright colored, similar to trout flies, are favorites in fly-fishing for white perch.

The Shad

By the majority of people the shad is known mainly, if not exclusively, as a delicate, fine-flavored food fish — a choice delicacy for the table, but having the one objection of innumer-

able small bones, vexing to the gourmandizer. The shad, like the salmon, comes from salt water into fresh water, and the best sport in catching this species is with the artificial fly, in the tide-water streams along the Atlantic coast. The weight of the shad varies greatly, specimens having been caught of as high as eight pounds, but those of two to four pounds are game fish affording excellent sport, care being taken to avoid heavy strikes, as the mouth is very tender. In spring-time, with brook trout tackle, fly-fishing for shad is now one of the favorite sports with a few expert anglers along the Atlantic coast. Early morning hours, and from five to eight o'clock in the evening, are best for shad fishing, and a very taking fly is the Scarlet Ibis, on a small hook. "Planked shad" are doubly appreciated by the man who has caught them with a fly, says an ardent fly-fisher.

Mud Shad

This species, believed to be a landlocked common shad — or descend-

ant of the latter species — is quite plentiful in some of the inland lakes and streams, particularly in the larger streams of the Mississippi Valley, the St. John's Rivers, the Potomac, and in a few of the other large lakes and rivers of the north. Entrance to the great lakes was through the canals. Common names are the Lake Shad, Hickory Shad, Winter Shad, Gizzard Shad, White-Eyed Shad, Thread Herring, etc. It is a prized food fish, but lacks the game qualities of the shad in coastal waters.

The Whitefish

Quite a number of species of the whitefish inhabit the waters of the Great Lakes region, and westward to the Pacific, northward to Labrador, as well as some of the streams tributary to the Missouri. It is one of the best of food fishes, and as a game fish one or two species take high rank, mainly on account of the mystery attached to their movements and the short period during which they can be caught with the artificial fly. The

celebrated Cisco, of Lake Geneva, Wisconsin, is probably most famous, rising readily to the fly during a period of about two weeks in May or June, while the natural "cisco fly" hovers over the water, then suddenly disappearing into deeper water — its usual habitat — until the next season. Although ichthyologists name no less than thirteen species of whitefish, none except the cisco is regarded as in any sense a game fish, and this of a rather doubtful nature, the cisco being a surface-feeder for so short a period, and then eagerly taking anything resembling the natural fly. Local names of the various species of whitefish include Lake Herring, Michigan Herring, Cisco, Lake Whitefish, Frostfish, Mountain Herring, Rocky Mountain Whitefish, Roundfish, Shad Waiter, Black-Fin, etc.

The Herring

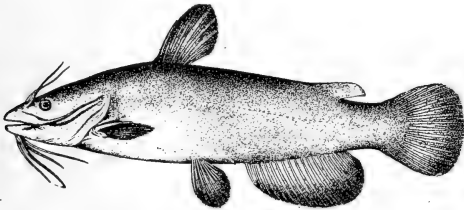
The branch herring, otherwise known as Alewife, Big-Eyed Herring, Gaspergou, Sprat and Whitebait, is common in the large lakes of New

York, and in the tide-water rivers along the Atlantic coast, where it is esteemed a fine food fish, and a fair game fish at times, as it is caught with artificial fly under favorable conditions in Lake Ontario and elsewhere. The inland herring, variously called Alewife, Skipjack, and Shad-Herring, has a wide range from the larger streams of the upper Mississippi Valley, in Lake Michigan and Lake Erie, southward to the Gulf of Mexico, as it descends to the deep waters and presumably the ocean, from the streams tributary to the Mississippi. Its food is mainly worms in the fresh water and crustaceans in brackish waters. It is ordinarily about one foot in length.

Bullhead and Catfish

Whether the bullhead is a separate species or merely a small catfish, signifies nothing to the fisher-boy whose early triumphs in the way of catching fish in the mill-pond, lake or river, resulted perhaps in catching one or the other of these fresh water food-

fish. While they lack every essential of the game-fish, yet the bullhead affords enough excitement to satisfy the ardor of a beginner, and a sufficient size and quality to appease his hunger, after returning home filled with enthusiasm but clamorous for a feast of freshly-caught fish. Skill is



Catfish (Bullhead).

not required, to any great degree, in catching either bullheads or catfish — probably the most willing biters and bolters of bait to be found in fresh-water fishdom — but a little skillfulness is needed to escape one of the “horns of the dilemma” in removing the fish from the hook, for the creature seems armed to the teeth, with an additional spear of defense on the back. Still fishing is the usual method of

catching, the range of bait almost as great as the appetite of the fish, and the time may be from dawn to dewy eve, or during the still hours of the night, for none of the finny tribe can excel the bullhead or catfish as night ramblers and bottom feeders. A set pole will, in fact, do the work if the fisher lacks either energy or time to attend to the primitive sport, but the active fisher-boy seldom wishes to be absent when the wriggling prey takes the hook and begins the stout struggle for freedom. In small ponds the bullhead rarely exceeds three or four pounds in weight, but the catfish of the Great Lakes sometimes reaches one hundred pounds, and the channel-cat of the Mississippi attains to one hundred and fifty pounds; no child's play to land, whether hooked from boat, wharf, or in mid-stream by "jugging"—that is, fishing with large jugs, to which strong line and hook is attached, the bait to be near bottom, and allowing the jug to float slowly down stream, followed by the fisherman.

The Branch Herring

Although this is, strictly speaking, a salt water species, it is so frequently caught in the tide water streams along the Atlantic coast that it deserves mention as a fish affording sport to the fresh water angler. The branch herring is perhaps best known as the "alewife," and in spring-time many are taken with artificial flies in the rivers of the Atlantic coast, from the Albemarle and Potomac rivers, northward to the Connecticut, and along the tide-water streams of Massachusetts and Maine. The landlocked division of the species, in the large inland lakes, also furnish sport to anglers, and good food to the masses.

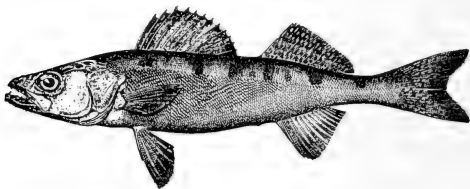
The Smelt

This excellent fish, better known as a table delicacy than as a species of interest to the angler, is one furnishing fairly good sport, usually late in the season, as winter approaches, and can then be found quite abundant in the channels and creeks near the coast, from the Gulf of St. Lawrence

to Virginia. One species of smelt is also found along the Pacific coast, ranging from California northward. The average size is about six inches in length, and the best lure is worm bait, held within a foot or two of the bottom.

Pike-Perch

In many inland waters, from the extreme northern states to the Caro-



Pike-Perch (Wall-Eye).

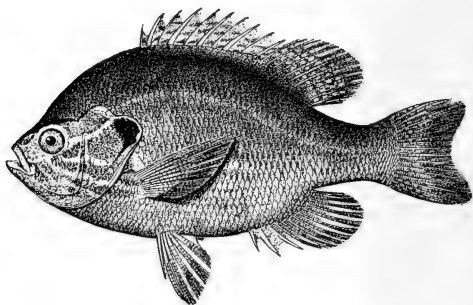
linas, the pike-perch, more familiarly known as the wall-eyed pike, gives rather exciting sport to the fisherman, especially those fond of still fishing and trolling. The pike-perch frequents both lakes and streams, and can sometimes be taken with the artificial fly, using for morning fishing a dark-colored bass fly, and for evening fishing a light-colored fly. The

best live baits are frog, minnow, crawfish and worm. For trolling bait it is advisable to use a spoon not larger than No. 3, or if live bait, preferably the minnow. In appearance the pike-perch bears some resemblance to both the perch and the pike, therefore the hyphenated name was given by ichthyologists. It is usually found in the deep waters of the lakes and in the rivers it frequents rapids or swift-running portions. In weight it runs from one pound to six pounds, rarely reaching ten pounds. The pike-perch is quite abundant in Michigan, Wisconsin, New York, Ohio, Kentucky, Missouri, Tennessee, West Virginia, and Arkansas.

The Sunfish

In boyhood, the first line of invitation cast to a finny friend is very likely to be dropped to the sunfish, commonly called "pumpkin-seed," and happy the lad whose offer was accepted. In various sections the little fish — seldom weighing more than one and one-half pounds — is known under the name of Sunny, Brim, Red-

Bellied Bream, Sun Perch, Red-Bellied Perch, Red-Breast, Blue Bream, Copper-Nosed Bream, etc. It is quite plentiful in the lakes and ponds of the Great Lake region and in streams from Maine to Georgia. Angleworms are killing bait, but under favorable conditions the sunfish will take the



Sun Fish.

artificial trout fly, brook trout tackle being used. This fish is usually found in waters that are still and clear.

The Chub

This is another finny favorite of juvenile fishers, and by no means confined to the attention of boys, for many older anglers find chub-fishing

well worth while, especially when the higher class fishes are not to be found, or refuse to bite. The weight depends mainly on the habitat, as the chub of the brook is usually quite small, while in larger streams specimens of good size are frequently taken, sometimes from eighteen to twenty inches in length. For still fishing use a grasshopper or grubworm; and for fly-fishing, a lure with big red body. In trout streams where the chub is also an inhabitant he is more or less of a nuisance, as he is likely to take the fly eagerly just when the angler has reason to expect a rise from a brook trout, and in some cases the chub seizes the second fly when the fisher is almost ready to land the trout he is playing on the other fly. Good old Thad. Norris relates interesting incidents of this kind in connection with trouting on the Beaverkill and other streams.

The Shiner

Ranking low on the list among American fishes that take the hook, the shiner is by no means least in the

estimation of the average fisher-boy who finds his angling activities confined to small brooks or waters devoid of brook trout. Given his choice between taking a shining silver dollar or catching a large shiner, the enthusiastic youthful angler would be very likely to take the latter. This is based upon the invariable answer to that ancient, yet ever ready juvenile question: "Which would you rather do or go a-fishing?"—ambiguous, but exciting to the boyish mind and heart. There is but one answer; except possibly when the circus comes to town. The shiner is otherwise known as the Red Fin, Red Dace, Minnow, Minnie, etc., but under any name he is a popular and usually "far-flung" prize in the country boy's annals of angling. In length the shiner seldom, if ever, exceeds ten inches, but that does not measure the joy of catching—a fact forever impressed on the memory of him who recalls "the first little minnow he caught with a pin."

The Bream

This little favorite, a member of the Percoid or perch family, is most frequently found in small streams and lakelets of the eastern states, and along the Mississippi valley. It is prized as an excellent pan fish, and affords fair sport to the angler, the ordinary method being still fishing, with short, light rod, a short line, No. 3 Kirby hook, baited with minnow, red worm, shrimp or crawfish; the bait to be from sixteen to twenty-four inches below the float. Two species are familiar to anglers—the Blue Bream, or Copper-Nosed Bream, about eight inches in length, at most, and the Red-Bellied Perch, or Red-Tailed Bream; a third species, less known, being the Goggle-Eye, or War-Mouth Perch, a fish with dark green mottled back and brilliant sides. All these are often miscalled sunfish, or Sun Perch, as they frequent the same waters, and the resemblance is evident.

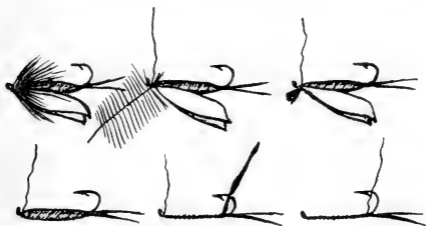
HOW TO MAKE ARTIFICIAL FLIES

“Mark well the various seasons of the year,
How the succeeding insect race appear,
In their revolving moon one color reigns,
Which in the next the fickle trout disdains;
Oft have I seen a skillful angler try
The various colors of the treach’rous fly;
When he with fruitless pain hath skim’d the brook,
And the coy fish rejects the skipping hook.
He shakes the boughs that on the margin grow,
Which o’er the stream a weaving forest throw;
When if an insect fall (his certain guide),
He gently takes him from the whirling tide;
Examines well his form with curious eyes,
His gaudy vest, his wings, his horns, his size.
Then round his hook the chosen fur he winds,
And on the back a speckled feather binds;
So just the colors shine through every part,
That insect seems to live again in art.”

THE best way in which to catch trout, and even bass, is with a fly; although the fish takes the fly because he thinks it is a real live one, he is not particular about having it look exactly like a live one.

A fly is made this way: hold the hook by the bend and wind the tying thread which has been thoroughly waxed, and should be of silk, several times around the straight shank; by winding it on the shank it is brought

down to the point at which the bend begins. A fibre or two of feather, or a few strong hairs from a squirrel or buck-tail, are wound in under the tying thread at this point; these make the tail of the fly, and should be about as long as the whole hook. Then, with a few turns of the thread the body material is fastened in at the



Artificial Flies.

same point. This material may either be silk or wool; sometimes it is fur which has been spun on the thread between the fingers — the wax holding it there until it has been wound in.

Before commencing to wind the body material on the hook, the tying thread is brought up near the eye of the hook (by winding), and left there in readiness for making the end of the

body material fast. By fastening a little weight to the thread it may be allowed to hang free without having it unwind. When the body has been wound on, the end is made secure by taking a few turns over it with the silk thread. The wings are made from sections of one side of a feather; cut two sections out of the proper size (they should extend out over the end of the hook a little when completed), and holding them down on the top of the shank up near the eye, make them fast by a few turns of the thread; then cut off the stumps which extend forward.

The next step is to tie in the hackles which represent the legs of the fly. Hackle feathers are found on the necks and saddles of game cocks; for certain kinds of flies hen's hackles or even partridge hackles are used. Strip all the fuzzy part of the feather off, and holding it by the tip end, pull it through the fingers of the other hand; this will make all the fibres stand out from the quill. Then tie in the tip end just in front of the

wings; by winding the hackle around the hook, both in front of and behind the wings, the legs are put on the fly. Fasten the tying thread off by tying a few half-hitches just back of the eye of the hook, and to make sure that this will "stay put," touch the knot with a little varnish on the end of a match. When it has dried hard the thread is protected, and the hitches stuck tight.

With a pin pick out any fibres of the hackle that may have been caught under when winding it on; if the wings are too big they may be trimmed off with scissors. However, it is much better to make the wings the proper size in the beginning, as it makes them look stiff and unnatural to trim them later.

A plain hackle fly may be made without wings. The tail and body are wound in as explained above; instead of tying in a pair of wings, wind either one or two hackles in, and finish off as directed. Hackle flies are supposed to represent spiders or cater-

pillars, according to the shape in which they are made.

There is another way in which to put on the wings of a regular fly, which will prove to be a more secure method. Instead of holding them on the shank of the hook so that they point backwards, place them so that they will extend out over the eye of the hook; fasten down with a few turns of silk, and then bend them back into their proper position and make secure there by several more turns of thread. Wings made in this way are known as "reversed wings."

HOW TO CAST A FLY

“And here, where the eddies, so pearly white,
Sink away into gloom or wheel into light,
Where the trunk of decaying pine-tree doth throw
Its leaning bridge over the current’s flow,
The patient angler, with rod and line,
May cast his flies and his tackle so fine,
And soon his basket a treasure will hold
Of azure fishes o’rspangled with gold.”

IN order to cast a fly one must have a fairly limber rod, and a line of the kind that is known as “enamelled”; this means a silk line that has been covered with a dressing of waterproof material which gives it a very smooth finish, and adds weight to it. It is the weight of the line that makes it possible to cast a fly, just as it is the weight of a long whip lash that makes it possible to throw the lash out full length.

Pull out about twenty feet of line, and lay it on the ground in front of you; then pick up the rod, holding it in the right hand with the thumb extended along the top of the handle. On a fly rod the reel should be placed below the hand grasp, and when held in position for casting the reel should

be underneath the rod with the handle to the right.

Now, with a quick, snappy motion, throw the line out in the air behind you; this is best done by keeping the right elbow close to the side, and only using the forearm and wrist in making the back cast. The rod must not be allowed to go further back than the shoulder; in other words, it must be straight up in the air when the back cast has been completed. Before the line has time to drop to the ground behind you, you bring the rod forward with a smart motion, and thus throw the line out on the ground in front of you. It is best to learn how to cast on the ground instead of over the water, as the line may be placed in a straight line fully extended, before trying to make a back cast. As soon as you have gained a little experience and skill, this part may be omitted, because you will be able to throw the line out straight when you make the forward cast.

Unless you allow plenty of time for the line to straighten out in the air

behind you, the flies will be snapped off with a loud crack; thus, when the back cast has been made, it is necessary to stand perfectly still for an instant, not making the forward cast until the line has had time to straighten out. Of course you must not wait so long that it will have fallen to the ground; if you get a friend to watch and tell you just the moment the line is fully extended, it will help you to time this pause correctly.

You have seen that a complete cast is made as follows: the back cast, the pause, and the forward cast. If the rod is allowed to come down too close to the ground in making the forward cast the fly will alight on the water like a "ton of bricks"; therefore, you must stop the motion of the rod when it is about half way between the perpendicular and the ground — in other words, when it makes an angle of about forty-five degrees with the ground. Another important matter is to aim the fly at a point several feet above the surface of the water; then when the line has become fully ex-

tended in front of you, it will drop quietly instead of coming down with a splash.

If you wish to extend the line further, you make what are known as several false casts in the air, not allowing it to touch the water either in front or behind you; during the progress of these false casts more line is stripped off the reel by the left hand, and allowed to work out through the guides on the rod. In fact it is very wise always to hold the line in the left hand, grasping it between the reel and first guide; this allows you to strip in when a fish has been hooked without having to shift the rod from one hand to the other in order to turn the crank on the reel.

STILL FISHING

IT is reasonable to believe and probably safe to assert that the very earliest form of angling was still fishing. It is not, of course, one of the scientific methods of fishing, but it puts to the test that ever essential quality, patience, and the other trait so often mentioned in commenting on what is known as the contemplative art, for there is self-truth in good old Izaak Walton's lines — referring, doubtless, to the ancient and presumably everlasting branch of angling, still fishing —

“One hand alone my work can do,
So I can fish and study too.”

The first efforts of the youthful angler are naturally in the line of still fishing. The bob and sinker are regarded as important parts of the outfit, if fishing in deep water, but in the swift-running brook the bob is not required, and the sinker, if used, should be small. In either case there will be good reason for patience and for

the meditative mood, when fish do not bite freely. The study of fish and fishing, in this primitive form, is not tiresome but rather of the restful kind, to the enthusiastic beginner, and it often happens that still fishing continues to be the favorite form of angling through life.

The brook and the rapid river are not so favorable for still fishing as the deeper, quiet lake, or the old mill pond, where, as a rule, the country boy makes his first venture in angling. The angle-worm or common grub-worm is most frequently used for bait, and the rod is ordinarily of the simplest kind, a reel being attached if the fisher is at all ambitious to have the excitement of testing his skill in playing his fish before landing it. In fact, when a specimen is hooked—perhaps a large, open-mouthed catfish, or a monster pickerel—the reel will be found something more than ornamental; it may be the means of saving a finny prize that would have broken either rod or line and escaping, to the deep disappointment of the angler.

Selecting suitable places for still fishing depends on local conditions. It is generally safe to select the deeper pools instead of shallow water, and in summer weather, especially, comfort and convenience will incline one to such choice in seeking to attract the fishes to his lure. After finding the depth of the water, care should be taken to fasten the float so that the bait will be near but not upon the bottom. In some cases the fish are bottom feeders, and when this is found to be the case, the bait may be permitted to rest upon the bottom. Then at other times or places, the fish may be found feeding nearer the surface, or perhaps in mid depth, and the careful angler will, of course, regulate his float and bait accordingly. Hooks of medium size should be used for ordinary fishing, but when either very large, or unusually small fish are known to be most numerous in the waters fished, hooks of suitable size are to be preferred. With a fair variety to select from, there need be little if any difficulty in this respect.

For real ease and restfulness still fishing of course takes first rank, as it requires no exertion beyond that of landing a fish when hooked, and this cannot be called strenuous, except with the big ones. Comfortably seated on a convenient log or rock, or on the grass-grown bank, in the shade of a fine old forest tree, the still-fisher is certainly a picture of comfort and content. He may even drift into dreamland, but caution against dropping into the water, from an overhanging bank, should impel the fisher to adopt the motto of safety first. There is none of the toil of fly-casting, and if any flies seem inclined to bother the still fisher, he can remedy, if not remove this trouble, by use of mosquito netting around his hat-brim, and fastened around his neck by light rubber cord.

Ordinarily the sport of still-fishing is enjoyed most by very youthful and by very old anglers; the first on account of lack of skill to successfully try more scientific methods, the latter by reason of failing vigor and the un-

abated ardor which leads them to continue their favorite recreation in some form, even the most primitive. Once an angler, always an angler, is doubtless a true saying, so it will be seen that the aged devotee is still fond of the sport, still fishing, so to speak.

PIER FISHING

THERE is a form of fresh water fishing affording excellent sport where conditions are favorable; in fact, the best near-by angling to be had by residents of some of the larger cities and towns along the great lakes and the big rivers of the interior, viz., fishing from the piers. On the sea coast this has been brought to a perfected system, certain piers being used mainly or in some cases exclusively, for fishing, and although the expense involved may prevent adopting this plan in the smaller towns, the large cities could certainly provide such facilities, either through official or other means of raising the necessary money for the purpose. In any case, provision should be made that one pier — more, if possible — be open to the public; private and club enterprise being always able to look after the interests of those favored by fortune.

Permits for erection of such piers should not be difficult to secure in any city, even where funds are not

available to build at municipal cost; and acting under such restriction as might be necessary with regard to placing, it is probable that public-spirited citizens — anglers of course leading — would soon subscribe the amount required for a modest, substantial pier designed for, and dedicated to, the time-honored Waltonian pastime. As a means of promoting health and happiness, with wholesome food more readily obtained at slight expense, it would be difficult to name anything outside of absolutely essential needs, that could be more beneficial for the comparatively slight cost.

In connection with the establishing of fishing piers, and of equal importance to the angling fraternity, is the annual restocking of the waters with game and food fish adapted to the local conditions. In this good work, fortunately, state and national co-operation can be assured, as the Fish Commissioners are ever ready to help restore depleted waters with

the young fry, and the hatcheries have proved sources of bountiful supply.

The methods of angling from piers are varied, still fishing being most common, but at certain places, and favorable times, long distance casting is possible and good results probable. As to variety, the range is wide, taking in any and all of the species of fishes inhabiting the local waters, and the angler enjoying this form of recreation, with all its "glorious possibilities," may well feel that he is the peer of any devotee of the gentle art. On the score of economy, nothing less expensive could be devised, and with experience as a teacher, the fish hatchery as provider, skill and a moderate amount of good luck should bring to the landing-net such satisfactory net results that the angler's cup of joy and his creel will be fairly well filled.

Where public fishing piers exist, crowded conditions will, of course, come occasionally, when perfect fishing days appeal to all those fond of rod and line. These are the times that try men's souls, as far as angling can

do so, for tangled lines may lead vexed fishers to believe it is a game of cross purposes, but good sense, combined with good humor, will help loosen the snarls without loss of temper or any portion of the tackle. To engage in a war of words will cast a black cloud even on the brightest day, and possibly prevent further unpleasant casting during that angling session.

Where peace prevails, and rigid rules exclude rough characters from the fishing pier, what better family diversion can be found when the weather favors? From every angle — and few, if any, outdoor pastimes offer a greater number — fresh water angling, measured in the scale of merit, gives the fair-minded fisher full value for his expenditure of time and money; and fishing from the piers may be made one of the methods most highly approved, most readily engaged in, and most economical of all to dwellers in pent-up cities and towns on the banks of large lakes and rivers throughout the United States.

FISHING THROUGH THE ICE

THE sport of angling may be made an almost an all-the-year-round recreation, even in the northern states, by hardy fishers who are not to be chilled in their enthusiasm by cold weather, and for this reason will not yield to a "winter of discontent," as fishing through the ice affords excellent sport when conditions are favorable. It may be made a very comfortable pastime, and well worth the attention of all fresh water anglers, by taking care to provide everything necessary to guard against the cold winter weather.

The outfit for fishing through the ice, aside from tackle similar to that ordinarily required for lake or river fishing, consists in a tent or a snugly-built little cot, some four feet in width by six feet in length, with roof, in which a hole has been cut of size large enough to permit a stove pipe to be put through; in the interior, a small sheet-iron stove, with any arrangement desired for convenience or

comfort of the occupant, or the two who may occupy it, for the pleasure is often greater when a congenial companion participates in the pastime of winter fishing. Low runners should be attached, if the shelter is built in box-house form; but with a tent, a hand-sled will serve to take this from place to place, as may be necessary.

Cut a hole in the ice — a little more than a foot in diameter — and through this fishing can be done with either natural or artificial bait. Often, when the weather has been quite severe, and the ice very thick on this account, with few, if any, air holes on the lake or pond, the fish will come in numbers to the newly-made fishing hole, and may be readily caught with any suitable bait. A flash light or other artificial light can be used to good advantage when desired, and the fishing hut closed from the winter winds, warmed by the fire within, will be found remarkably cosy and comfortable.

In mild or moderate winter weather, there will be no necessity for

either hut or tent, and the anglers, on skates, can cover quite a distance in seeking the best places, cutting holes in the ice at intervals, and, if the fishers are so inclined, a "tip-up" appliance can be placed at each fishing pole, the simple arrangement consisting of a baited hook attached to a strong line, and this fastened to a stout stick, perhaps six feet in length, in place of rod, and firmly fixing the short pole on a cross-piece over the hole in the ice, the outward end of the impromptu "rod" to be decorated with a red or bright-colored flyer, the shorter end — about a foot or less — to be on the side covering the opening in the ice. A bite at the bait will bring the signal flag, and if the fish is securely hooked there will be a series of wig-wags, the "S. O. S." calls of the victim. This style of fishing, although often productive of big results, is not highly commended as a sportsman-like method of angling, being in reality more of a market fisher's system than of the true Waltonian manner of taking fish.

When indulged in for sport rather than for the market, and in the hope and anticipation of catching a large fish instead of a very large number of fish, the pastime is a commendable one, conducive to health, and giving that variety said to be the spice of life. In crystal clear water the fish may sometimes be seen by the winter fisher, as they approach the lure on the line of invitation. Pike, pickerel and black bass are some of the larger species caught in fishing through the ice, and the smaller varieties frequenting lakes and ponds are also "among those present" on the occasion of winter events of this kind.

Many veterans of the angling guild doubtless recall, with pleasure, the olden days of mid-winter sport with hook and line, when ice and snow never interfered with out-door pastimes, but brought, instead, the thrill that comes to natives of the northlands when chill winds seem to challenge us to come into the open air and engage in some of the recreations of the season. To eager rodsters of this

type, ice forms no barrier, but is rather a means of changing the method of fishing, so that the season has a charm beyond that of other ordinary winter amusements.

HINTS TO FRESH WATER ANGLERS

Baits and Tackle

BEST LIVE BAIT.—Angleworms are the best general bait for fishing, as this “garden hackle” proves attractive to a larger number of fishes than any other live bait. Rich soil is the best place to find angleworms, the heavy clay soil yielding good results, especially after rains. A strong solution of salt water, freely poured on the surface, will usually bring the worms to the top of the ground.

PRESERVING WORMS.—By placing worms in wet moss, and pouring a pint of milk over them daily, they can be kept in good condition quite a length of time. Useful bait cans can be bought at small cost, or made to order by any tinsmith.

LIVE MINNOWS.—By using a small-mesh dip net in waters where minnows abound, a good supply can soon be caught, and properly kept by keeping in a perforated can, in pure water.

Hook through the lip and body of the minnow, in such manner that it may appear natural in trolling through the water.

LIVE FROGS.—The frog is a successful lure for several species of fish. To catch frogs, attach a small piece of red flannel to a hook, and lightly drop this where it will be seen; the lure is almost irresistible.

SMALL MICE.—Nearly all fresh water fishes bite readily at live mice. In using this lure the mouse should be hooked through the tail, and allowed to swim away. This may seem a cruel practice, but is little more so than using frogs.

RAW BEEF.—Cut a piece of raw beef in suitable form and size, and it will prove to be a good bait, for the coarse fishes especially. This is a bait easily obtainable, and may be taken along to use in emergency.

LIVE GRASSHOPPERS.—For trout and bass grasshoppers should never be overlooked as one of the most attractive live baits. With a net of mosquito bar a sufficient number can

usually be caught in short order. Use as a surface lure, and never attach a sinker.

DOBSON, HELGRAMITE.—The helgramite, or dobson, known under many different names, is one of the best live baits for black bass. The crawlers are found under logs and stones in brooks and rapid-running rivers, and should be kept in damp grass, placed in a small box. Hook just back of the head.

ARTIFICIAL FLIES.—These are of such great variety that, for a complete list, want of space prevents giving names in detail. Of the standard flies for trout fishing, some of the most popular are the Grey Hackle, Brown Hackle, Professor, Grizzly King, Montreal, Coachman, White Miller, May-fly, Alder and Queen of the Water, with a few midge-flies, small and dark in color. Of black bass flies one of the favorites is the Henshall, so named in honor of the well-known author and angler.

TROLLING BAIT.—The artificial baits used in trolling are multitudi-

nous, including the spoons, minnows, and various devices invented to catch the gamy fresh water fishes. To mention any particular make would seem like favoritism, and to name all is impractical in the limited space of a little brochure wherein brevity is necessary to give wide range of information in compact form.

LINES.— That American manufacturers make the best silk lines in the world is generally known, in this country at least, and the evenly braided, careful enameled lines — thoroughly waterproofed with a preparation of linseed oil and paraffine — are alike pliable and durable; free from “kinks” if properly used, while ordinary tangles are readily released. In salt water linen lines are preferable, as silk is more quickly destroyed therein.

LEADERS.— For fly casting the leaders should be perfectly round, dyed a mist color, with a loop at each end and one in the middle — one end to be attached to the line, and a fly at each of the other loops, a third fly being

sometimes used. The angler who wishes to do so can purchase the gut of which the leader is made and tie it to his own taste as to length, etc., but the variety of tackle stores will usually enable him to satisfy his wants. The leaders to be used should be straightened and placed between two pieces of felt, thoroughly soaked, the day before using, so that there may be no danger of kinks, curves or bends when fastened to the line. The leaders should be kept in the felt covering, and carried in a small tin box about half an inch thick and three inches in diameter.

FISHING RODS.—Expert anglers take pride in using very light rods and tackle, depending upon skill in handling more than in mere strength of rod and line to land the fish; but the beginner will do well to avoid the extreme in either direction, selecting a rod of what may be termed the happy medium in length and weight. A well balanced split bamboo is to be preferred for the use of the skilled angler, and the novice, if careful in

casting as well as in playing the fish, will get more enjoyment in handling a handsome bamboo rod of finest make than in one of either lancewood or greenheart, the most desirable woods in rod making. Of light rods none can equal the split bamboo of best make, either for strength, elasticity or durability. The hexagonal has greater strength than the round rod. Another point is the "balance" of the rod—the poise when held ready for a cast—a matter readily settled by an expert, but difficult to decide by the inexperienced angler. A rod that really fits, so to speak, is a treasure to be kept from harm, an appliance cherished as a lasting friend, for with faithful care it should endure many years, giving service of the most satisfactory kind.

CARE OF RODS.—After using the rod it should be carefully dried and cleaned before putting it away. If the joints of a rod become tightened, they will easily loosen if held over the heat of a lamp chimney. Before using a rod rub a little brown soap on the fer-

rules, and trouble in unjointing will be avoided. In the autumn before putting the rod away for the winter, varnish slightly, hang it up to dry, then place on a level surface to prevent warping.

FLY - FISHING SUGGESTIONS.— In swift-running streams, when wading, the angler will get best results by fishing down stream, thus keeping a taut line. In slow streams, fishing upstream may sometimes be done to advantage. In very clear, smooth water, it is advisable to let the fly sink a little, then move it with a quick motion, imitating the action of a living insect. Two things are of great importance in fly-fishing; first accuracy, then delicacy, each being essential to success. In dry-fly fishing the fly must be kept dry by sailing it in the air between casts, and when on the water be made to closely imitate the action of the living fly. Dry-fly streams, so-called, are few in number. A variety of flies will help in luring the fickle trout or bass, and frequent change will enable the angler to learn

what is most enticing, provided his first casts are unsuccessful. Consider the season, and use flies similar to those hovering over the water, or, by experimenting, discover the kind most attractive. Many of the trout flies used are too large, and frighten instead of attracting the brook trout. In fly-fishing for bass, it is well to let the fly sink some six inches below the surface, then draw it upward, with wrist movement. Strike quickly when a trout takes the fly, otherwise the bait will be rejected before he can be hooked.

MODERATE PRICE TROUTING OUTFIT.—An angler of long experience says: "Here's a plain, practical, reasonable-price outfit with no unnecessary items: A four-ounce lancewood fly-rod, a common rubber click reel, to hold twenty-five yards of fine water-proof silk line, a seventy-five-cent cane landing net, small and with no metal on it, a seventy-five-cent creel, a dozen of the best made and highest-priced assorted trout-flies, a pair of waders, and a dollar's worth

of the finest and best made silk gut leaders.”

THE REEL.— There are a number of serviceable reels, the selection being a matter of choice or taste, but in placing the reel, the kind of fishing to be done must be borne in mind. With a bait rod the reel should be on the top side, in front of the handle; for the fly-rod, place the reel on the under side, below the handle.

GENERAL TACKLE.— The tendency of the times, and of sportsmanship in angling, is in the direction of light tackle, but this may be carried to an extreme with the beginner. Very light rods and lines are likely to be broken by a novice before he gains knowledge of how to use them, therefore it is safer to adopt a happy medium, and when in doubt any experienced angler will gladly give good advice. The steadily growing “cotton threaders” clan, composed of experts, mainly, who use light cotton thread, with rod and hook in proportion, catch quite heavy fish with such angling tackle, but it does not follow

that a fisher with no previous experience could do so. The same applies to the use of barbless hooks, advocated to avoid injuring small fish of size below the legal limit, to be returned to the water. The best advice to the beginner is to shun either extreme, as to tackle, and take into consideration the kind of fishing he intends to do, then consult a thoroughly skilled angler, whose suggestions will be of the worth-while order. Inspect the points of hooks to see that they are sharp; if dulled, file to a perfect point, carrying a fine file for this purpose. It is far safer to buy your fishing tackle at a regular tackle store, where there is not only variety, but better quality than at hardware or notion stores, and in addition to this, knowledge of the wants of anglers, and how to supply in order to retain trade. Have your own tackle; do not borrow, and never lend unless you are willing to lose. Test your line before fishing; better break it if imperfect, than have the first big fish break it for you. For fly-casting, leaders

with sliding loops are preferable. Artificial flies, dipped in kerosene oil, and dried, are safe from moths. As a moth-preventative for fly-books, sprinkle naphthaline crystals among the leaves. Leaders may be given the favorite mist color by immersing them in French writing ink for one hour, then drying. Never let your rods or lines rest against nails, if you would avoid rust and breakage.

SELECTED LINES

IN making up his outfit for angling, the fisher always finds it necessary to take special care in selection of his lines. In like manner, it seems desirable that some very appropriate lines, cast with such delicacy and precision that they must prove pleasing and instructive to the reader, be selected from the array presented by able angler-authors, and re-assembled in form for ready reference, herein. The novice will find that by carefully reading and closely following the lines, he can more readily put the precepts into practice, thereby making the pathway easier to success in reaching the goal of success as a scientific angler:

THE EXPERT FLY-FISHER.— To be a finished wet-fly angler one must possess as much skill as the dry-fly fisherman.—*Emlyn M. Gill.*

THE COMPLETE ANGLER.— Walton's book is as fresh and beautiful as a handful of wild violets and sweet

lavender. It breathes the odors of green fields and woods.

THE CAREFUL ANGLER.—His rule in fishing was to fish in the difficult places which others were likely to skip.—*Daniel Webster.*

THE HOME ANGLER.—The “sporting” element among fishermen haven’t any fine sensibilities. The true anglers fish for edible fish only for their own use and the use of their families.—“*Piscator.*”

THE LOST ANGLER.—Remember that water always is supposed to run south, save in a few instances where it runs direct north or west from the mountains, as the Red River in Minnesota, flowing north, for instance. This certainly would be a misleader. But as a rule water runs south. Follow it. Along streams man makes his abode.—*Robert Page Lincoln.*

FLY vs. WORM.—That fly-fishing is clean, and free from the muscular efforts of mountain-climbing; that it is usually rewarded with larger fish than those taken with a worm; that it has a freedom, a jollity, a certain

broad, wide-spaced exhilaration, I willingly admit. But the humbler, old-fashioned method has a charm of its own which I am not willing to forego.—*Willis Boyd Allen.*

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.—*Kit Clarke.*

TO KEEP FISH ALIVE.—The best method is to carry a net about three feet long, with a swell center, 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.—“*The Practical Angler.*”

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 down-stream, and the trout is pretty sure to seize it.—*Kit Clarke.*

THE BROWN HACKLE.—Two hundred anglers, representing all parts of

the United States, contributed fly-fishing chapters to "Favorite Flies," Mary Orvis Marbury's wonderful book on artificial flies and fly-fishing, and 130 of them declared the Brown Hackle their favorite pattern.—H. C. Wilcox.

THE INDOLENT ANGLER.—I know of old anglers who have experienced better things, who make long excursions in pursuit of *mascalonge*, who will sit on a cushioned seat with a cushioned back in the stern of the boat, and suffer themselves to be pulled about all day, with a trolling rod extended from each side. I never could appreciate this inactive mode of taking fish, which is little better than cockney punt-fishing, and does not require one-tenth the skill.—*Thad. Norris*.

LOCATING THE TROUT.—Often the whereabouts of a trout is betrayed by a break or a leap from the surface, and the wide-awake angler will make it his business to toss his fly over the spot sooner or later. Sometimes the

trout rush at the lure like a flash, leaping clear over it in their eagerness. They are difficult to hook then.—*Charles Hallock.*

CASTING IN THE RAPIDS.—When I come to rapids I cast far down the foaming yeast of waters and draw my dancing, leaping flies swiftly up stream. The water throws the flies hither and thither in the most natural way, and often from a single cast in such a place I have three trout on.—*Ned Buntline.*

A WADING COSTUME.—Long woolen stockings, reaching midway between the knee and hip, and supported by elastic side garters with breeches buttoning or buckling just below the knee, is the perfection of wading costume.—*Fitz James Fitch.*

SKILL THAT DOES IT.—Skill, and trained skill at that, does the good work, and the angler's score is in proportion to his knowledge of "how to do it!"—*Wm. C. Harris.*

PASSION FOR FLY-CASTING.—A gray-haired bait fisher is very rare,

while the passion for fly-casting, whether for trout or salmon, grows by what it feeds upon, and continues a source of the highest pleasure even after the grasshopper becomes a burden.—*George Dawson.*

FLY-FISHING vs. BAIT-FISHING.—The true angler is not confined to fly-fishing, as many imagine. When the fly can be used it always should be used, but where the fly is impracticable, or where the fish will not rise to it, he is a very foolish angler who declines to use bait.—*W. C. Prime.*

CARE OF TACKLE.—When spring comes round, look to your tackle with careful inspection, and see that all are in perfect order. Above all, look well to your flies; reject all specimens that have been injured by use and all frayed gut lengths. It is better to throw away a handful now, than to lose flies and fish together the first time you fasten to a rise.—*Charles Hallock.*

SKILL IN FLY-CASTING.—The natural and acquired skill actually neces-

sary before any man can throw a "neat fly," is known only to those who have made this method of angling their study and amusement.—*Frank Forester.*

PECULIARITIES OF FISH.—There are two peculiarities of all sorts of fish which are frequently unnoticed; that they are largely attracted to their food by scent, and that they feed at night.—*Seth Green.*

NOT ALL OF FISHING TO FISH.—The fisherman whose catching of many fish causes him to forget his surroundings, blinds his eyes to the beauties of nature, and deadens his ears to the music of the wild, is no angler.—*O. W. Smith.*

THE BUNGLER.—Bragging of ungentle catches, untruths about the size of a specimen, and non-ichthyological nonsense about the mystery of a species—unnatural history such as cheap fiction writers indulge in—by bungling would-be fishermen, annoy the practical man and puzzle the earnest tyro. The record of honest

sport is entertaining and instructive.
—*Charles Bradford.*

USE SUITABLE TACKLE.—The quality of gameness in a fish is best determined by the character of the tackle used. A brook trout on a striped bass rod, or a black bass on a tarpon rod, could not, in either case, exhibit its characteristic gameness, or afford any sport to the angler. Excellent sport with small fishes, however, is now rendered possible owing to the advent of the very light trout rod. It should not be considered beneath the dignity of an angler to cast the fly for a rock bass, a blue gill, or a croppie, with a three-ounce rod. Certainly it is just as sportsmanlike as to fish for six-inch brook trout in a meadow brook or a mountain rill.—*James A. Hemshall.*

THE ANGLING WORLD.—Angling takes us from the confusion . . . of the big cities and places us in close contact with one of the most important divisions of human labor—the cultivation of the soil, which is

the real foundation of all national wealth and true social happiness. Everything connected with the land is calculated to foster the best and noblest feelings of the soul and to give the mind the most lofty and sublime ideas of universal nature. To men of contemplative habits the roaming along brooks, rivers, lakes, and fields gives rise to the most refined intellectual enjoyment. Such persons move in a world of their own and experience joys and sorrows with which the world cannot meddle.—
A. L. H.

MISNOMERS OF WELL-KNOWN FISHES

That some of the best known game fishes and food fishes are misnamed, is indicated in the brief summary of contradictory names thus given by an ichthyologist: The black bass is not a bass—it is a sunfish. The white perch is not a perch—it is a bass. The rock bass is not a bass—it is a sunfish. The wall-eyed pike or pike-perch is not a pike—it is a perch. The true fresh water basses that are angled for and which are strictly members of the bass family seranidae—are only three in number—the white bass, *Roccus chrysops*; the yellow bass, *Morone interrupta*; and the white perch, *Morone Americana*.

AN ANGLER'S ALPHABET

A is the albacore, caught on the troll,
B is the black bass, fighting for goal,
C is the crappie, or strawberry bass,
D is the drum-fish, in ocean en masse,
E is the eel, of river and sea,
F is the flounder, of flat form is he,
G is the grayling, fast fading away,
H is the herring, for food and for play,
I is the *inconnu*—whitefish best known,
J is jack-salmon, or pike-perch—no drone,
K is the kingfish, preferred to the cod,
L is the lake trout, fit for the rod,
M is the muscallonge, tiger in fight,
N is the namaycush, angler's delight,
O is the ouananische, salmon land-locked,
P is the pike-perch—lakes are well stocked,
Q is the *quinnat*, Pacific coast salmon,
R is the rock-fish, for masses and mammon,
S is the salmon, of fishes the king,
T is the trout, how its praises do ring,
U is an unknown, find if you can,
V is vermilion-fish, quite a small clan,
W is the weakfish, caught 'neath sea-foam,
X is the X-ray—the x left to roam,
Y is the yellow-tail, found off the coast,
Z is the "zip-fish," a Münchhausen boast.

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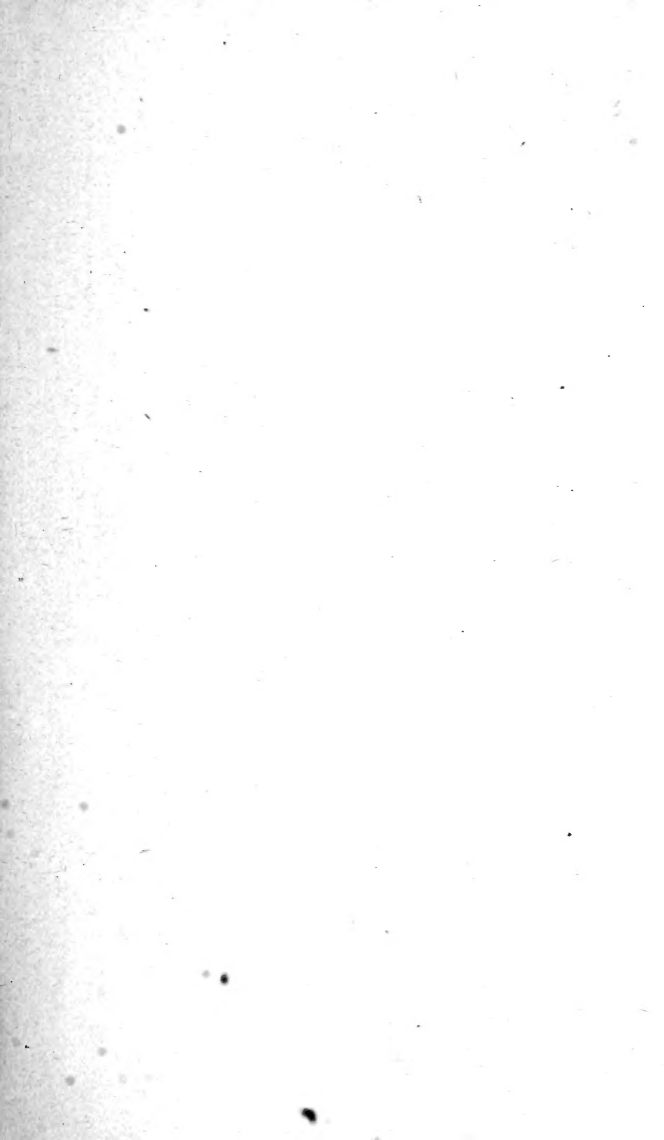
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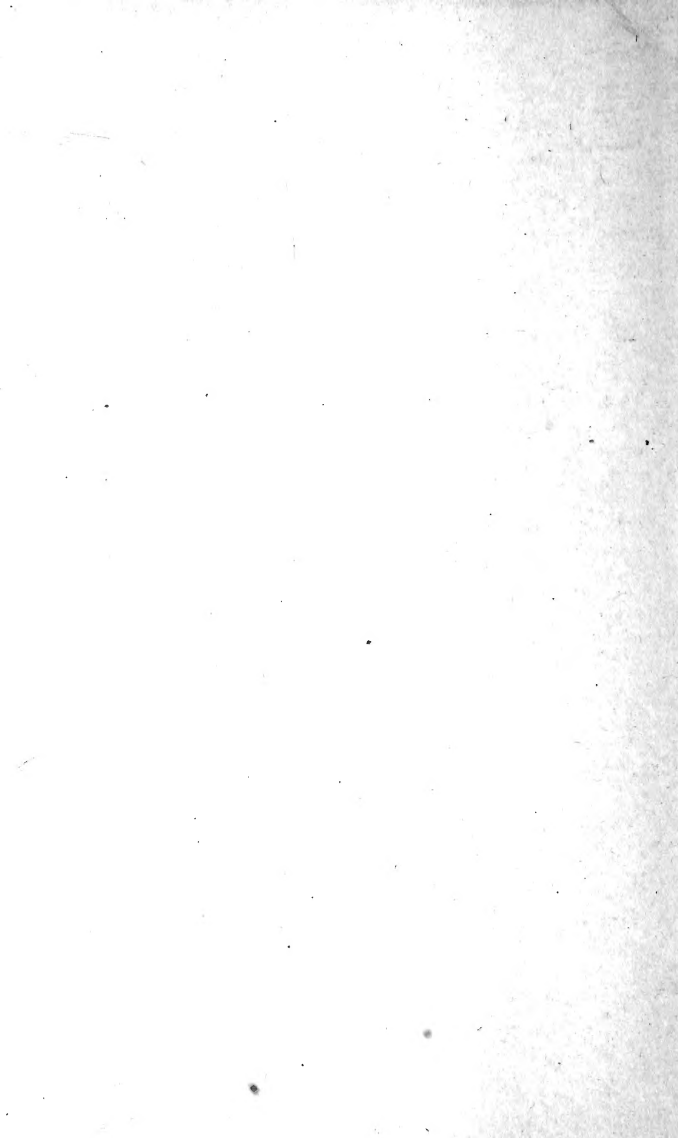
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