

THE GAME FISHES
OF THE WORLD
CHARLES F. HOLDER



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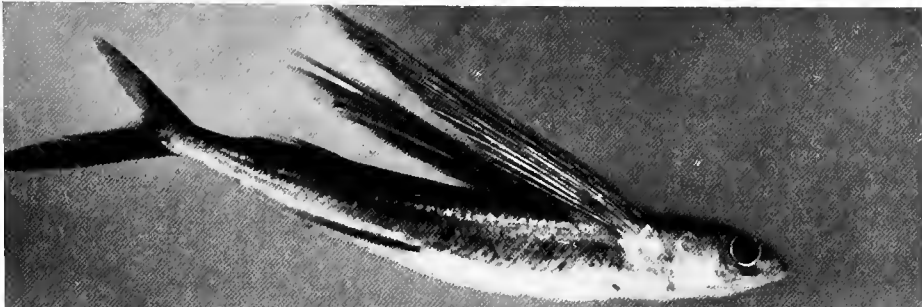
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Fig. 1.

Salmon Fishing on a Rainy Day on the Hodder, England. (The Author). Frontispiece.



THE GAME FISHES OF THE WORLD

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OF CALIFORNIA" "BIG GAME AT SEA"
"THE LIFE OF CHARLES DARWIN"
"THE RECREATIONS OF A SPORTSMAN"
ETC. ETC.

HODDER AND STOUGHTON
LONDON NEW YORK TORONTO

PREFACE

THE present volume was designed to provide a well illustrated condensed account of the principal game fishes of the world. So far as the author knows, such a volume has not been given to the public, and the data can only be had by consulting many different volumes, pamphlets, reports, and monographs, found only in widely separated libraries.

Anglers frequently wish to consult a volume of this kind, and I have often been asked if such a book, giving the essentials, and what is popularly known as 'up to date' information on the subject, is available. If the result of my efforts is found of value and interest to anglers, travellers and sportsmen in various lands, I shall be more than gratified.

It is evident even to the casual reader that to exhaust so comprehensive and voluminous a subject as *The Game Fishes of the World*, a number of volumes would be required, hence I have endeavoured to confine myself to the prime essentials, mentioning only those forms which have been recognized as game fishes by anglers in various parts of the world.

Practically, all the desirable fishes have been referred to, and more or less data relating to most of them given. If the curiosity of the reader is aroused and more detail required, a brief bibliography has been appended in which will be found mentioned works which describe the various fishes in a more comprehensive manner; works which can be found in the library of almost any town or city in England or America, and all in the sumptuous library of the British Museum.

In the preparation of this volume I have availed myself of a wide personal experience in the United States, Canada, the

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Atlantic and Pacific oceans and the Gulf of Mexico, a residence of several years, winter and summer, on the outer Florida reef, where the fauna is practically identical with that of the Bahama, Bermuda, Lesser Antilles and the Caribbean Sea in general. I have also observed some of the angling rivers of Western Europe and the fisheries of the Riviera, and have had the delight of standing on the banks of the Hodder, Ribble and Tweed, salmon rod in hand. I know the charm and beauty of the Yure and its grayling, though my actual experience is limited. Aside from this, I have availed myself of all available sources of information in America, the United Kingdom and Europe to make the volume as useful and comprehensive as possible in so limited a space, and if the angler misses some reference, as he undoubtedly will, I plead guilty of having omitted it as a non-essential. Wherever possible I have given my personal experience.

I wish to express my thanks and obligations to many British anglers, particularly to Mr. R. B. Marston, Editor of the *Fishing Gazette* and founder of the Fly Fishers Club, whose courtesies have been unremitting. I have availed myself fully of his most valuable journal, his books and those of the *Amateur Angler*. My thanks are due to the British Sea Anglers Society for much aid and for the privilege of attending their meetings, and for courtesies from Mr. F. A. S. Stern, Mr. F. D. Holcombe, Sir J. Wrench Towse, Mr. L. J. Graham Clarke, Dr. I. Sefton Sewill and others. Also to the members of the Fly Fishers Club, to Mr. F. M. Halford and others for many courtesies in the Club, the views of their wonderful collection of flies, the use of their library, and warm hospitality when I was in England partly to obtain data for my books. My hearty appreciation is also due to Mr. H. T. Sheringham, the Angling Editor of the *Field*, to Mr. R. Thom Annan, Mr. W. W. Simpson of Whalley, Mr. George Hodgson of Hexton Manor and Mr. W. D. Coggeshall, resident members of the Tuna Club in England, Mr. E. M. Mallett, Mr. G. A. Boulenger, F.R.S., and many more.

I am particularly indebted to Mr. C. H. Cook, 'John Bicker-
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dyke,' whose *Book of the All-Round Angler* I found indispensable. My warm thanks are due to Mr. F. G. Aflalo, the founder of the B.S.A.S., for many courtesies and for the privilege of quoting from his most valuable books on sea angling in many seas, which he has sent me from time to time, in all, constituting a library of sport of the greatest value.

My acknowledgements are due to the Glasgow Sea Anglers Association for many kindnesses, and an opportunity to meet anglers of that city. My thanks are due to Major Hills, at whose country seat, Alburgh Hall, I saw the Yure and its grayling, and to Mr. W. W. Simpson who enabled me to cast for salmon in the Hodder and Ribble, and to Mr. R. Thom Annan for invitations to fish his sea-trout river in Ross-shire and his salmon water in Wales. I am indebted to Prince Pierre d'Arenberg, President of the Casting Club of France, for many courtesies, not the least being a series of photographs of himself showing the first black bass taken by the Prince in France, where he is endeavouring to place angling on a firm basis.

My thanks are due to Mr. Cotter and Mr. Streeter of the Tarpon Club of Port Aransas, Texas, Mr. Conn, Mr. Potter of the Tuna Club, Mr. Chas. V. Barton of Los Angeles for data relating to the shore angling in California, and to Mr. T. S. Manning, Colonel Stearns, Mr. Smith Warren, and especially to Mr. H. Ormsby Phillips for the photographs of his remarkable catches with light tackle and permission to use them.

I am particularly indebted to Mr. P. V. Reys, of Avalon, Santa Catalina, California, for the admirable set of living game-fish pictures of that region, unique in every respect, and for the use of several copyright photographs, and to Dr. B. F. Alden and his collaborator for the wonderful X-ray radiograph photographs shown in the volume, and to Mr. W. Carter Platt for photographs used in the book. I am indebted to Mr. James Horsburgh, Jr., of San Francisco, for photographs of the Pacific Coast and angling lakes and streams; to Dr. David Starr Jordan, Dr. G. Hart Merriam for permission to use their books and reports, and finally to Mr.

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Hunt of Key West for the photographs of Florida fishes, among the most admirable ever taken, and to Mr. George A. Weber of the Laurentian Club and San Souci, Quebec, for many attentions and permission to use his photographs of angling scenes and places in Canada where we have fished together.

PASADENA, CALIFORNIA, U.S.A.

July, 1913.

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CHAPTER I

SALMON FISHING IN ENGLAND

‘ For often at night, in a sportive mood
He comes to the brim of the moon-lit flood
And tosses in air a curve aloft,
Like the silvery bow of the Gods, then soft
He plashes deliciously back in the spray,
While tremulous circles go spreading away.’

Anon.

IN all probability, if any angler in any land should be asked to indicate the great game fish of the world, taken in fresh water, he would say without hesitation, the salmon (*Salmo salar*). And the same angler, without question, would concede the United Kingdom, all things considered, to be the most admirable setting for the picture. I have no doubt many American salmon anglers, knowing the Canadian Restigouche, and other rivers of the north and south sides of the great sea at the mouth of the St. Lawrence, and the superlative gameness of the salmon, might take exception to this ; but having in mind the beauties of the English salmon streams, the marvellous system by which the sport is conserved, the pride of the people in it, the splendid literature that has been developed by it, the poesy, song and legend associated with it, and the type of men and women who indulge in it, on the highest plane of sportsmanship, I doubt if the decision could be controverted, or that many true anglers would question the justice of it.

It requires no little temerity to criticize a sport so firmly entrenched in the affections of a people, yet almost my first word of praise of this sort is tempered by a criticism : the rivers are too beautiful, too distracting for the angler with the ‘ artistic

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temperament,' and if one has not the latter he has little interest or love for the real esthetic features of fly fishing. What chance has an angler, especially an American, when casting for salmon, on the Tweed, we will say, when a friend whispers, 'If you will cast your fly just over there, it will drop not far from the spot where Scott wrote *Ivanhoe*.' Or when casting for salmon on the Hodder, or was it the Ribble? Father Irwin of Stonyhurst said, 'You see the old bridge above us (the charming one I had been devouring with envious eyes)? Cromwell's army crossed that in the seventeenth century.' And when my friend Annan took me down the Tweed to another bridge, under which salmon were lurking, that I might view its ancient beauty, a bridge that Scott used, I forgot all about the salmon, the Jock Scotts and other flies the gillie had made for me at the Edinburgh Salmon Club, just as I missed the first salmon on the Ribble thinking of its old bridge and of Cromwell's army, as my seventh great grandfather doubtless crossed it, as he was one Edmund Johnson, a 'fighting parson' in the army of Cromwell.

How can a mere mortal concentrate his mind on angling on such rivers as the Tweed, Wye, Ure, Derwent, Esk and others where Nature has outdone herself in producing the most radiantly beautiful vistas of green, of forests and sweeps of upland and lowland that blend and melt into the blue of the heavens in splendid pictures, no matter which way one turns or looks? It is possible that I am too critical, but I submit that if I do not land my salmon some time on the Tweed or Wye I have at least given a reason.

With this symposium of seeming levity, or appreciation, I approach the subject of the salmon, which, according to Walton, is 'the king of freshwater fishes.' As to the antiquity of salmon fishing in England, no one knows. The early Britons, the Anglo-Saxons and the Romans who held the country several centuries, undoubtedly fished the salmon streams of England. The salmon, it is known, has been fished with rod and reel for

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at least two centuries, as Walton says, 'Yet sometimes he will, and not usually at a fly,' And when he refers to salmon tackle, 'Note also that many used to fish for salmon with a ring of wire on the top of their rod; through which the line may run to as great a length as is needful, when he is hooked. And to that end some use a wheel about the middle of their rod, or near their hand.' This was in 1670 or thereabouts. But Walton doubtless borrowed his information regarding flies from Juliana Berners, who compiled or wrote a treatise on fishing, which was published by Wynken de Worde in *The Booke of St. Albans*, in 1486, over four hundred years ago. Referring to the salmon she says, 'You may also take him with a fly in like form and manner as you do a trout or grayling,' adding, 'but it is seldom seen.'

No one can read the list of Juliana Berners' flies and not be impressed with the belief that flies were known and used for salmon years, yes, ages before, for as R. B. Marston says in his delightful *Early Fishing Notes*, 'Nothing but gradual evolution extending perhaps over centuries could account for this list. It is not necessary to quote Juliana Berners further, but her treatise on angling is yet the soul of the modern high standard in angling in England and America. This refers particularly to the angler and should be framed and hung in every club in the world :

'Also ye shall not be to ravenous in takyng of your sayd game, as to moche at one tyme, which ye maye lyghtly doo yf ye doo in every poynt as this present treatyse shewyth you on every poynt. . . . Also ye shall besye your-selfe to nouryssh the game.'

It does not require much imagination to see the good Prioress of Sopwell—Juliana—sending on Thursday to some monastery, stationed, as the missions of California were, on or near a trout stream, a demand for salmon, at which we can imagine the monks, all anglers, walking down to the river to catch the fish. An ancient canticle, handed down from the time, tells the story :—

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'The sun was setting and vespers done, the monks came one by one,
And down they went through the garden trim in cassock and cowl to
the river's brim,
Every brother his rod he took, every rod had a line and hook,
Every hook had a bait so fine, and thus they sang in the even shine,
"Oh! to-morrow will be Friday, so we fish the stream to-day!
Oh! to-morrow will be Friday, so we fish the stream to-day!"—
Benedict.

If it was not the salmon season doubtless the Prioress and the nuns caught pike, carp, trout, perch and tench from the Priory pond.

Oppian in his *Halieutica* gave the Romans a treatise on angling; and that the Greeks were anglers Homer tells us,

'Of beetling rocks that overhang the flood,
Where silent anglers cast insidious food,
With fraudulent care await the finny prize,
And sudden lift it quivering to the skies.'

Alexander the Great was entertained by sages who told him how the Macedonians caught fish with what they called a 'hippurus,' the first fly known. It was as large as a hornet, looked like a wasp, and when properly used, buzzed like a bee. This, doubtless, was the origin of the wasp fly, and was used with success on the river Astreus for certain 'speckled fishes' of Aelian.

Flies are not referred to in the Bible, but in the prophecies of Isaiah xix. ver. 8, we read, 'The fishes also shall mourn and all they that cast angles into the brooks.' This prophet must have known an angler who had cast into a brook, lost his fish, and who, like all anglers, ancient and modern, perhaps mourned because the biggest fish ever hooked got away.

Salmon fishing is practically the same in England and Eastern America. The fish is the same (*Salmo salar*); it takes the fly; the chief differences are that the rivers in America where the best salmon fishing is found are larger, wilder, the conditions more primitive, the distances greater, the fish possibly larger,



Fig. 3. Salmon Angling in Scotland on the Tweed, on a Dark Day.
1. R. Thom Annan has a Strike. 2. The Edinburgh Salmon Club.
3. R. Thom Annan Casting on the Tweed. (Photo by the Author). p. 4.

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more numerous and harder fighters than in the rivers of the United Kingdom. Again the sport of salmon fishing in America is of comparatively recent accomplishment. There is little or no literature on the subject, compared to the scores of works by English authors, and it is the exceptional angler who is a salmon fisher; due to the fact that the best rivers in Canada, New Brunswick and other localities are nearly all taken by clubs or controlled. Notwithstanding this, America has had in the past fifty years many enthusiastic votaries of the sport, from Charles Hallock to Dean Sage, and its delights are well known and highly appreciated. Beautiful scenery is an essential quality of trout and salmon streams, and I fully believe the indulgence in the appreciation of it constitutes at least half of the sport; hence it may be adduced that I am an uncertain angler. Yet I do not believe that the salmon takes its tail in its mouth and by releasing it suddenly, accomplishes its greatest leaps, as did the ancients, nor do I use lob-worms scented with oil of polypody for bait, suggested by Walton, though later on I shall make the melancholy confession that I have taken many salmon with sardines and some in a beautiful pool with a spoon; but not until I had exhibited a Job-like patience with the fly.

The English salmon doubtless has the same habit as its Canadian brother. In the winter it lies in deep water off the coast, possibly not far from the mouth of certain rivers, and there, in a splendid investment of silver, has the habit of a voracious salt-water fish, preying upon the small fry of all kinds in company with other predaceous fishes. In the spring it moves inshore, and urged on by instinct to deposit its eggs in the seclusion of the upper reaches of some river, it enters fresh water and slowly proceeds on its way despite all obstacles—nets, traps, poachers and scores of enemies—and accomplishes its end; affording in the Atlantic and Pacific an example of pertinacity and indomitable persistence without equal in the animal kingdom. It has even influenced man, who builds ladders and runways, and steals its spawn that it may not become ex-

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tinct. No subject has been more studied and written about, and few subjects are so little understood.

Fresh water is essential to the production of the young. The eggs will not hatch in salt water, nor will the newly hatched young live in it. When the fish attain the upper reaches of the river, jumping falls, dashing up inconceivable rapids, they select gravelly shallows and deposit their eggs which are at once vivified by the milt of the male.

The eggs are preyed upon by many enemies. There is scarcely a fish that will not eat them, and but a small percentage of the original deposit are hatched, in from eighty to one hundred and forty days, more or less, depending upon the temperature. The male and female salmon now return to the sea, in poor condition, known as kelts, or spent fish.

The young at birth become victims to various enemies, from trout, grayling, perch, even snakes in America. They are known as parr. They move slowly down the river, but remain in fresh water for unknown reasons from one to three years. Half the progeny of a single fish, it is estimated, leave the river at the end of the first year; two-thirds possibly of the remainder enter the sea in the second year, and the small residuum leave at the third year. The parrs are easily recognized as they are striped, like the swordfish, with blue bars. The parr begins to change as the impulse to migrate seizes it; the bars fade away or are hidden, and the fish takes on a coat of brilliant silver, becomes a smolt, and enters the sea—the winter home of its ancestors. The sea acts like a saline elixir to the fish, and it may grow and develop in an extraordinary fashion within a brief period. Thus a smolt has been known to return to the river that it left in May or June, in August, or by the first of September, weighing anywhere from two, or three, to ten pounds.

Such a returning fish is known as a *grilse*. It is now sexually mature, and is on its way to the upper reaches of the river, the same one or some more convenient stream, to deposit spawn, which is accomplished in November or December. To follow

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the history of such a fish, it returns to the sea a *kelt*, lives offshore during the winter, preying upon herring or such fishes as it follows, and other succulent game. This often gives it a remarkable growth, so that in the following spring when it enters the river, runs the gauntlet of poachers and netters, it appears in a pool of some fortunate angler, on the Esk, we will say, a plump, fighting, full-fledged, salmon weighing possibly twenty pounds, that takes his fly and gives him the play of his life.

It is the knowledge of this experience, this survival of the fittest, this extraordinary struggle to produce its kind against all obstacles of man and nature, that gives the true angler the high appreciation of this royal fish. It is this that has made salmon fishing what it is in the United Kingdom, and when one hears the criticisms of some would-be anglers that the best fishing is bought, controlled by private owners or clubs in all lands, it is well to remember that without these safeguards, or if all the salmon rivers of Great Britain were thrown open to the public, the fish in five years would disappear, and salmon fishing would be a lost art and a legend.

There are of course many curious and interesting exceptions to the life history I have briefly drawn, which would fill a volume alone in their presentation and discussion. Some fish remain in the ocean a longer or shorter time. There is an interesting difference in the time of salmon in ascending the rivers of Great Britain. If the river is polluted, like the Thames, and no river should be polluted, they pass it by. In the rivers of Scotland that flow into the German Ocean and Pentland Firth, the ascent is easily made. In December and January there are fresh salmon in the Thurso and Naver rivers; also in the Tay; but in Yorkshire streams the ascent begins in July, August or September in wet seasons. If it is dry and the rivers very low, it will be delayed until the autumnal rains raise the rivers.

It is not believed by Dr. Jordan, the eminent authority, that on the Pacific Coast the salmon invariably return to the same river in which they were hatched, or where they have spawned. This

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belief holds to a certain extent in England, and has resulted, among many interesting experiments, in attempts being made to introduce artificially propagated eggs from one river to another on the principle of adding new vigour to a stock that habitually interbreeds. The beneficial result of this, if I am not mistaken, has been noticed in larger and better salmon.

An interesting incident on the Restigouche in New Brunswick tends to show that, in some instances, salmon do return to the same stream, and will not, if interfered with. One owner of this river built a dam on his water to force the salmon to spawn lower down. The following year there was a great falling off in salmon. In three years they had deserted the river, and when the present owners leased the river and removed the dam, it took five years to bring back the river to its original status. Among other attributes, salmon, it would seem, have memory, though of course they may have gone up the river and turned back; but it is believed they did not enter in any numbers. Many of these interesting experiments have been carried on in a period of sixty years at the breeding establishment for salmon on the river Tay.

We have, then, the salmon of twenty or fifty pounds, or the grilse of ten, in the upper pools of some of the English rivers in spring, summer, fall or winter, fresh from the sea and in the finest condition, full of vigour and ready to take a fly, which is made as alluring as possible by the various fly-makers of the kingdom. Salmon tackle that is so alluring and fascinating is practically the same in England and America; that is, all the old flies that have come down the years, have been perpetuated in both countries: Jock Scott, Grey Turkey, Silver Doctor, Bull Dog, Durnham Ranger, Routledge's Fancy, Irishman's Stocking, Grey Doctor, Dun Turkey, Golden Pheasant, and many more.

'A man that goeth to the river for his pleasure must understand when he goeth there to set forth his Tackles. The first thing he must do is to observe the sun, the wind, the moon, the starres and the wanes of



Fig. 4 Salmon in England.

1. From the Wye, April 10th, 1912, 45 $\frac{3}{4}$ lbs. male, 46 $\frac{3}{4}$ ins. in length, 26 ins. in girth.
2. River Wye, 2 rods, 12 fish, 140 lbs., largest 23 $\frac{3}{4}$ lbs. 3. River Wye, 43 $\frac{3}{4}$ lbs. male,
43 $\frac{3}{4}$ ins. in length, 26 ins. in girth

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the air ; to set forth his Tackles according to the times and seasons to goe for his pleasure and some profit.'

So says Master Barker in his *Art of Angling*, written in 1653. This tackle is the rod, line and flies, leaders,—subjects, texts for a thousand books and sermons, and while it is taking coals to Newcastle or holding the candle up to the sun, to describe it to the reader, I may say that the line must be the best, Number 2 or 3, plaited oiled silk salmon line obtainable. There should be thirty-five yards of this, and back of it a finer line perhaps to fill the reel, a 'back line,' used on many large reels. The leader 'trace,' the unspun silk of the silk-worm, should be round, clear and transparent, and from sixteen to eighteen inches long, double or single. If you wish to make the sport easy and depart from time-honoured usage, use an American multiplier ; but the typical English salmon reel should be employed, a plain click reel at least three and a half to four and a half inches, outside diameter, with a width of barrel of from one and a half to one and three-quarter inches. One should read, for the particulars of these details, the works of Mr. Cholmondeley Pennell, his *Modern Practical Angler* and *The Sporting Fish of Great Britain* ; the hook, a Pennell, O'Shaughnessey or Limerick. In my own experience the O'Shaughnessey is the best all-round hook in fresh or salt water, but of course open to discussion.

The rod is a most important factor, as an angler comes to love an old one and to appreciate its record and gallant deeds. My first suggestion would be to have the best and only the best of everything. A typical rod might to-day be eighteen feet in length, though I have seen and fished with one on the Tweed of nearly twenty-two feet. On the Ribble the rod I used was not over fifteen feet in length, and I found that with it, I could cast a fly from Lancashire into Yorkshire. In point of fact, with a five or six-ounce rod an angler can take a one hundred-pound fish. I have taken seventeen, and twenty-pound yellow-tails on my eight-ounce ten-foot split-cane trout rod, and could

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have landed a fifty pounder ; but it is too hard work. Major Traherne's rod was of greenheart, in three pieces, said by Dean Sage to be but sixteen feet in length.

It is not my purpose to go into the minutiae of tackle. The angler should go to the best tackle men in England and America, and will be given the best advice. Always remember to buy a rod, greenheart or split cane, that balances well and bends from tip down equally and in proportion. There is the same something in foils. I have several that do not balance, while another fits the hand and 'feels' right. This feeling right is an essential in a rod. The English streams are usually so small that the casting is done from the bank, as on the Tweed. I recall my first impressions of this delightful little river, about fifteen miles from Peebles or at the Edinburgh Salmon Club. I was charmed with its beauty, but confessedly amazed at its size. No name was more familiar since boyhood, and I knew the old angling song :

'TWEED FOR EVER !

I

' Let ithers anglers choose their ain,
An' ithers waters tak' the lead,
O' Hielan' streams we covet nane,
But gi'e to us the bonnie Tweed !
An' gi'e to us the cheerfu' burn
That steals into its valley fair—
The streamlets that at ilka turn
Sae saftly meet an' mingle there.

II

' The lanesome Tala and the Lyne,
An' Manor wi' its mountain-rills,
An' Etterick whose waters twine
Wi' Yarrow frae the Forest hills ;
An' Gala too, and Teviot bright,
An' mony a stream o' playfu' speed ;
Their kindred valleys a' unite
Amang the braes o' bonnie Tweed.

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III

‘There’s no a hole aboon the Crook,
Nor stane nor gurly swirl aneath,
Nor drumlie rill, nor faery brook
That daunders through the flow’ry heath,
But ye may fin’ a kittle troot,
A’ gleamin’ ower we’ starn and bead ;
An’ mony a sawmont sooms about
Below the bielts o’ bonnie Tweed.

IV

‘Frae Holylee to Clovenford,
A chancier bit ye canna ha’e ;
Sae gin ye tak’ an angler’s word,
Ye’ll through the whuns an’ ower the brae,
An’ work awa wi’ cunnin’ hand
Yer birzy heckles, black and reid ;
The saft sough o’ a slender wand
Is meetest music for the Tweed !

‘O the Tweed ! the bonnie Tweed !
O’ rivers it’s the best ;
Angle here, or angle there,
Troots are sooming everywhere,
Angle east or west.’

‘Thomas Tod Stoddart.’

In some way I had pictured in my mind a large river, but here was a little stream, completely across which I think I could cast a fly. There was a gentle slope down to it, and its rippling waters ran smoothly and quietly along through one of the most beautiful parts of Scotland and a region of great historic interest. There was a well-worn path along the edge, and from here I watched my friend Annan cast with the fine long rod of his fathers, and under his tutelage I crudely and clumsily cast my first salmon fly ; something to remember all one’s life, a memory to file away in the confines of the imagination, to be taken out again and again.

The salmon angler has many casts, the Spey among others,

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but the overhead or hand is, doubtless, the average used. The fly is sent out over the water and drops thirty or forty feet, we will say, at an angle of forty-five or fifty feet downstream. The current swings it down and around in the arc of a circle, the angler dropping the rod slightly, keeping, if possible, the line from bellying; he anticipates a strike when it reaches the centre, and from now on until it is trailing parallel with the shore. If nothing occurs the angler casts again, moving on, and on, from pool to pool. Suddenly the strike comes; the salmon hooks himself on the steady strain and goes into the air in a splendid leap, giving the angler the sensation that can not be described—a mild angling delirium known only to anglers with the artistic temperament of the athletic type. All the tricks that fishes of all seas are heir to this salmon tries. He leaps, he comes in, he rushes upstream and down; he sulks and defies the angler and the gods, and at this time is pointed, head down, his powerful tail moving to and fro, exactly as I have seen a thirty-pound yellowtail when I attempted to lift him tail first, only fooling him by suddenly giving him all the line. In from twenty minutes to a half hour the salmon comes to the net or gaff, his silver sides are glistening in the sun. The achievement is accomplished. ‘Nearly equal,’ to quote Lord Gordon, on Whyte Melville, to a ‘fine run with the hounds,’ though this is hardly a just comparison. I have tried to compare my sensations as Master of Hounds of the Valley Hunt Club during a hard run after the lowland wolf and landing a salmon or some fine fish, but they are in a totally different class; both joys complete, and perfect definitions of true sport.

It is interesting to compare the methods of salmon fishing in England and America. In the latter the streams like the Restigouche, Matapedia, Upsalquitch, Nepisiquit are often so large that the fishing is done from canoes manipulated by Indians or white guides, the angler playing the salmon and going ashore on some convenient ledge to land him. In England the fishing is mostly from the shore, or from the river when wading—the



Fig. 2. Salmon Angling in Wales. The Wye.

1. Colonel Robertson Casting for Salmon in the Rapids at Glanrhos, Wales. 2. Gerald Graham Clarke in the Rapids of the Wye—L. J. Graham Clarke Watching—Glanrhos. p. 12.

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ideal condition. Some of the stories one hears in England regarding fighting salmon recall my tuna fishing, when to be towed about for eight or ten miles, all the time fighting the fish, was a part of the game. An Irish angler is said by Couch in his *Fishes in the British Isles*, to have hooked a salmon that took him *three* miles downstream in five hours, when, exhausted, he handed the rod to a friend who kept up the fight *eight* hours longer, during which the fish took him *seven* miles towards the sea, daylight finding the angler breaking down while the salmon apparently was as fresh as ever. The exhausted angler, in desperation, was induced to sell his chance to a gentleman for a pound banknote, and the fresh angler was taken *four* more miles downstream in the following *nine* hours, followed by a wondering and constantly increasing audience. At the end of twenty-two hours the rod broke at the reel and the giant swam out to sea. I have heard of a man being forced to swim half a mile downstream in an American river, yet saving his fish, and volumes could be filled with marvellous stories of the salmon.

I have touched upon that feature of salmon fishing in England, Scotland and Ireland—the scenery. Rivers are delightful if only to walk down. The charming stretch of the Tees at Barnard Castle, referred to in *Nicholas Nickleby*, its grandeur and beauties in Westmorland, the Tweed, Eden, the Esk, Wye and others mentioned in the chapter on trout fishing in England. What can excel the delight and refined beauty of the Severn near Arley in Shropshire, the Derwent near Haddon Hall in Derbyshire, the Wye at Symond's Yat in Herts, or on the reach of Mr. Graham White at Rhadnor, Wales, a river I know my forebears fished prior to 1650.

These noble, often exquisite streams were designed to aid in the development of a great nation. They are humanizing agencies in the attainment of culture and the higher esthetic qualities of mankind, and it is lamentable that in all lands where this noble fish takes a fly that laws can not be enforced to reduce nets to the minimum, to make it a crime to pollute a river.

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Salmo salar attains a large size. I shall never forget the models of this splendid fish I saw in England. A fifty-seven and a half pounder has been taken. Mr. Cholmondeley Pennell gives the record to a female of eighty-three pounds. Penant refers to a seventy-four pounder. In 1789 a seventy pounder was taken in the Thames near Falham. An eighty pounder was netted in the Tay. The South Kensington Museum shows one of sixty-nine pounds from the Rhine. Fifty-one to fifty-four pounders have been taken in the Shannon. The Tay has produced fifty-three, fifty-one, and forty-nine and a half pound salmon, and the Wye a fifty-pound fish. On the Tweed a salmon was caught in 1886 in the Floors Castle water, by Mr. Pryor, Hylands Chelmsford, weighing fifty-seven and a half pounds, fifty-three inches in length and twenty-eight and a half inches in girth. In the *Fishing Gazette* I find the following : 1870, Mr. Haggard, in the Tay, sixty-one pounds ; 1874, the Suir, Tipperary, fifty-seven pounds ; 1875, Derwent, fifty-five and a half pounds ; 1877, in the Awe, Mr. J. B. Lawes, fifty-four pounds ; 1884, in the Dee (Floors water), Mr. Pryor, fifty-seven and a half pounds ; 1889, on the Mentoun, Lord Polworth's water, fifty-five pounds ; 1892, the Derwent, fifty-six pounds ; 1895, the Tay, Lord Zetland, fifty-five pounds, the Eden, fifty-five pounds.

These splendid examples afford the reader some idea of the possibilities of this noble fish, the ideal game of the gentleman angler.

In every salmon stream there are 'casts' or lies—places affected by salmon where they make a temporary home or abiding place. I have seen the same with trout, and it is an important feature of the art to know and understand all about these places. A friend who, it happened, was on a hill over such a pool in Canada, saw four salmon poising low, side by side. A twig came downstream. One salmon rose, seized it and carried it downstream, releasing it, then wheeling round took its exact place. This was repeated several times. I have seen a rainbow trout that seemingly had riparian and exasperating rights, behind

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a certain stone in Feather River, California. I saw it there every day for weeks, but it ignored me and all my inventions.

Among the quaint old customs that have come down to the present day is salmon Sunday on Paythorne bridge, on the Ribble, which I crossed in 1910. The bridge is about ten miles above Gisburn. It is an old custom for the inhabitants of the surrounding country to go to this bridge on a certain Sunday (about November 20) and spend the day there watching the last run of the salmon under the bridge. Thousands of people take part in this queer pilgrimage, to the delight of the inhabitants and the joy of the keeper of the neighbouring inn.

One of the most inspiring sights in England is the participation in the sport of angling by ladies. There is nothing more inspiring and health-giving for women than casting a fly or sea angling with rod and reel. A fascinating account of an English salmon stream and the enjoyment of the sport is given by Mr. R. B. Marston in the *Gazette* of December 7, 1912. The lady anglers referred to are Lady Bernard Gordon-Lennox, Lady Evelyn Cotterell, Lady Amy Gordon-Lennox, Miss Ivy Gordon-Lennox, the Countess Percy née Lady Helen Gordon-Lennox. Mr. Marston says :

‘Of all the British waters there is none that has no much of the character of a Norwegian salmon river as the Spey in the last seven miles of its course. Between Orton and the tide there is a fall of one hundred and sixty feet, down which the river sweeps between huge banks of shifting shingle with a force that adds greatly to the natural power of a salmon when hooked. In this part of the river there is hardly anything that can be termed a pool ; nothing but a succession of swift, rough streams with a little comparatively slack water along the sides and at the tails. A fair proportion of the cast may be fished from the bank or by wading deep-waist high ; and to accomplish this in a heavy stream over a bottom covered with slippery, rounded stones requires some strength both of body and nerve.

‘Such being the character of the Gordon Castle water, it would seem at first sight most unsuitable for lady anglers ; nevertheless they do much execution therein. Where wading moderately deep suffices, they are on equal terms with the men ; in places where the fish lie far out they are

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accommodated with boats, which the Duke and his male guests only use for crossing the river.

'And this brings to mind one of the most commendable features in the management of this part of the Spey. Neither in spring, summer or autumn does the Duke allow the use of any lure except the fly. The sport obtained during February and the spring months in the water from Fochabers Bridge upwards is sufficient refutation of the evil doctrine that salmon will not readily take the fly in snow water and cold weather. These conditions can be and are satisfactorily met by the use of large flies; and who will challenge the supremacy of fly-fishing over every other branch of the craft, provided that it is equally effective in its results?

'The five ladies are all mistresses of the mystery of angling. They can not only send out a good line in a nor'easter, but they have complete command over their equipment, and none of them is likely to be involved in the disaster which besets many a neophyte, who, having hooked a strong fish, either forgets, or lacks the power of back and arm, to keep up the point, and, allowing rod and line to be pulled into a horizontal position, encounters the inevitable fracture.

'Spey salmon are a noble race, numerous and steadily increasing, owing to a timely reduction of netting, which is now restricted to the water below Fochabers Bridge. The spring run used generally to be accounted to consist of small fish; but of late there has been an increase in the average weight. One day last February, two anglers, fishing opposite sides of Alltdearg, hooked fish simultaneously. One called across the river to the other that he would bet half-a-crown his fish was the heavier. He lost his wager by a matter of eight ounces, the two fish weighing respectively eighteen and eighteen and a half pounds.

'The Gordon Castle water, being so rough and rapid, fishes well even after prolonged drought. Indeed, in dry seasons, the display of salmon in the lower pools is sometimes amazing after the nets are removed at the end of August. A singular chance befell one of the ladies. She was being rowed across the river when a twelve-pound salmon, fresh from the sea, sprang out of the water into her lap. That fish never returned to harry the herrings in the North Sea! A curious thing about the Spey is that in some parts it looks so quiet, due to the fact that its surface where you fish is usually a hurrying, dancing stream, unbroken by rocks showing, and giving little indication of the wilderness of small rocks of all shapes and sizes which strew its bed. I shall never forget fishing in one of the pools on the Arndilly House water when the river was just rising the least bit, and getting my right foot jammed against a rock in a strained position. The stream was too strong to push back against it unless I could get my foot free. I went on casting my fly and hooked



Fig. 5.

Mr. Miller, who caught the 43½-Pound Salmon. (Photo by W. Mollison). p. 16.

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a good salmon, but the strain was getting exhausting. I was simply obliged to let the fish take out line, or he would have pulled me over, and some seventy or eighty yards below the fly came away. As I was winding in I felt my foot slip as though some gravel had moved from under it, and to my great relief I could move it, and so get a firm footing, and gradually push backwards until I could wade out.'

Among ladies who distinguish themselves on England's salmon rivers are the Duchess of Roxburghe, whose record for the year 1912 was thirty-five fish in the short autumn season. Thirteen salmon were killed in two days, the largest being a thirty-two pounder, and the average eighteen and one-third pounds. Lady Nina Balfour killed a thirty-two pound salmon, and, according to the *Gazette*, 'seldom had a blank on any of the thirty-nine autumn angling days in Mentoun, while her guest, Lady Bernard Gordon-Lennox, who in 1911 vanquished a forty pounder in the Spey, had with the single hooks used on that fast-flowing river eighteen salmon in five November days.'

CHAPTER II

THE GRAYLING

‘Very pleasant and jolly after mid-April.’

Walton.

I FEAR that angling in England has too many digressions for me. When I walked down the slope from Alburgh Hall one fair day on my way to try a cast at the grayling in the Ure, my host remarked, ‘We are walking down an old Roman road, and the ford the Romans crossed is where you can begin to cast.’

It may seem inconceivable, but I lost sight of the grayling and the attractive river that flows near Ripon and Fountains Abbey through one of the most beautiful and interesting parts of England. I can imagine nothing more attractive than this little grayling river near where I followed it at Ripon, one of the finest old cathedral towns in England, where the ‘Wakeman’s horn’ is still heard at eight o’clock. I saw it gleaming through the arbours of verdure with their autumnal tints—a kaleidoscope of colour. I saw it in the open, and I left it to follow down its little tributary, the Skell, on which I found one of the most charming of all ruins in England, or any land, the abbey church of Fountains.

I fear I forgot all about grayling as I wandered among the splendid ruins, the real history of England, but I came to myself a while later when I reached Studley Royal, the seat of the Marquis of Ripon, and saw the Ure, or one of its branches, murmuring along through a veritable paradise of woodland and lawns. As I stood on the rich green banks, bands of trout, and here and

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there a grayling, poised in the clear, limpid stream, or moved in alarm as my shadow fell across the waters.

I have seen and crossed a number of rivers in England containing trout, grayling, or both—the Swale, Tees, Nidd, Wharfe, Aire, Calder, Derwent—all a part of the system of the Ure, all going to make the Ouse of the Humber, but the Ure is the only one I have really fished for grayling, and it seemed to me the most delicious little river that one could imagine in dreams, something to fall in love with, and to chasten with a strong affection. Here I found a perfect demonstration of my own, but not original theory of what constitutes angling; not fishing alone, but all the beauty and joys of beneficent Nature that fell to my lot. So in angling on the Ure, if I had never seen a grayling or a trout I should have esteemed myself the luckiest of anglers.

The Ure is essentially a Yorkshire river, and if you climb to nearly half a mile near Shunner Fell in the wild regions between Westmorland and York, you may find the head-waters of the little river that rolls on, laughing, rippling to the sea. On its way it picks up the Ribble, Beck, Hardraw Beck and Gayle Beck above Hawes, and below many more. You may find grayling almost anywhere, at Hawes, Bainbridge, Aysgarth, Redmire, Wensley, and Masham, near which I recall some fine pheasant shooting, Wensley and others. In nearly all these places are angling clubs, as the Ripon Angling Club, the Askrigg Club and the Wensleydale Angling Association.

The grayling is one of the most esthetic of fishes; a first cousin of the clan of trouts, he looks like a herring at first glance, but has a highly coloured dorsal fin suggestive of that of the great sailfish of Madagascar. Jordan says, 'A very noble game fish, characteristic of sub-Arctic streams,' St. Ambroise, the Bishop of Milan, termed it the 'flower of fishes,' and poets have written of it from early days. The Canadian Arctic grayling (*Thymallus signifer*) was discovered by an Englishman on the Sir John Franklin Expedition of 1819, and was named by Sir John Richardson, who thus writes of it:

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'This beautiful fish abounds in the rocky streams that flow through the primitive country lying north of the sixty-second parallel between Mackenzie's River and the Welcome. Its highly appropriate Esquimaux name "Hewlook-Powak," denoting "wing-like," alludes to its magnificent dorsal, and it was in reference to the same feature that I bestowed upon it the specific appellation of *signifer*, or the "standard-bearer," intending also to advert to the rank of my companion, Captain Back, then a midshipman, who took the first specimen that we saw with the artificial fly. It is found only in clear waters, and seems to delight in the most rapid parts of the mountain streams.'

Izaak Walton knew the grayling and speaks of him lovingly : 'And some think he feeds on water-thyme for he smells of it when first taken out of the water ; and they may think so with as good reason as we do that the smelts smell like violets at their being caught ; which I think is a truth.' *Un umble chevalier*, the French call him, and an old legend tells that the grayling fed upon gold. Walton tells us (and what better authority ?) that 'many have been caught out of their famous river of Loire, out of whose bellies grains of gold have often been taken.' In describing the grayling he says succinctly : 'Very pleasant and jolly after mid-April.' Cotton calls the grayling, 'one of the dearest-hearted fishes in the World, and the bigger he is the more easily taken.' But Walton says he is 'very gamesome at the fly, and much simpler, and therefore bolder, than the trout, for he will rise twenty times at a fly, if you miss him, and yet rise again.' Another great English angler and author, R. B. Marston, comes to the rescue of the grayling as follows :

'*Note.*—Since I wrote this chapter, in which Cotton's remark about the grayling being a dead-hearted fish is referred to, I took a friend, a salmon and trout-angler, who had never caught a grayling, to the Test. His first fish was one of two pounds, which fought so well and so stubbornly that, when I turned every now and then from my fishing to watch his bending rod, I thought he would have no reason to call a grayling dead-hearted. Later on, among a few brace of good fish I killed, was one of two and a half pounds, which fought splendidly, compelling me to follow him forty yards downstream and, for a time, spoil one of the best bits of water fishable in a wild November north-easter. I was so warm from the



Fig. 6. Grayling Angling in England.
1. Stalking. 2. Good Luck on the Beautiful River Wharfe, in Yorkshire. 3. Netting the Grayling. Photo by W. Carter Platt. p. 20.

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exertion of fishing and playing fish in such a gale, that I did not think of the weather till I noticed the blue nose of my friend the keeper, who was carrying my net : he shivered so that I sent him home.'

So much for the little grayling that by many authorities and wise men takes its place among the game fishes of the world. His natural range we have seen is the Arctic and sub-Arctic streams, and so he has wandered, and been carried far a-stream until many lands and rivers claim the flower of fishes. There is but one genus, *Thymallus*, so called because the fish has the odour of thyme, but there are five well-known species in different lands, three of which belong to America.

The Arctic form, already referred to, attains a length of eighteen inches, and is a most desirable game with a very light rod. Another, the Michigan grayling, was first brought to the attention of the world of anglers and science by the Dean of American anglers, Charles Hallock, who told me the story years ago. He sent a specimen to Agassiz. This is *T. tricolor*. Its home is in the streams of Southern Michigan where it once reigned supreme. A town was named Grayling and became the centre of interest for anglers. A more attractive little fish can hardly be imagined, and to watch the sensitive and really splendid dorsal rise and fall and flash in its regal colours in the sunlight is, indeed, a privilege.

The back bears a rich olive hue ; the lower surface is a bluish white, while the fins seem to scintillate and glow in tints of pink, old rose, blue, flashes of scarlet and purplish-pink. The side fins are olive-brown tipped with blue ; the ventrals striped in brown and pink. The large powerful tail is deeply forked. Over all, like a sail, rises the splendid red dorsal, splashed or ocelated in red, blue and purple, each framed in emerald-green.

In Montana is found a grayling that has been given the name of the territory. It lives in the streams which find their way into the Missouri River above the Great Falls, Deep River and streams of the Little Belt Mountains, the Gallatin, Jefferson,

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and Madison whose cool waters are peculiarly adapted to it. Elk Creek, a tributary to Red Rock Lake, is a famous place for them, and in April they may be seen in great numbers passing up the Jefferson, according to Jordan, through Beaverhead and Red Rock rivers to Red Rock Lake, which they pass for fourteen miles, reaching the small streams which flow into it, there depositing their eggs. Dr. James A. Henshall, the distinguished authority on fishes, stands sponsor for this American grayling. He has successfully accomplished its artificial propagation and considers it a fine game fish, the equal of the Brook or Red-throat trout. These graylings readily take a small fly from May until November, and range from ten to twenty inches in length and attain a weight of two pounds.

'And in this river be Umbers, otherwise called grailings,' wrote Holinshed, in his *Description of Britain*, over three hundred years ago.

The grayling, in all probability, finds its finest development in England, five pounders having been seen, though Dr. Day is authority for the story that a nine-pound fish was taken in Lapland some years ago. The species common in England and Europe in general, is *T. thymallus*. In the Ure I found it in very shallow water. It spawns in April and May in the immediate vicinity of its natural haunts. It has a wide range in Europe, as far south as Hungary, and is highly appreciated in Northern Italy and in Switzerland, where Gesner sounded its praises as a game fish. It is caught in Siberia and Russia. In England the fish is widely distributed, especially in Hampshire streams where the dry fly is used. They do not lie at the surface, like trout, but haunt the bottom and dash upward, turn, and in a flash are at the bottom again, as I saw the brook trout in Lac Weber, Canada.

Mr. Halford recommends for Test grayling, Wickham's Fancy, Red Tag, Orange Bumble, Adjutant Blue, and the Duns on 000 hooks. The mouth of the grayling is very delicate, and the fish deserves, and should have, the lightest and most delicate

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tackle. Criticism of the grayling is often heard in England and America, the charge being that it decimates the trout, being an egg eater. This is more or less true, but it depends upon the trout. The Montana grayling and the cut-throat agree very well, but between the grayling and the red-spotted trout there is war, and the result is fatal to the grayling. In England it is believed by many that the grayling is a menace to the German or Brown trout. Listen to the dulcet names of some English streams you may whip with delicate rod: the Wharfe, Swale, Nidd, Tees, Rye, Derwent, Ouse, the Esk, Eden, North Tyne, Till, Coquet and Dove. Here are some American streams: Toxaway, Altamaha, Ogeechee, Ocmulgee, Savannah, Nantahala, Tugaloo. These are the Indian names of American laughing waters in the Southern states.

The Wharfe is a delightful little grayling river, which rises on the green slopes of Cam Fell. Near Bolton Abbey and woods there is grayling angling, tinted with so rich and sumptuous an historic flavour I am sure I never could hook a grayling there; it would be like the Ribble. At every cast I saw Cromwell, or George Fox, Bishop Laud, Sir Harry Vane, Pym, and all the crowned heads from Charles the First to James, who liberated my sixth great-grandfather from the Tower and sent him back to America with estates restored. In America the diversions or digressions are beautiful scenery, splendid mountains, but when historic lore is added at every foot one may be pardoned for missing the game altogether.

At Pool, Arthington, Collingham Bridge, Boston Spa, Tadcaster, Ulleskelf, and Ryther there is more or less grayling fishing, and so in the towns on the Nidd, as Cattal, where the Harrogate Angling Club holds forth, the Swale, Derwent and other streams mentioned in bewildering number, and all characteristic of the splendid reaches and perfect landscapes of England.

I am indebted to Francis M. Walbran for the following interesting list of flies he has tried on Yorkshire rivers, which are

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especially commended for September and October: Bradshaw's Fancy, Walbran's Red Tag, Rolt's Gem, Rolt's Sylph, Orange Bumble, Honey Dun, Bumble, Quill, Bodied Water. Hen, Green Insect, Green Aphis, Apple-green Dun, Silver Dun, Walbran's Pale Autumn Dun, Walbran's Dark Autumn Dun, Cooper's Fancy, and many more.

The grayling is an esthetic little fish, and to attempt to trap him with anything but the lightest rod, line and trace is a crime. Many a fish has been condemned unfairly, as the angler took the game with a pseudo club rather than a rod. I have seen individual tarpon, tuna, and yellowtail that were a disgrace to the term game. It is so with all fishes. There are exceptions to the rule, but the grand average of the graylings gives the sportsmanlike angler one of the finest and most beautiful of all the little fishes of the laughing waters, and my object has been, not so much to describe him scientifically, or to mention all the rivers in England he loves, but to impress him, like thyme, upon the reader's attention, as like rosemary, he is for remembrance, and 'Very pleasant and jolly after mid-April.'

CHAPTER III

SOME ENGLISH TROUT STREAMS

'The pleasantest angling is to see the fish cut with her golden oars the silver stream and greedily devour the treacherous bait.'

Shakespeare.

I CAN hardly explain to the layman (and to the angler it is unnecessary as he knows all about it) the quality of my delight when I first saw the radiantly beautiful trout streams of England. Whether it was a sense of proprietorship, as my ancestors on all sides fished these streams prior to 1656, or just mere appreciation, I cannot tell. I have no doubt that having a strong underlying appreciation for what England has done to civilize the world, my inner consciousness had bridged the two and a half centuries since my Quaker ancestors left England for America, as missionaries. I am sure that all these forefathers at some time were anglers, as a man could not be human and resist the more than beautiful and alluring streams of England. I am going to believe that they were, and that some of them saw the Dove, and knew Walton and Juliana Berners, and all the rest of that little band of honest anglers who have added to the joy of living, by creating the purest and most delightful of outdoor sports—angling with a fly.

Everything is old in England, and the ancient Britains, the Romans, the early angling Saxons and many more races have known England, its trout, salmon and grayling in the past five or ten thousand years, and nowhere in the world has sport been so well conserved, so dignified and made so completely a part of the health of the race.

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He who first cast a fly in English trout streams has left no trace, but that the Romans fished here is well known, as they held the land for several centuries. I recall a day spent in an old Roman camp near Blackburn with W. W. Stimson, Esq., where in an old well by the river Hodder had been found a marvellous collection of Roman articles.

Theocritus, so rich in fishing pastorals, wrote of angling two centuries before Christ and referred to flies, 'the bait fallacious suspended from the rod.' Three centuries after Christ Aelian described fly fishing among the Macedonians as tried in the River Astracus. He refers to a bee-like insect and a 'fooled fish' that rises and seizes it. Speaking of flies, reminds me that the most alluring spot I remember in connection with flies and fly tying is one of the upper floors of the Fly Fishers Club of London, where I fancy there is always a seat waiting for me. There is a wonderful little library on one floor, where you may see and read many angling works from the time of Walton down.

The most interesting spot is the fly room, where a member, if seized with a feathery inspiration, may sit down at a table and find in drawers at hand, every feather for any fly known, from the Ibis to the Silver Doctor. More, there is here a collection of real insects from almost every stream in England, from which flies are shaped or have been made; and the novice will be amazed to see how unlike, and like, artificial flies are to the real thing, and to observe that they are not flies at all.

Just who invented fly fishing is not known, but that it is a very ancient art goes without saying, reaching far back into antiquity. Doubtless, the Romans fished with a fly in England ages ago, and the men of the stone age before them. The American Indian had never heard of the March Brown, or May-fly, described by Juliana Berners, yet some of them fished their radiant streams with a fly.

When fishing years ago near Big Meadows, California, on the Feather River, I noticed here and there fluffy feathers of white dancing in the breeze over the water, and beneath a clump of

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willows. When I crossed the river to investigate, I found a strong willow pole fastened to a tree, on the end of it a small but strong line to which was fastened a bunch of white feathers concealing a hook. This was a savage Royal Coachman, and I believe Feather River was named from this custom, the taking automatically of big rainbow trout being an ancient one. The fly tying art was at one time in the hands of a few specialists, men of great individuality and invention, generally true lovers of sport in the open and nature. Now, owing to the great demand for flies, they are manufactured by wholesale, large establishments turning them out, and cheaper ones imitating them, though as yet, flies are not made by machinery.

Every angler has his favourite fly. Many years ago I fished the St. Lawrence River for bass with Andrew Clerk, and his favourite fly was the St. Patrick, which I think he invented. I have always found it very alluring not only for eastern bass but for western trout, and one of the most beautiful of all flies.

I once found a fly maker in the Feather River country. He fished all summer and made flies all winter while snowed in. I shall never forget the pleasure of my anticipation as I came down the road and read the sign on the little shop, as here I was to stop, and the fly maker was to 'break me in' to that particular locality. It was the custom here when a large trout was taken to lay it on a piece of paper and mark the outlines; then the fly maker would colour it, cut it out, and bearing the angler's name and the certificate, nail it on to the wall. The wall of this little shop was well covered with mighty paper trout, a hall of piscatorial fame, where hangs, or did hang, a certain seven pounder bearing my name, taken with a Royal Coachman in the month of September.

Some of the most beautiful salmon flies I have ever seen were made by the son of the head-keeper at the Edinburgh Salmon Club on the Tweed. They were too beautiful to use, and I carried them around with me a long time. I remember taking them out once in a while to give them away, or to display

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them as one would an uncut gem. In this way, I disposed of a dozen or two St. Patricks and I fancy the Jack Scotts and Silver Doctors went the same way. There are several fine fly tiers in Ireland and many in England and Scotland of national reputation, while in America, Orvis is remembered with affection; and there are several men who are more or less famous, not to speak of amateurs, as fly tying is an art if not an exact science.

Of flies there are no end, and all anglers have large collections for one reason or another; but the fact remains that a few flies seem to fill all the requirements. I have fished for days on the Feather in California and the Williamson in Oregon, one of the most beautiful trout streams in the world, and the most prolific with big trout, and used but three flies, the Royal Coachman, Kamloops and March Brown; but there are times when the game is suspicious or arrogant, and then the angler tries one after another.

What is more delightful than to listen to the theory of a dry fly enthusiast, and watch his system of changes. He is just being born in America, and Dr. Emlin Gill is the high priest, having written a volume on the subject. I have always been a *pseudo* dry fly fisherman by intuition—that is, I enjoy using a wet fly, dry fly fashion, finding my greatest pleasure in casting with one fly at the target made by the rise of a trout and withdrawing the fly before it sinks.

But I am wandering from the trout and beautiful trout streams of England. The chief charm of trout fishing lies in the environment, and it is here that England shines, for her trout streams are a joy to the lover of angling the world over.

Somehow, one is reminded of Turner when thinking of angling in England, and there rises in my mind his picture of 'The Brook.' I have spent much time angling in that little stream, comfortably seated in the Tate gallery, wondering if it widened out, and whether it was a trout or grayling stream where it was larger.

I have mentioned in a previous chapter some of the streams of England, and to my mind they absolutely fill the field of what



Fig. 7. The Trout Streams of England.

1. Spinning for Trout in Low, Clear Water.
2. A Dry Fly Cast. (Note the rise). Photo by W. Carter Platt.

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should be best in a typical, ideal trout stream, possessing transcendent beauties to charm the senses and lure the angler from the mere killing. In nearly all you may take trout ; but think of the vistas and landscapes of the poet and artist that are to be bagged on the Derwent, near Abraham's Tor, the Severn near Arley, Bridgenorth or Cam. What ineffable charm there is in the castellated effect of Haddon Hall as the Derwent ripples on in Derbyshire. Then the Wye, with which I have a speaking acquaintance, and know about from delightful correspondence with Mr. Graham Clarke, who lives on it ; and whether you see it in Breconshire, in the heart of a splendid rolling country, embosomed in verdure, or sweeping by fair Ross in Hertfordshire, where my friend Annan lives and fishes, it is always the same—beautiful, appealing and strong in its personality.

The Wye, I fancy, is a wild river, despite its pastoral views ; that is, it belongs to the wild country, runs through regions given over to wild life. It comes rippling on, is joined by the Marteg and Elan not far from Rhayader, and here becomes rushing, impetuous, a real river, famous for its salmon. Of all the rivers of England, it is probably the least defiled, and from near Ross it is a noble stream, with torrential flow that stamps it as one of, if not the finest river in England for the angler or lover of nature where grand and beautiful scenery are entwined with the best of salmon and trout fishing.

What can be more charming than a sight of the Avon near Salisbury, a pastoral scene, or the Wiley at Stapleton ; and what memories does the Itchen at St. Cross, Winchester, and St. Catherine's Hill, conjure up of ancient worthies, honest anglers and fervid love makers. The climax is reached in the Dove at Dovedale, Derbyshire, where it creeps, deep in the verdure between lofty cliffs, a veritable cañon, and is lost in mysterious valleys far beyond, in the land of dreams and fancy. And there is the Eden, near Carlisle and the Roman Wall, and as it flows near Lazenby in Cumberland, one is enamoured of the beauties

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of its sylvan glades and glens. Christopher North gives some idea of this in the following :

‘ I’m wrapped up in my plaid, and lyin’ a’ my length on a bit green platform, fit for the fairies’ feet, wi’ a craig hangin’ ower me a thousand feet high, yet bright and balmy a’ the way up wi’ flowers and briars, and broom and birks, and mosses maist beautiful to behold wi’ half-shut ee, and through aneath ane’s arm guardin’ the face frae the cloudless sunshine ; and perhaps a bit bonny butterfly is resting wi’ faulded wings on a gowan, no a yard frae your cheek ; and noo waukening out o’ a simmer dream, floats awa’ in its wavering beauty, but, as if unwilling to leave its place of mid-day sleep, comin’ back and back, and roun’ and roun’ on this side and that side, and ettlin in its capricious happiness to fasten again on some brighter floweret, till the same breath o’ wund that lifts up your hair sae refreshingly catches the airy voyager and wafts her away into some other nook of her ephemeral paradise.’

It is an injustice to all these streams, these little rivers in the affections of some anglers, to mention one and not all : the Avon, Hamoaze, Dart, Erme, Tamer, Tavy, Eve, Thames, Arun, Ouse, Rother, Trent, Wharfe, Nidd, Swale, Tees, Stour, and so on indefinitely ; a region of delight to owner or angler whose luck leads him into their particular sphere of attractions. One cannot write of trout without thinking of Walton, who so happily combined angling, the song of milkmaids and philosophy. Walton presents a milkwoman with a fish, who replies : ‘ God requite you, Sir, and we’ll eat it cheerfully, and if you come this way a-fishing two months hence, a grace of God, I’ll give you a syllabub of new virjuice, in a new made haycock for it.’

Here are Walton’s flies. He says to Venator :

‘ You are to note, that there are twelve kind of artificial made flies, to angle with upon the top of the water. Note, by the way, that the fittest season of using these is in a blustering windy day, when the waters are so troubled that the natural fly cannot be seen, or rest upon them. The first is the dun-fly, in March : the body is made of dun wool ; the wings, of the partridge’s feathers. The second is another dun-fly : the body of black wool ; and the wings made of the black drake’s feathers, and of the feathers under his tail. The third is the stone-fly, in April : the body is made of black wool ; made yellow under the wings and under the tail, and so made with wings of the drake. The fourth is the ruddy-fly,

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in the beginning of May : the body made of red wool, wrapt about with black silk ; and the feathers are the wings of the drake ; with the feathers of a red capon also, which hangs dangling on his sides next to the tail. The fifth is the yellow or greenish fly, in May likewise : the body made of yellow wool ; and the wings made of the red cock's hackle or tail. The sixth is the black-fly, in May also : the body made of black wool, and lapt about with the herle of a peacock's tail ; the wings are made of the wings of a brown capon, with his blue feathers in his head. The seventh is the sad yellow-fly, in June : the body is made of black wool, with a yellow list of either side ; and the wings taken off the wings of a buzzard, bound with black braked hemp. The eighth is the moorish-fly, made, with the body, of duskish wool ; and the wings made of the blackish mail of the drake. The ninth is the tawny-fly, good until the middle of June : the body made of tawny wool ; the wings made contrary one against the other, made of the whitish mail of the wild drake. The tenth is the wasp-fly, in July : the body made of black wool, lapt about with yellow silk ; the wings made of the feathers of the drake, or of the buzzard. The eleventh is the shell-fly, good in mid-July : the body made of greenish wool, lapt about with the herle of a peacock's tail ; and the wings made of the wings of the buzzard. The twelfth is the dark drake-fly, good in August : the body made with black wool, lapt about with black silk ; his wings are made with the mail of the black drake, with a black head. Thus have you a jury of flies, likely to betray and condemn all the Trouts in the river.'

Then Walton gives his friend the best instructions to be had :
' First, let your rod be light, and very gentle.'

The streams of England, Ireland, Wales and Scotland abound in trout of many kinds ; in fact, nearly all kinds of trout have been introduced with more or less success. An extraordinary number of names are applied to them, as in other countries. ' John Bickerdyke ' catalogues them for the angler as (1), the chalk stream trout ; (2), the moorland or mountain trout, taken with a wet or dry fly ; (3), the lake trout, found also in the Thames ; (4), the salmon trout. The chalk stream trout is the common Brown trout of Germany, *Salmo fario*, famous in the annals of the Test, Itchen, Wiley and Lambourn.

Salmo fario is also the mountain trout of England, and he is found in the wild streams of the north of Scotland, the mountains

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of Ireland and Wales. So too does the *Salmo fario* loom up as the lake trout where he grows large and lusty, often a giant, especially large fish having been taken in the Orkneys. A twenty-nine pounder is on record from Lough Derg, known as 'Peppers trout.' Lough Ennel has produced a twenty-six pounder, but whether 'gilaroo' or 'ferox,' I know not.

English sea trout afford great sport, ranging up to twenty pounds. The Thames trout is *Salmo fario*. When well fed and conditioned he is fat, big, often ponderous, and from the first of April to the thirty-first of August, the sport is excellent to the patient angler. Scientifically, the Brown trout is *Salmo fario*, and in Wales in the Rhymney there is a hybrid between *Salmo trutta* and *Salmo fario*.

In England there is a representative of the American brook trout known as the charr, saibling, sea charr, or ombre chevalier, and technically *Salvelinus alpinus*. The charr is a beautiful little fish, called torgoch in Wales. You can find it very generally in the lakes of the United Kingdom, particularly in Loch Doon in Argyleshire, Loch Achilty, Ross-shire, Loch Knockie in Inverness-shire, the Taf, Dochart, Ericht and Fruchie. It rarely exceeds a pound in weight, ranging from a half to two pounds, which suggests very light and gossamer-like tackle.

Loch Leven trout are as well known in America as in Great Britain, and you may take an American Rainbow trout in the Dove if you are very lucky. In years to come, the trout family will be distributed over the world—a work almost accomplished.

I can imagine no purer delight than to wander along these beautiful streams of England, casting here and there with the daintiest of tackle, dropping a dry fly into the circle of radiations formed by the rising trout. 'John Bickerdyke' says that as a game fish he prefers the rainbow to the brown trout. The rainbow does best, that is, he attains greater weight in sluggish rivers, or where he does not have to keep continually in motion, as the Williamson, in Oregon, where sixteen, eighteen and twenty-pound fish are not uncommon.



Fig. 8.

Radiographs of Game Fishes (Trout). By Dr. B. F. Alden, San Francisco.
Showing skeleton, air bladder, etc. (Radiographed by Jean B. Sabalot). p. 32.

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Some of the record brown trout in England are a sixteen pounder, caught at Chertsey Weir; one at Shepperton Weir, River Thames, a twenty-three and a half pounder, was caught with a spoon; a twenty pounder has been taken in the Kennett in the nets of the Earl of Craven.

Trout fishing in England has produced wet and dry fly fishing, around which is growing a literature of its own, and the enthusiastic dry fly fisher has added to the joys of life, even if the point cannot always be seen. The most satisfactory catch I ever made was in Canada, where my canoeman raced at a rise, and I sent my fly thirty or forty feet and dropped it into the circle where it was taken at once by what proved to be a two and a half pound charr. This was the essence of dry fly fishing, but with a wet fly, and I fancy I experienced all the joys of a dry fly angler.

The methods of taking trout are, alas! only too numerous everywhere; but I believe that there should be but one, the fly, and but one fly. When the trout are not taking flies, when they absolutely refuse, a minnow should be used, their natural food in many countries. But it is not for me to lay down the law. I am only venturing to suggest gallant treatment for a gallant fish; and that to trap, or snare him with some of the awful hook-lined 'contraptions' found in many lands, is little less than a crime. It is well, however, to bear in mind that we cannot all go a-fishing when the desire seizes us; and that the man who has but a day a year, should possibly not be hampered by the ethics of conservation.

CHAPTER IV

SOME SMALL GAME FISHES OF ENGLAND (COARSE FISH)

‘ Angling is somewhat like poetry, men are to be born so.’

Walton.

THERE are some delightful old English customs relating to the fishing rights of certain streams, which I heard one night at a banquet of the Fishmongers’ Guild in honour of Lord Eversley, who has done so much for the fishing interests in Great Britain. One referred to certain rights at Oxford, and another to Loch Maben, where the inhabitants have an annual ‘ Vendace ’ fishing day in the neighbouring lakes, taking advantage of a right to fish awarded them by James VII. The vendace is not known in many places in Scotland, so I am told, being peculiar to the Lochs in Dumfriesshire, in Derwenter and the Bassenthwaite Lakes, having been brought from France by Mary, Queen of Scots, according to the legend. The vendace is not a game fish, living in the deeps of the lochs ; feeding, it is said, on certain algae which impart to it a delicious flavour. This is but one of scores of old customs the angler meets in England, relating to manor and other rights, the privileges of certain streams, a subject, which I imagine, of itself would make a most interesting little book, as who would not like to join the people about Loch Maben on vendace day ?

In strolling up the Thames in England in the direction of Maidenhead, or along the Seine in Paris, the alien wonders what

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the hundreds of anglers are catching. Lord Granville Gordon says in the fine work on sports in Europe, edited by Mr. Aflalo, 'It often makes me smile to watch the Thames anglers on a Sunday morning, sitting and watching hour after hour with a quill float thrown out some yards from the bank in hopes that a roach or perch may take a fancy to the worm on the hook.' So then, it is roach or perch these Sunday anglers are trying for, but if the truth was told, these scores of men are hoping for a big pike, or a big Brown trout of ten pounds, that Mr. Somebody of somewhere caught on a certain day in June in some year, no one knows when.

If all anglers devoted themselves to the same fishes, they would soon be exhausted ; but we are provided with a catholicity of tastes, and it is well that scores of anglers like the perch and dace and carp, as they certainly have a restful time in the attempt to take them, and that is what anglers need. The majority of these Sunday anglers on the Thames, and the Seine and Rhine are doubtless hard-working people, who look forward to the day with unfeigned joy. They need perfect and complete change and rest, and what more restful occupation is there than angling, and that particular angling described by Lord Gordon 'sitting and watching hour after hour, . . . a quill float thrown out some yards from the bank' ?

Some of the cleverest anglers in England, inventors of mysterious and wonderful tackle, had their training on the Thames not far from London ; and I never think of it, but the story of Mr. R. B. Marston occurs to me. Two London working men wandered into that strange land, the country, and dropped into an inn to get a glass of something, this being the only sport with which they were familiar.

'Why don't you go a-fishing?' asked the landlord.

But they had never fished, so the kindly host loaned them his own rods and line with two wonderful balloon-shaped red and green floats, the kind I fished with as a child in New England. Reaching the water, they baited the hooks and cast out.

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Both fell asleep, but after a while one awoke, and seeing the 'float' gone, aroused his companion in alarm.

'Hey, Bill, what d'ye think that "bobber" cost?'

'I dunno,' replied his friend looking anxiously out over the waters for his own, 'Why?'

'Why, the bloomin' thing 's sunk.'

I do not mean to infer that it is too peaceful on the Thames, as one of the earliest pictures of my recollection was one by Leech in *Punch*, showing two happy and contemplative anglers standing in their punt and intently watching their 'float.' Behind them comes a long narrow boat rowed by two unconscious men, and just about to strike them amidships. I think this picture bore the legend 'Peace.' The essence of angling is peace and patience, and without it, the angler may as well give up, as an impatient angler is impossible.

England has a large number of small game fishes in its lakes, rivers and streams that are included in the term coarse fish; roughly, they include the pike, referred to elsewhere, the dace, rudd, roach, perch, barbel, chub, gudgeon, eel, and several more. An interesting fact is that these fishes have from the earliest times received the closest attention from anglers; and an angling literature has been built up about them and their methods of capture, worked out with an almost inconceivable minuteness of detail. This is most commendable, as I am a protagonist of the principle that man, at least in America, works too hard, plays not enough; and that anything, no matter how trivial, that can be invented to force him out into the open air, bring him into close contact with rivers, flowers, trees, sky, is a distinct advantage, and fishing tackle and fishing methods do it.

My experience with the rudd has been confined to sitting comfortably in the Fly Fishers Club of London, and with Messrs. Marston, Graham-Clarke, Cogshall, Dr. Sewell, Mr. Stern and others, admiring and wondering at the gigantic rudd on the walls of this famous Club. I had never seen a rudd; somehow it fascinated me, and I hope some day to take one. Walton thought but

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little of the rudd, but he does pay his respects to the roach, a cousin, in saying that 'the roach is accounted the water sheep for his simplicity or foolishness,' and as for the rudd, he thus flays him:—'But there is a kind of bastard small roach, that breeds in ponds, with a very forked tail, and of a very small size, which some say is bred by the bream and right roach; and some ponds are stored with these beyond belief; and knowing men that know the difference, call them ruds.' Cotton comes to the rescue of the roach and says, 'The roach makes an angler excellent sport, especially the roaches about London, where I think there be the best roach anglers.' All this leads up to the oft-repeated angler's conclusion that an angler should refrain from criticising the methods and game of a locality until he knows all about it, as the fish never thought of as game in one country may be the very acme of the sport in another.

John Bickerdyke calls roach fishing a fine art; and the little fish, found almost anywhere in England, and represented by the rudd in Ireland, is a most attractive little creature, a 'coarse fish,' yet a gallant Roman, one *Leuciscus rutilus*. It looks like our 'golden minnow' or dace, common as bass bait in the St. Lawrence; a cousin known as the chub is very evident in the Yellowstone Park. There is an attractive one in Japan, but none of them are so ponderous and aldermanic as the British roach with its scintillations of silver, its eyes, tail and fins flashing red, and its back a steely blue, often green, blending harmoniously into the molten silver of its sides.

This little fish soars up to three pounds in weight in favoured localities, and hooked on a two or three-ounce trout rod ought to make the rudd welkin ring. Well scoured gentles are the bait the roach is most enamoured with, and he is 'chummed' up, to use an Americanism, with 'stewed wheat.' This attracts the bands of roaming roach and ensures a good catch. The art of roach fishing might be made into a volume; there is 'legering' for them, the 'Stewart tackle,' 'Punt fishing,' the 'leger float tackle,' 'Nottingham fishing,' a 'Ground baiting,' and many more.

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There is roach in winter and roach for the summer, roach in lakes, brooks, meres, ponds and canals.

‘I pray you sir, give me some observations and directions concerning the perch, for they say he is both a very good and a bold biting fish, and I would faine learne to fish for him.’—*The Complete Angler*.

Cheek by jowl with the roach in English waters is this familiar American fish, the yellow perch, *Perca fluviatilis*, often a nuisance in the St. Lawrence when black bass casting, but a fine little fish on a very light (two or three ounce) ten-foot split-cane rod; and it has many admirers, being a table fish of the first class. I have taken four or five pounders, and in England, while a pound or two-pound fish is the average, certain giants, piscatorial Daniel Lamberts, are occasionally found, weighing four or five pounds. The perch is a beautiful fish with a large, splendid and expressive dorsal, which he expands and lowers and talks with. It is not particular as to bait, but live minnows lure it invariably, and I have taken it in Canada, or on the St. Lawrence with a St. Patrick fly. There are scores of ways by which the clever anglers of England decoy the perch into the creel or boat, from legering to the float tackle, or paternostering to the plain hand-line.

In America, the perch is considered the finest pan fish, and it has a high commercial value. It can be taken at any time, with almost any bait, from skittering with a frog or minnow, to a fly or grasshopper; but the best sport is obtained by taking it in deep, cold water twenty or thirty feet, with a very light rod, when the little fish will make a desperate fight for liberty, that is, desperate for a perch. Dr. Jordan refers to eight or nine pounders in European waters, and Thoreau writes, ‘It is a true fish such as the angler loves to put in his basket or hang on the top of his willow twig on shady afternoons along the bank of streams.’

‘Perch, like the Tartar clans, in troops remove,
And, urged by famine or by pleasure, rove;
But if one prisoner, as in war, you seize,
You’ll prosper, master of the camp with ease;

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For, like the wicked, unalarmed they view
Their fellows perish, and their path pursue.'

I conceive the perch to be a game fish, as he has given so much pleasure to thousands, men, women and children nearly all over the civilized world. You can even find him as a fossil in Oeningen, and almost everywhere in Europe, Lapland and Siberia. It is an Alpine climber up to lakes four thousand feet in air in Switzerland, and is just as much at home in the brackish waters of the Caspian and Baltic seas, or the shallows of the Sea of Azof. In America, it ranges from Labrador to Georgia. It does not seem to fancy Scotland north of the Firth, or the country west of the Rocky Mountains. Dr. Day has written exhaustively of the perch in England, and of the shoals found in the Norfolk Broads.

They spawn in the spring, but at different times in different waters. In America in May, or in the south, March or April. In England and Sweden in April and May. In France and Austria, March to May. Frank Buckland states that a perch deposits one hundred and eighty thousand eggs. Lacepède raises this to one million. Block gives it as twenty-eight thousand, and Abbot as eight thousand. The cheerful angler may take a general average, and feel sure that the yellow perch is safe from extinction for all time.

The literature of the perch is interesting, particularly in England. The Saxons represented one of their gods standing on the back of a perch, 'emblematic of constancy in trial, and patience in adversity.'

Drayton in his *Polyolbion* says:—

'The perch with prickling fins against the pike prepared,
As nature had thereon bestowed this stronger guard,
His daintiness to keep.'

All the treatises on angling refer in detail to the perch. 'The perch with fins of Tyrian dye,' and J. P. Wheeldon, an English author, says:—'A gloriously handsome fish, the perch, when in

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condition affords excellent sport, and is a deserved favourite with each and every fisherman, be he young or old.' It is the 'partridge of the waters' according to Ausonius.

'Nor will I pass thee over in silence, O Perch, the delicacy of the tables, worthy among river fish to be compared with sea fish; thou alone art able to contend with the red mullets.' Venner in his *Via Recta ad Vitam Longam*, 1650, tells us that the perch is the equal of the trout or pickerel, while Frank Buckland writes: 'Our friend, the perch, is one of the most beautiful fish which it has pleased Providence to place in our waters.' Lord Lytton has doubtless fished for perch, as he tells an interesting story about it in his *My Novel*.

The barbel, *Barbus vulgaris*, evidently does not believe in Home Rule, nor has it any particular interest in the non-conformists. I judge this, as it is not known in Ireland or Scotland. Their stronghold is the Trent and Thames, where giants of eight, ten, twelve, fourteen pounds have been taken by delirious anglers. Mr. Jones of London, I believe, holds the record with a fourteen pounder, taken from the lawn of the *Swan Hotel*, near Badcot Bridge.

The barbel is an attractive fish, moustached like a cavalier, with four barbules about its mouth. In India it is one of the great game fishes to which I have referred elsewhere, the mahseer.

The species known as *Barbus mosal* in the highlands of India attains a length of six feet and affords wild sport to the adventurous angler who follows him to the watery lair of his choice. 'A right good fish to angle for,' says 'John Bickerdyke.' It is also known as the chevin, chevender and the large-headed dace, or skelly, *Leuciscus cephalus*. It is caught in very much the same way as all this group of coarse fish of England. It, too, avoids Ireland and the north of Scotland, and for some reason Devon, Cornwall and Norfolk.

The chub is a most complacent and sociable fish, imitating its betters by taking a fly. The dace, daver, dort, is an attractive, graceful little fish, beloved by anglers and especially



Fig. 9. Angling in England.

1. An Autumn Freshet. 2. Summer Angling (Photo by W. Carter Platt). p. 40.

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by children in America, who fish for it and the sunfish with pin hooks, or by heating the point of a needle and bending it into a point quickly, obtaining a strong, small hook of any kind, as I often did for very small game, especially sardines. A dace at a pound weight is an active fish, especially on a very light fly rod. With the dace comes the gudgeon (*Gobis*) looking like a barbel, but with two barbules instead of four. It is very common in the Thames, taken after the fashion and forms successful for roach. John Bickerdyke's instructions for gudgeon angling might well astound an American angler, as our methods must on occasion excite the mirth of British anglers. He says: 'The essentials are a punt, two rypecks, a rake the head of which contains four or five teeth and weighs from five pounds to ten pounds . . . some well scoured red worms and brandlings.' Your American angler would hesitate at the 'punt' and stop short at the 'rake,' and if facetious, would suggest that it was to comb the hair of a mermaid; but he would never suspect that it was to cleverly rake the bottom when the gudgeons stopped biting, to raise a cloud of mud, and give them a mulletean condition they adore, as they swim to it in search of food, and the sport goes merrily on.

The gudgeon is a humble little fish with no suggestion of romance, but poets have, if not raved over him, not passed him by. Pope says:

'Tis true, no turbot's dignify my board,
But gudgeons, flounders, what my Thames affords.'

The carp is certainly a game fish in India, but in America even the big German carp of great weight is considered a nuisance. In England the carp is taken up to twenty-nine pounds, but the average is very much smaller. There are many other small fishes in English waters that are taken with rod, reel and line and cleverly designed tackle; which have their literature, their admirers, and most of them are referred to and described by the father of British angling, Walton. Such are the tench (*Teneo*), the bream

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(*Abramis*) of three kinds : Pomeranian, Golden and Silver bream. I am sorry to say I shall never take one, as I observe England's distinguished angling authority, Mr. Clark, says, 'the bream can hardly be taken except between two p.m., or three p.m., and a mortal's breakfast hour.' The bleak (*Alburnus*), eels, minnows, loach, ruffe, the lamprey, eel, pout, blue roach, powan, gwyniad, shad and graming are others occasionally taken in the waters of the United Kingdom.

When angling for lamprey, it is well to remember that Antonia, the wife of Drusus, owned a lamprey in whose gills she hung earrings, and it was Martial who wrote :

'Angler would'st thou be guiltless ? then forbear,
For these are sacred fishes that swim here,
Who know their sovereign, and would lick his hand,
Than which none's greater in the world's command,
Nay more, they're names, and, when they called are,
Do to their several owner's call repair.'

I may add that I have an account of the most remarkable fish in the world, and the largest on record, the Ribbon fish (*Regalecus*) taken on the coast of Scotland, a ribbon of silver, with scarlet plumes a foot or more high. When such a beautiful fish visits a coast but once in a century, and is so rare that nearly every catch is on record somewhere, the angler has but little chance to try his skill and invention on it. But to show how lucky I am, I have had four of these fishes brought to me when I happened to be fishing at Santa Catalina in California. One six feet long was alive, and through the courtesy of the owner of the Zoölogical Station, I was allowed to have the fish photographed alive, and in the water, through the glass of its tank, securing an excellent picture, the first known of the living fish.

At Long Beach, California, a specimen about twenty-five feet long was found, washed in by the sea. As these lines are written, I have received the report from Santa Catalina, that a diver on a glass bottom boat saw a nine foot *Regalecus* in the kelp

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forest, plunged over, dived down and brought it up, apparently a tremendous fish story ; but a very easy matter as these fishes appear to be helpless in shallow water, and are at a disadvantage when they climb the mountains of the sea and approach the shore. If the sea-serpent is ever chased to his lair and landed, I think he will be found to be a gigantic *Regalecus*, a band of silver, fifty or sixty feet long, three or four feet high, with a 'mane' of splendid crimson plumes three or four feet tall. If the angling reader has sufficient curiosity to fish for this game, I have indicated the way and means : equipped with a diver's armour he can walk along the bottom of the sea, and hunt for the most beautiful fish in the world.

CHAPTER V

THE PIKES AND THEIR COUSINS

Our plenteous streams a varied race supply :
The bright-eyed perch, with fins of Tyrian dye ;
The silver eel, in shining volumes roll'd ;
The yellow carp, in scales bedropt with gold ;
Swift trouts, diversified with crimson stains,
And pikes, the tyrants of the watery plains.'

MY earliest interest in the Pikes came, I think, from an English friend, who told me that he had seen a large pike leap from the water and knock a young bird from an overhanging limb, and then complacently devour it. I have also read in certain voracious prints that a pike, or a big pickerel, seized a certain calf by the tail and slowly but surely dragged it into deep water ; but it did not state that the fifty-pound pickerel swallowed the one-hundred and fifty pound calf, though I am prepared for almost anything, having seen a deep-sea fish that had swallowed a victim a third larger than itself. And who has not observed the 'gentle reader' swallow fish stories of huge and plethoric stature ? Be all this as it may, the pike or pickerel, has an open countenance and a mouth of only too generous proportions, so anything can be expected from it.

Williamson, who wrote in 1750 *A Pocket Companion for Gentleman Fishers*, had a high opinion of the jack or pike. To illustrate its savage nature, he tells a story of one that dashed at a drinking mule, seized its lips, and doubtless did its best to drag it in ; but the mule backed away and landed the pike. The author refers to this as a new way of angling, and states that the owner of the mule became 'master of the Pike.' This author credits

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the pike with a 'wonderful natural Heat,' which enables it to eat and digest anything. The mule was a clever angler, but I cannot permit a British mule to defeat a Yankee cow which, I was told, took a big pickerel in Lake Superior by wading into the water and thrashing her tail about, whereupon a large thirty-pound pickerel dashed at it, became entangled in its long hairs, and so frightened the cow that she turned and ran ashore, dragging the fish into the farmyard where it was received and eaten in triumph: not by the cow but by the cow's owner. I could tell how in Arkansas they fish for the pike by bending down a seventy-foot pine tree, the pickerel releasing it when it strikes, the tree tossing the fish half a mile into the back country. There are other experiences which I might give, but it is not well to boast of one's country in a book to be published in Great Britain.

I have always held a suspicion that certain pike or pickerel relish being caught. I fancy I obtained this impression, possibly a libel, from one fish which when hooked came at me and almost leaped into the boat. Yet the pike has some admirers. Beaumont and Fletcher in that ancient work *The Faithful Shepherdess*, 1611, writes:—

'I will give thee for thy food no fish that useth in the mud,
But trout and pike that love to swim,
When the gravel from the brim
Through the pure streams may be seen.'

I have taken pickerel in the St. Lawrence with a fly and have seen a number which made a gallant fight.

The American pike has a wide range in North America, being found in lakes, streams and rivers, a voracious ravenous fish, playing havoc with its betters and ready to take a big spoon and a mouthful of feathers on any and all occasions.

It ranges all over Northern Europe, England, Russia, and probably in China and Siberia and south, at least as far as Constantinople, and is at its best in England and Germany. Especially in the latter, large and vigorous specimens have been taken, while certain pike are supposed to attain great age.

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In America there are numerous species, and the smallest, about one foot in length, is found from the Allegheny mountains east. This is *Esox americanus*. The grass-pike is a little larger and has a range in the United States in the Valley of the Mississippi, though in the upper and middle portions. In the eastern part of the continent is found the Eastern pickerel, *E. reticularis*, a larger fish of two feet and a weight of several pounds. This is the common pike of the spoon, or caught skittering, and it will take almost anything.

In the St. Lawrence and in nearly all fresh-water streams or waters in the north of Europe, America or Asia, is found a large pike or pickerel *E. lucius*, that approximates a game fish. It is essentially a big game fish, attaining a length of four feet and possibly fifty pounds. I have taken many of them, but never a fish over fifteen pounds, and the average was less than ten. One day when trolling in the deeper parts of the St. Lawrence for muscallunge I lost all my spoons, when my oarsman contributed a piece of his violent red shirt which proved an appealing lure to the tribe.

It is an interesting fact that the pike is abhorred in certain waters. When you are fishing for salmon in the Wye as an example, or for muscallunge in the St. Lawrence. Yet if you are from a pike or pickerel country it is interesting to meet them far from home, Lapland, Kamtchaka, Siberia, and if you climb the Tyrolean Lake of Halden, two-thirds of a mile above the sea, there will be found a pike, yes, higher yet. A friend tells me he caught one in Lake Reschen in the Tyrol, nearly a mile in the air. If it so happens that there is nothing else to catch the pike becomes at once a game fish.'

The lakes of Zurich, Neuchâtel, Morat, Joux, the Black Lake in Fribourg abound in pike.

Something about the pike attracted the ancients. He looked wise, crafty and philosophic; half hidden in the weed, imitating it in colour, tint and marking. Lucullus, the gourmet of classic days, called the fish Lucius.

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'Lucius obscuras ulva caenoque lacunas,
Obsidet : Hic nullos mensarum ad usas,
Fervet fumosis olido nidore popinis.'

The French, who are said to have had a pike over two hundred years old, which wore earrings, and came to the ringing of a bell, called it 'Lus.' In Italy it is 'Luccio,' and it is very probable that when the Athenians spoke of *Lycus* sixteen hundred years ago they referred to the pike, the Wasserwolf of the Germans. The Romans were masters of England several centuries. They left little impression on the people, but the pike was called 'Luce,' as late as in the time of Chaucer.

'Full many a fat partricke had he in mewe,
And many a Breme and many a Luce in stewe.'

In England the name became a symbol in heraldry, and here doubtless we get the name Lucy, Lucius and many more. Shakespeare refers in derision to the escutcheon of the Lucys, a fact which the Baconians seemed to have overlooked in their attempts to unseat the Bard of Avon by discovering that Lord Bacon, not William Shakespeare, hated the home and name of Lucy.

In England's lakes, rivers and ponds, as well as in America or elsewhere, the pike, jack, pickerel, call him what you will, is the Wasserwolf. He preys on any living thing from a duckling to a swallow, and from a mouse to a frog. Everything is game to this wolf of the pond that moves at night, hides in the watery sedges, sneaks upon his prey and devastates and terrorizes the world of the inland seas. I dare not venture on the size the pike attains. It appears to be mainly a question of food supply. Buckland said, 'From the days of Gesner down, more lies, to put it in very plain language, have been told about the pike than any other fish in the world; and the greater the improbability of the story, the more particularly is it sure to be quoted.'

This of course refers to that time-honoured story of the pike of the Emperor Frederick II that was taken in 1497 in Hailprun, Suabia. It was nineteen feet in length, and was so heavy that a

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crowd of men bore it from the wrecked net. Close examination of the monster showed a brass ring fastened to its gills on which in ancient Greek was this : ' I am that fish that was first put into this lake by the hands of Emperor Frederick II on the 5th day of October 1230.' This illustrious pike was then two hundred and sixty years old. The taking of this fish, the means of making the Emperor known to history, was a crime against law and order. He should have been returned to the water where he would now be the proud Wasserwolf of Suabia and six hundred years or more of age. Frank Buckland, beloved by Americans as well as Englishmen, was more of a naturalist than angler. He lacked the imagination of the latter, and accepted nothing that did not ' come under his own personal knowledge.' He has, however, left us some accurate records of pike : thirty-five pounds, forty-six and one-half inches ; seventy-two pounds, seven feet. Pennell refers to pike of one hundred and forty-five pounds, taken in Bregenty in 1862. The pike is a living lance, a freebooter and pirate, or anything you may call him, even a fresh-water shark ; but yet jack fishing is a sport and the fish is taken with a float, paternoster, or by spinning, legering and trolling in England. In America mainly by trolling, using a large spoon.

Walton gives a chapter to the pike and says he is ' choicely good ; too good for any but anglers and honest men.' In his invaluable *Book of the All-Round Rgler*, John Bickerdyke gives the complete details of the methods of taking and propagating the pike and many interesting stories about this fish, which has, beyond peradventure, a strong personality.

No matter what one's opinion in private or public may be regarding the pike or pickerel, American or English, there is one member of the tribe above suspicion, a game fish of regal qualities and proportion. This is the much-named muscallunge of America, *Esox masquinongy*.

' Whence and what are you, monster grim and great ?
Sometimes we think you are a " Syndicate,"



Fig. 10.

Sea Angling at Scarborough.—Mr. R. B. Marston and Mrs. Marston.
(Photo, Victor Hey, Scarborough). p. 48.

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For if our quaint cartoonists be but just,
You have some features of the modern "Trust."
A wide, ferocious and rapacious jaw,
A vast, insatiate and expansive craw ;
And, like the "Trust," your chiefest aim and wish
Was to combine in one all smaller fish,
And all the lesser fry succumbed to fate,
Whom you determined to consolidate.'

Wilcox.

It is the king of the tribe ; savage, a veritable wolf, having all the savagery of the jack or pike with all the latter's faults eliminated. In a word, the fish is game in every sense of the word, a hard-fighting fish that never gives up until it is in the boat. Its home is in the great American lakes from which it wanders into the St. Lawrence and the lakes and tributary rivers of these lakes and streams. It attains a length of eight feet and a weight of over one hundred pounds in favourable localities and conditions, but the average fish taken is, I believe, under twenty pounds, due possibly to the fact that the fish is eagerly sought and followed by the fresh-water anglers who enjoy the big game of the sea. In appearance the muscallunge resembles a large pickerel. Nearer examination shows that there are differences, but the principal one is the black spots or tiger-like markings on the fish not found on the pickerel ; so there is no mistaking it. In the young, the spots are round and black ; as the fish attains maturity they coalesce and form bands or stripes. It has all the variety of the pike and a hundred times its courage. It spawns in the spring, the female depositing about two hundred and fifty thousand eggs, which hatch in fifteen days.

I have had an unfortunate experience with these fish. I have followed them, day in and day out, with incredible patience, but I have never landed but one, and that only of sufficient size to enable me to say that I have taken a muscallunge. When pressed as to its size (and there are persons who display this obnoxious curiosity) I try to change the subject to tunas or almost anything ; but I have hooked several and have seen several

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taken, so have a sense of proprietorship. In my pursuit of the fish I used an eight- and ten-ounce rod, number E line, a multiplying reel and a large one-hook spoon (spinner). The small fish fight like a pickerel, and I thought the fish I took was one until I saw its beautiful spots ; but the larger fish make a splendid play. I saw a muscallunge on a friend's line leap into the air and shake its jaws, make fine runs in long lines, diving into the deeps, swimming around, bearing off like a Mexican barracuda ; indeed the muscallunge recalls this fish or specimens I have taken. When hooked the boatman should pull for deep water, as, like the yellowtail, it will rush for the weed and break the line. The fish is a menace, due to its sharp teeth, and should be gaffed carefully and killed quickly. They are often shot when gaffed, before being taken into the boat.

There is a second species of muscallunge, *Esox ohiensis*, found in the Ohio Basin and Lake Chautauqua, Mahoning River, the Ohio River, Evansville and Conneaut Lake. It is a fish of great value in commerce as well as in sport, and the State of New York has propagated it with notable success.

This species is taken with a spoon and a live minnow. The former method is very successful in September ; after this the live minnow is the most satisfactory bait. Still another muscallunge is the *Esox immaculatus*, confined to Eagle Lake and various small bodies of water in the northern portions of the States of Wisconsin and Minnesota. It is easily recognized as it has no spots ; in their place are 'vague, dark cross shades.'

I have seen an extraordinary-looking pike from a lake in Canada. I have never visited it, merely passing it on the portage between two lakes, but one day I met two men with a string of the fish which I at first thought were muscallunge ; but they had an extraordinary green colour, literally as green as grass, but more metallic. The men told me they would bite as fast as the spinner was thrown out, and the fish were so large that they soon lost all their tackle. Taking these fishes affords in America a singular combination of sylvan scenes, delightful lakes

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and solitudes, out from the waters of which will spring on the hook this lake wolf ; a devourer of trout, bass and every fish, to give the angler literally the play of his life, on rod, reel and line.

Many anglers keep records of their catches, and the following is the muscallunge record of Mr. F. G. King, of Waterford, Pennsylvania, who fishes in Lake Le Boeuf, Erie County of that State. The record was originally published in the *Field and Stream*. This is interesting in showing the variety of bait, and that live bait and large bait leads. The angler calls his system of angling for this game fish 'plouting.' The boat is rowed slowly from fifty to sixty feet from the weeds, and the live bait slowly reeled in and by the bow of the boat. It would be interesting to use the Santa Catalina Tuna sled with this game. The boat or launch could be kept away, while the sled would tow the bait along the edge of the weed in which the game lies.

Mr. King's record is as follows :—

CATCH OF MUSCALLUNGE TAKEN FROM LAKE LE BOEUF, WATERFORD, ERIE Co., PA.

Year.	Number.	Weight.	Largest.	Average.	Spoon.	Live Bait.	Worms.
1900 . . .	48	290 $\frac{11}{16}$	20 $\frac{1}{4}$	6	9	39	—
1901 . . .	39	280 $\frac{3}{4}$	28	7	16	23	—
1902 . . .	44	394 $\frac{7}{16}$	44 $\frac{1}{8}$	9	12	32	—
1903 . . .	73	457 $\frac{15}{16}$	28	6	16	56	1
1904 . . .	82	478 $\frac{9}{16}$	28	6	40	42	—
1905 . . .	58	452 $\frac{3}{4}$	36 $\frac{13}{16}$	8	16	40	2
Up to Oct. 13, 1906 . . .	93	532 $\frac{1}{4}$	29 $\frac{1}{2}$	6	9	82	2

CATCH EACH MONTH.

1900—June, 6 ; July, 17 ; August, 2 ; September, 12 ; October, 11 ; total, 48. 1901—June, 15 ; July, 4 ; August, 8 ; September, 3 ; October, 5 ; November, 4 ; total, 39. 1902—June, 6 ; July, 8 ; August, 9 ;

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September, 9 ; October, 8 ; November, 4 ; total, 44. 1903—June, 18 ; July, 22 ; August, 16 ; September, 8 ; October, 8 ; November, 1 ; total, 73. 1904—June, 18 ; July, 21 ; August, 16 ; September, 12 ; October, 12 ; November, 3 ; total, 82. 1905—June, 7 ; July, 8 ; August, 19 ; September, 10 ; October, 10 ; November, 2 ; December, 2 ; total, 58. 1906—June, 30 ; July, 33, August, 13 ; September, 11 ; October 13, 6 ; total, 93.

In the same waters with the pickerel is found the Wall-eye Pike (*Stizostedion vitreum*) representing the Pike Perches of the world. It frequents the great lakes of America and their confluents, and is sought for by anglers in the St. Lawrence (where I have taken it), in Lakes Cayuga, Seneca, Oneida, Chautauqua, of the State of New York, and many others farther to the south, as far, even, as Georgia.

It is a frequenter of the bottom in deep clear waters, but will take a fly readily, and is a game fish of the highest rank when taken in foaming waters near falls or rapids. Black bass tackle is adapted to it, though very long rods are advocated by Dr. D. C. Estes, the authority, who made Lake Pepin, Minnesota, famous by his advocacy of this game fish whose name recalls the invective in *Titus Andronicus*, where Lucius vents his sarcasm on the Goth :—

“ Say wall-eyed slave, whither would'st thou convey
This growing image of thy fiend-like face ? ”

CHAPTER VI

SEA ANGLING IN GREAT BRITAIN

'It is not every man who should go a-fishing, but there are many who would find this their true rest and recreation of body and mind. And having, either in boyhood or in later life, learned by experience how pleasant it is to go a-fishing, you will find, as Peter found, that you are drawn to it whenever you are weary, impatient, or sad.'

From I Go A-Fishing, by W. C. Prime.

ANY one who has had the pleasure of visiting the British Sea Anglers Society rooms in London and listened to the learned papers read and the scientific interest taken in the subject, will realize that this particular department of sport (Sea Angling) is being conducted with the same intelligence and earnestness that has characterized all English pastimes, and given the British Empire the first place among nations as a great conservator and founder of manly sports.

The British Sea Anglers Society has over five hundred honorary agents along its coast-line who report to its headquarters at Fetter Lane as to the exact conditions at any time, so that fisherman's luck has little to do with sea angling; all that man and prescience can do to prepare the way for the angler has been done, and it but remains for him to land his game.

The situation of England is peculiar and well adapted to produce a great race of men as well as fishes, and to thoroughly appreciate it, it is only necessary to follow its latitude, which impinges Labrador in Canada, across the North Atlantic in winter. By all rights we should find another Labrador where the British Isles lie, but, even in winter, here is something different. Instead

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of intense cold, it is, as a rule, the reverse, and in summer, instead of the stunted and woebegone verdure of the Labrador latitude, we find one of the garden spots of the world, unexcelled in its rare and radiant landscapes, the joy of Constable and Turner; beautiful rivers and streams which have lured men and warriors for a thousand years. The reason for this is the Gulf Stream, which comes up the Atlantic coast from the Gulf of Mexico and beyond, flows offshore on the American coast, not influencing it materially, sweeping across the ocean and giving the British Islands sufficient warmth from the Tropics to assure them a climate more like that of South Carolina and Georgia than what we might expect in the latitude of Labrador. This, naturally, has affected the fishes, and we find in England a much greater variety than in the same latitude in Canada, Russia, or any country in the same latitude.

I think the features piscatorial which most impress the stranger in England are the seriousness with which the people take their sports, the marvellous number of books on angling, which have been written from the time of Walton and Juliana Berners down to to-day, and lastly, the extraordinary attention to the details of tackle shown in the English books and the interest displayed in every feature of the sport. This is shown in the press devoted to angling. The journals I am familiar with have a large personal following or clientèle, which discuss their wants, likes and dislikes in columns and pages. Then there are numerous firms devoted to tackle, bait, and this and that, to a much greater extent than in America. But it is in the detail of tackle that England shines particularly. As an illustration, I find in the fascinating and useful work of 'John Bickerdyke,' the *Book of the All-Round Angler*, what to me are amazing descriptions of tackle of different kinds, which have been studied out with the greatest care, in fact, the making of which and putting it in practice is an exact science suggestive of the earnestness and thoroughness with which Englishmen conduct all their sports. If we go over the lists of books in the Fly Fishers Club, or the

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library of the British Museum, we find that there are literally thousands of similar books of varying degrees of value, but nearly all following out the altogether delightful pace set by Izaak Walton in giving the details of the sport *in extenso*.

After reading one of these books I turn to my simple fishing bag or box, and wonder at its simplicity, its utter lack of colour and imaginative values, and am filled with regret. I find no 'bobs,' no 'snuggling tackle,' no appliances for 'clod fishing,' no 'paternosters,' no 'gorge hooks,' no 'legering' no 'paste,' and a thousand and one delightful things which are the objects of vital importance in the kit of the British sea angler.

Instead, I have two lines, a #9 for fish of fifty pounds and under, a #21 for the giants, a nine-ounce rod for the smaller fry, a sixteen-ounce rod for the tuna, etc., a few O'Shaughnessey hooks, with long or short piano wire leaders, possibly of two sizes, a sinker of two different sorts, a small and large reel, and that is all. In a word, the *average* American angler has not the fund of detail found in the British sea angler, and 'John Bickerdyke,' Mr. Minchin, or Mr. Aflalo, would, possibly, find it a difficult matter to write a book on American angling and devote much space to tackle. Not that some Americans do not use many kinds, but the great majority do not, and here it seems to me that we have lost some of the esthetic charm of angling. I can explain perhaps by observing that America is yet young, lacks homogeneity in its sports. We have thousands of Greeks, Portuguese, Swedes, Norwegians, Italians in our great ports, particularly in the south and on the Pacific coast, introducing their boats and methods, fishing as they did in their own country.

Again England has built up her angling literature and methods through a thousand years of practice. It reminds me of my first impression of English towns and cities—they were finished and had accomplished their end. So to an American particularly, the detail of the British angler, the literature of the art of angling, the thousands of books on all its phases, are delights, pure and simple, whether it is the book of Juliana Berners, or the *Miseries*

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of *Angling*, or the definition of the Angler in the Tropics, 'sitting in a Turkish bath holding a string.'

The sea fishes of England taken with rod and reel are the cod, conger, pollack, coal-fish, bass, mackerel, hake, haddock, halibut, plaice, whiting, pout, red gurnard, tope, ling, sea trout, surmullet, skate, turbot, wrasse, and many more, a remarkable variety of hard-fighting fishes when the latitude of England is remembered; a list that affords the finest sport, a sport that has been worked out to its utmost detail, and reduced to a science and a fine art by the gentlemen anglers of the scores of clubs of England. For this reason, and the great variety of tackle used, I cannot go into detail, and can but refer the angler to the great leaders and students of British sea angling, 'John Bickerdyke,' Mr. Aflalo, and others, whose works teem with minute directions, all tested by the personal experience of the authors who are not only *littérateurs*, but experts and authorities.

The distances are so small in England that good fishing is within reach of the residents of London at all times, as there is not a month in the year that the sea angler cannot find something somewhere, while in New York rods are put away in October and not used until spring and summer, unless one wishes to fish in, or through the ice, a doubtful and predatory undertaking anywhere.

In a general way, good fishing is found all around the British Islands, either offshore, in the bays, from the rocks, in the shallows, or in deep water. Ireland, particularly Ballycotton, has earned a reputation for big congers and skate, and these summer sports, as described at the British Sea Anglers Society meetings, tell the story of fishing along the Irish coast. Brighton, Newhaven, Eastbourne, Hastings, Seaford have flat fish or whiting and pout, the latter on rocky bottom. At Eastbourne, Lowestoft and Littlehampton the game bass may be taken—one of the finest sea fishes in any waters while, in estuaries and rivers one may take mullet.

The delights of gray mullet angling have been dwelt on by



Fig. 11. British Sea Anglers.

Amanda S. Grain, Esq., and Edward Meadlock. Conger Eel, 7 ft. 4 ins., weight 66 lbs. p. 56.

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Mr. T. W. Gomm in a paper read before the B.S.A.S. Mr. Aflalo with some friends took at Margate seven fish which weighed about twenty pounds, one of which weighed three pounds; while on another occasion Mr. Gomm and Mr. Francis Daunon took at Margate jetty thirty-three mullet, the best weighing eight pounds seven ounces. The mullet anglers use ten-foot hollow cane rods and ground bait of bread paste. A silk line, a slider float, and clickless or silent Nottingham reel, with a Number 3 crystal hook completed the tackle. It only remains to be said that the mullet anglers were artists in that peculiar sport.

What fishes may be had every month in the year are as follows, for which I am indebted to the late Mr. William Hearder and Mr. Marston of the *Fishing Gazette*:

January.—Atherine (smelt), tub, piper, red gurnard, mackerel, dory, skate, sharp-nosed ray, homelyn ray, sprat, anchovy, eel, ling, cod, whiting, haddock, pouting, coal-fish, and all shell-fish.

February.—Atherine (smelt), sprat, anchovy, ling, whiting, pouting, dab, mackerel, eel, tub, piper, red gurnard, and all shell-fish.

March.—Mackerel, pouting, conger, atherine (smelt), thornback, anchovy, sprat, dab, turbot, brill, and all shell-fish.

April.—Scad, mackerel, conger, eel, atherine (smelt), thornback, pouting, hake, brill, turbot, dab, and all shell-fish.

May.—Sturgeon, dory, scad, mackerel, thornback, conger, eel, bass, surmullet, launce, pollack, hake, atherine (smelt), wrasses, turbot, brill.

June.—Brems in general, wrasses in general, atherine (smelt), sturgeon, bass, surmullet, pilchard, thornback, pollack, hake, mackerel, dory, scad, eel, conger, launce, sole, plaice, turbot, brill, mary-sole, flounder, halibut.

July.—Pilchard, herring, homelyn ray, sharp-nosed ray, skate, thornback, launce, sturgeon, mullet, atherine (smelt), wrasses in general, brems in general, surmullet, bass, pollack, lythe, hake, mackerel, scad, dory, eel, conger, dab, brill, turbot, sole, mary-sole, halibut, plaice, flounder.

August.—Bass, surmullet, conger, eel, herring, anchovy, pilchard, pollack, hake, tub, piper, red gurnard, wrasses in general, brems in general, sharp-nosed ray, thornback, skate, homelyn ray, atherine (smelt), mullet, sole, flounder, plaice, dab, mary-sole, halibut, turbot, brill, dory, scad, launce.

September.—Sole, flounder, plaice, dab, mary-sole, halibut, turbot,

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brill, conger eel, trout, launce, pollack, coal-fish, lythe, hake, whiting, chad and breams in general, wrasses in general, bass, surmullet, mullet, atherine, scad, dory, tub, piper, red gurnard, sharp-nosed ray, skate, homelyn ray, sprat, herring, pilchard, twaite, shad, anchovy, and all shell-fish.

October.—Plaice, sole, flounder, dab, halibut, turbot, brill, mary-sole, mackerel, dory, surmullet, conger, wrasses generally, tub, piper, red gurnard, whiting, pollack, cod, haddock, coal-fish, hake, homelyn ray, launce, pilchard, sprat, herring, twaite, shad, anchovy, mullet, atherine (smelt), and all shell-fish.

November.—Anchovy, twaite, shad, herring, sprat, pilchard, wrasses generally, tub, piper, red gurnard, sole, flounder, dab, plaice, mary-sole, halibut, turbot, brill, dory, surmullet, coal-fish, hake, whiting, cod, haddock, pouting, ling, atherine (smelt), skate, homelyn ray, sharp-nosed ray, and all shell-fish.

December.—Coal-fish, hake, ling, cod, haddock, pouting, whiting, tub, piper, red gurnard, eel, sprat, pilchard, anchovy, dory, mackerel, atherine (smelt), skate, homelyn ray, sharp-nosed ray, and all shell-fish.

As in other localities, the best months for the sea angler are July, August, September and October. In July, pollack (which I have taken with a fly) and bass. In August, pout, gray mullet and bass. In September, bass, conger, chad and gurnard. In October, cod, codling and silver whiting. Mr. F. G. Afalo gives every detail of sea angling in his excellent work, *Sea Fishing on the English Coast*, and I note he says, for rocky coasts use 'whiffing tackle,' paternoster, chopstick, sid-strap. When on sandy coasts, the tackle recommended is drift line, leger, trot, long line, throw-out-line, which again suggests to me the charm and mysteries of English tackle. To illustrate the difference, in several years' residence in Florida on the reef, a wonderful fishing ground, I used but three kinds of 'rigs.' One for bottom fishing, had a sinker on the end, and a foot above it, one or two hooks, a foot-apart. The philosophy of this was that the sinker lodged in the coral and held the line, and the bait swung clear where the fishes could see it. My other line was a cast-line, with a long light copper wire leader, a rod and reel to the line of which a sinker could be attached, if necessary, for trolling or dragging behind a boat.

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At Scarborough (Yorks) the angler finds most excellent fishing for bass, conger, mackerel, codling and others. Also at Filey, Ramsgate, Deal, Dover and Hastings, Bexhill, Eastbourne. On the south coast we have Brighton, Shoreham, Littlehampton, Bognor, Selsea, Southampton, Bournemouth, Poole, Swanage; in fact, at nearly all seaports there is some kind of fish or fishing, more or less good, according to the patience and enthusiasm of the angler.

In the present volume my object has been to present the fish, not particularly the fishing grounds, but it can be said that if the angler lays out the coast of Scotland, England, Ireland and Wales into sea angling districts, and changes his ground on every angling trip, he will have experienced some of the most interesting sea angling in the world of sport, and have visited some of the beautiful and picturesque regions in Europe. This is particularly true of the west coast of England—Ilfracombe, Tenby (South Wales), Isle of Man, Ramsey, Douglas, Peel, not forgetting the Irish coast and Ballycotton, a place where good anglers go before they die, to fight gigantic skates and congers, two great sporting fishes, with the rod and reel.

I have not the temerity to venture where anglers tread, and discuss British sea angling or the fishes, but I should fancy that the bass, *Labrax lupus*, stands as one of, if not the finest of small sea game fishes, and specimens I have seen impressed me that it is a fighting fish of the first water. 'The bass decidedly holds the highest place among those sea fishes which afford sport to the angler,' says 'John Bickerdyke,' so my American 'guess' (used by Shakespeare) was equal to the occasion. It is a fine fish, having something of the appearance or shape of the striped bass, or a monster yellow perch.

The bass has a wide range in European waters and affords sport from England to the Tiber, and beyond, and has been known from the early times. Archistratus called the bass of Milet the 'offspring of the Gods,' and at Rome it was esteemed so highly that the young were called *lanati* (woolly), their meat

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was so pure and white. Columella tells us that Marcius Philippus taught the Romans to take the bass as a fine game fish. Horace wrote of the bass, and in keen satire said to the *bon vivants* of his day, ' Whence is it that your palate can distinguish between the Tiberne basse and those taken at sea ? ' Aristotle praised this fish for its cunning. [It was difficult to capture, and both Ovid and Aelian must have observed its cleverness, as they refer to it as burrowing in the sand to evade the net. With this appreciation of the bass the Romans must have been delighted when they landed in Britain to find that the finest game fish of these waters was their own bass of the Tiber, whose very name was given on account of its cunning.

The average bass-taken by English anglers ranges from two to four pounds, and ten and twelve pounders are not uncommon. ' John Bickerdyke ' mentions a twenty-seven pounder from Brixham. The yare more frequently found in south and south-western England, coming inshore in May, the larger fish leaving in October. The expert bass fisher finds it in the surf, off the mouth of rivers, on sandy bars, off rocky points, showing that it is a versatile fish. One charm of the bass is, that it will take a fly. A volume could be written on it and its cousins in various parts of the world, everywhere a good hard fighting game fish.

Mr. Aflalo is loud in his praise of the bass, and one can read his description of the catch he made one fair morning off Teignmouth of a thirty inch eleven and a fourth-pound bass that fought a half hour before surrendering, and will heartily agree with him that this is the king of game fishes of England's sea-coast. Some of Mr. Aflalo's best bass weighed ten and one-quarter pounds, eight and one-half, six, five and one-quarter, four and one-half pounds.

I had hoped to have some bass fishing at Teignmouth, particularly when I was at Bristol, knowing of a good ground in the estuary of the Lyn where it reaches the Bristol Channel, the little town reminding one of Italy, but I was dissuaded by torrential rains. I was too late, but I stood on the highlands

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of Bristol and looked down on the beautiful water, and knew that my forebears in the seventeenth century, one of whom lies at Frenchay, not far away, must have caught bass on the coast in the time of Cromwell.

The pollack is one of the finest of the British game fishes, making a good fight on the rod. I have taken them with a fly off the rocks on the New England coast, from five to seven pounds, using an eight-ounce rod and breaking many tips. They are caught off rocks in both countries, and in America, off, and in the mouth of rivers. In Scotland the saithe or coal-fish ranks high as a game fish with the Glasgow sea angler, and it will take a fly.

The mackerel in English waters is full of life and vigour, affording the anglers with a light rod sport of a fine character. In America this fish is taken trolling (dragging the bait astern), but I have had my best and most satisfactory angling for them in California; in chumming them up; namely, throwing finely chopped bait overboard, and when they were all about the boat, casting for them with an eight-ounce rod and trout tackle, using a small spoon or white bait, or even a white rag. I have seen a school (*sceole* Anglo-Saxon) in the Atlantic at night that looked like an acre or more of fire on the water, due to the phosphorescence occasioned by the movements of thousands of fishes.

The list of British fishes is a long one. The bream, chad, conger, whiting, pout, and many more afford most excellent sport if approached with tackle appropriate to the game. I have seen an angler in America catching a pollack with a tarpon rod and line, yet reviling the fish as a poor fighter when he should have used an eight-ounce trout rod. A peculiarity of the pollack, at least in America, is that it deteriorates at once when taken from the water. In a word, if you wish to eat pollack waste no time in cooking and serving it, and drink its health in chablis.

One of the most attractive of all British fishes and rare everywhere is the opha or kingfish (*Lampris*). One specimen has

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been caught with rod and reel in Californian waters, and a fine one adorns the walls of the Tuna Club. These fishes are so rare that nearly every one taken in the nineteenth century is recorded. It is a wandering pelagic fish, taken offshore. It attains a weight of two or three hundred pounds. The sword-fish (*Xiphias*) has been seen in British waters, but is not a regular visitor.

Angling for small game is to be found in England between the Humber and the Tweed, whose beautiful reaches I know in the Peebles district. This comprises the shores of Northumberland, Durham and Yorkshire, including Holderness. Mr. Aflalo gives this region for all the year fishing the first place in the United Kingdom, and refers to the cod, codling, whiting, haddock, plaice and other fishes as abundant; also to the fly fishing for billet and rock fishing for codling, the method of which he says, 'closely approaches to salmon fishing.' At Scarborough the anglers fish with a fifteen-foot rod, with a reel seven inches in diameter. The town is a solace to the angler who has ill luck, as some anglers do. All along the coast will be found a most interesting ground for sea angling, Robin Hood Bay, Scalby Ness, Scarborough Pier, Cayton, Filey Brig, Castle Hill, Flamborough, Bridlington, Danes Dyke, Saltburn, Staithes, and Whitby being favourite resorts for anglers who do not expect bass, big skates or conger.

There is very good sea angling to be had at Valentia, according to the reports of Mr. Holcombe and Mr. F. A. S. Stern to the British Sea Anglers Society, and also to Mr. Mallet and Mr. Crisfield. I quote from Mr. Stern, as reported in the *Fishing Gazette* :

'On Tuesday,' said Mr. Stern, 'in spite of wind and rain, we got out to the Coastguard patch and took 462 pounds odd of fish, including skate of 141 pounds and 58 pounds, conger, 25 pounds, 19 pounds, 8½ pounds, and cod of 21 pounds, 17 pounds, 16 pounds, and 12 pounds. On Wednesday, at the same ground, 405 pounds of fish, including a skate of 117 pounds, conger, 22 pounds and 18 pounds, ling, 206 pounds, and six small

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dogs. On Thursday we got out to Reenadrolaun Point, found too much sea, so came back and anchored on the Bank in from eighteen to twenty fathoms of water. I there captured, after much trouble, a skate of 125 pounds, which disabled my winch and had to be hand-lined aboard, and four weighing 63 pounds, five cod, 53 $\frac{3}{4}$ pounds, biggest gurnard and two pouting, 2 pounds; total 408 $\frac{1}{2}$ pounds. Mr. Holcombe had eight cod, 94 $\frac{1}{4}$ pounds, biggest 21 pounds, besides ling, pollack, pouting, gurnard, conger, and bream, a total of 188 pounds; our day's total 596 $\frac{1}{2}$ pounds, not including three small dogs. It was certainly one of the best day's sport that I have ever spent upon the sea, and the most uncomfortable one; the weather conditions were awful.

'Our total take in the four days amounted to 1,605 pounds of fish, with fourteen certified specimens. We caught three skate exceeding 100 pounds, namely, 117 pounds, 125 pounds, and 141 pounds. Though the comparison may not be quite fair, we two ordinary anglers caught 100 pounds more fish in one day, than were caught by about forty skilled men at Deal in perfect weather and under the most favourable conditions.'

Possibly the most famous grounds of the British Sea Angling Society of London is Ballycotton, Ireland. Every year this influential society has a Ballycotton night. A great variety of fishes are taken here, but pollock, conger, halibut, and skate are the principal game fishes, and due to their size afford most excellent sport. In 1912 Mr. H. E. Burton took a one hundred and sixty-six-pound skate, Mr. F. D. Holcombe a one hundred and fifty-pounder, Mr. C. J. Crisfield a two hundred-pounder; at Letterfrack, Mr. S. Bullock took a seventy-five pound halibut, Mr. A. Wignot a seventy-pounder; Mr. F. V. Murmann a forty-five-pound conger at Valentia. For photographs for all of which I am indebted to Mr. F. D. Holcombe, who holds the record at Ballycotton for the second largest halibut with rod and line, a one hundred and twenty three pounder.

CHAPTER VII

THE TOPE AND OTHER LEAPING SHARKS

' Flat fish, with eyes distorted, square, ovoid, rhomboid long,
Some cased in mail, some slippery-backed, the feeble and the strong ;
Sedaned on poles, or dragged on hooks, or poured from tubs like water,
Gasp side by side, together piled, in one promiscuous slaughter.'

Badham.

ENVIRONMENT is an important factor in discussing, or even thinking of the game fishes. There are anglers who look with horror upon the shark, and smile in derision when this musky, big man-killer is mentioned in the same class with trout, salmon, tuna or tarpon.

It is a matter of location and condition, and I recognize the fact that of all men the writer on game fishes should hesitate to denounce certain fishes as not game, merely because he has never had any experience with them. Thus I have lived in various countries where eels, and large ones, were common as the morays of Florida, the snake-like moray of Santa Catalina, a veritable sea serpent ; and there are others. One is distinctly impressed on my memory. My father was at the time an army officer, surgeon of the garrison at Fort Monroe. It was just after the Civil War, and my mother's boudoir was a casemate, calling to mind Beauchamp Tower in the Tower of London. The casemate had as a window a port for the ten-inch Columbiad, which had not been mounted as the place was used for officers' quarters, and looked into the wide moat. I sometimes fished from this point of vantage, and one day hooked a mighty eel, a dark-green fellow with yellow spots, and a mouth with the teeth of a shark and the capacity of a boa constrictor, I brought



Fig. 12. British Sea Anglers.

1. 43-Pound Conger taken at Valencia, Co. Kerry, Ireland, by F. V. Murmann, British Sea Anglers' Association. 2. 150-Pound Skate taken at Ballycotton, Co. Cork, by F. D. Holcombe, British Sea Anglers' Association. 3. 73-Pound Halibut taken at Ballycotton, Co. Cork, by A. Mignot, British Sea Anglers' Association. p. 64.

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it in with great difficulty, and forgetting where I was, jerked it through the port almost into the negro maid's lap. The eel cleared that casemate as quick as would a shell with a smoking fuse.

I had never heard of eels as game fish, but after listening to Mr. Holcombe's description, at the British Sea Anglers, of the congers caught at Ballycotton and other places in Great Britain, I found that I had overlooked a fish that made a hard fight.

So it is with the mullet. I have lived in Florida where the natives looked upon mullet as a special dispensation from an all-wise Providence. If a Conch or a negro, or a poor white, had a barrel of 'grits' and a castnet for mullet, he was independent of any and all earthly contingencies, as all he had to do was to wade a little and cast a little, for mullets were like the sands of the sea. But as a game fish, I confess the mullet, a mud-grubber and stupid, never occurred to me. Yet I am convinced, after reading Aflalo, 'John Bickerdyke' and other distinguished authorities, that I was wrong. In California, within a year, I have known of a mullet being taken with a fly.

It is the same with sharks. I imagine there are few anglers who have caught more sharks of all kinds than I, merely because I had an unusual opportunity. I lived on the Florida reef, where I fished for sport and in the interests of science, nearly every day for several years; and we took to shark fishing, as the reader would go out with the hounds, or take an hour's spin with the single sculls for exercise. I fancy if my adventures along this line were collected and appropriately garnished, they would present a startling showing.

But it never occurred to me to associate the shark with a game fish. It was like hippopotamus shooting; but I am prepared to change my mind and accept some sharks as game, particularly the British tope, the Santa Catalina bonito shark, and the leaping shark of Texas; doubtless there are many more. Often while fishing off Port Aransas I would hook a shark, which in default of some better name, I called the tarpon shark.

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I always hooked him while trolling for tarpon ; and I was usually deceived for a few seconds, as, if the shark was six feet long, he would go into the air in a leaping frenzy, so clever an imitation of the tarpon that it at first deceived me. I am not prepared to say that the aftermath, the play of this fish, was not satisfactory. If I had not known it was a shark, I would have been satisfied, but the taint of vermin was there.

So with the bonito shark. I have played these fish of from four to ten feet, and a more determined fighter it would be difficult to find. When the game is about four feet long and goes into the air repeatedly and drops, to rush away, making the reel sing and scream, one is convinced that there is some balm in the shark Gilead. But I am mindful of the splendid term 'game fish.' When you see it, or hear it, it should not suggest sharks, but salmon, trout, kingfish, a fighter of the first value to man in its relation to his sustenance. So, I would place the salmon first and relegate the shark to another class, not to be despised, but to be developed and better understood. In fact, shark fishing is in a class by itself.

For many years I was a devotee, especially when the game was big, and I have been towed many a mile by the man-eaters of the outer Florida reef. A thirteen- or fourteen-foot shark, if fought by one man in a small boat and a steerer, is a match for almost any man. I did most of my shark fishing in a light cedar boat made for this and other purposes, where a capsize was the only possibility, the boat could not sink. Under the bow-deck was an air-tight compartment, while around the gunwale was a row of tin cans soldered up and decked in. In many a race have I been swamped by carrying sail in this boat in a half gale and a heavy sea. The latter would roll in on top of her, crossing the bar, but she never tipped over. I would let the main sheet go and my man and I would get overboard and balance her as well as possible, and bail her out with bail cans. She was so light that even when full of water, she would stand up with five or six men in her. With a boon companion, I would

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often fasten her to a bed of coral, and bait up the sharks on the edge of a blue channel. Then with a big steel hook and chain, a line of strong but not large manilla rope, we would take our choice of the sharks. The lure was a big grouper, and when a shark had taken it, he was hooked with a wrench that brought a response that would have jerked a man overboard had he held on. Nothing is quite like the rush of a thousand-pound shark, and we stood awhile and watched the coil fly into the air, the man in the stern turning the boat in the direction the shark was supposed to be going. Then when the end came, there was a quick grasp for it, a few seconds of terrific struggling to stay in, then the boat would get under way and the race was on.

I had a little run-way for the line in the bow, a very important feature in shark fishing, and the end of the line was fastened to the centre of a board, or sometimes to a tin can, which, if worst came to worst, we could throw over ; and I have often done this to save a capsiz. The shock would, by a sudden jerk, tear the rope from the cutwater, get it over the side, until the water began to pour in, when we would toss the can over. This generally occurred a mile or two from the start, and as we knew half a dozen sharks were following the other, we took no chances.

I was frequently towed by sharks so large that we never stopped them, or never saw them. The moment we held the line or rope, they broke it. There is nothing quite like this rough and tumble game, if one likes that sort of sport, is young and full of fight. The fierce reaches, the violent efforts to get the boat around, the rushes to windward on the turns, the sudden slack away of the line as the shark came in, the moments of dire uncertainty as to which way it would start or go, the feverish anxiety as to whether he was really off were all delightful and strenuous. I could, as a rule, handle a fourteen-foot shark weighing eight hundred to a thousand pounds (estimated) after it had towed us a mile or more. At least by that time, we could, by working hard, pull the boat up over the fish and bring it up,

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foot by foot, until we reached the chain. Here was the danger point. All the work had been done at the bow ; now the line had to be transferred to the scull-hole at the stern, and the way we did it was this : my companion took the line or the slack, led it astern and placed it in the rowlock. I was now holding the shark by the chain, his head not two feet distant, and he was rolling over and over, doubling up, straightening out, beating the water and ever and anon lifting his ponderous tail into the air, striking out with deadly portent. In such a position, I have had a shark seize the cutwater of my boat and bury its teeth in it, hanging on, and wrench and try to shake it. It is a weird sight to look down into the mouth of a man-eater, with its thirteen or more rows of teeth packed away in layers, not two feet distant, the most of them, the outer ones, grinding away at the chain. When the shark rolled over on its back, by standing upright, I would throw the rope over, let go, and spring to the stern, my companion hauling in the line as quickly as he could, often getting the big head almost to the surface at the stern before the shark knew what had happened. Then one would hold the line while the other took the oar, and try to tow the game in, generally impossible without help.

I have fished for sharks off the beach when twenty or more men would take the line, and with a shout run the unlucky game up the sands, even its remoras holding to it. But this is not a fair game, not the 'square deal' we hear so much about in America, and which appears to be the dominant note in Great Britain. The attempt to manage a big shark, as I have described, from a boat is unfair to the two men generally, as an eight or fifteen-hundred pound shark is a leviathan, and if he really knew his power could end the game at once. I once caught such a shark at Fort Jefferson, Florida ; and have told the story many times, as I never knew before of an attempt to tame a big man-eater. Two of us, and I was but a lad, caught and towed the shark for a mile or two, then a barge gave us a tow, and when we finally reached the island, twenty or more

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men took the line and dragged the big fish up an incline onto a little dam. Here I cut out the hook, and we pushed the monster, that had a mouth that would have taken me in, shoulders and all, into the moat or ditch that surrounded the fort. The shark lived several months, but it never was tamed in the accepted sense, though it would drag about boats, and submitted to several indignities of the kind, and with the dogged pertinacity of certain suffragettes I recall in England, refused all food, that we could see, though no 'pet' ever had more attention or a better prison.

There is a remarkable difference between the sharks I took on the Florida reef, from the St. Johns to Key West, and those of California. The warm hot water of the Tropics give them size and extraordinary bulk, and a fourteen-foot Gulf of Mexico shark was, in my experience, always in girth that of a large horse or similar size; while in the waters of Santa Catalina the sharks are all long and slender. A hammerhead of ten or twelve feet might not weigh over two or three hundred pounds. There is something repellent about the big shark, especially as you see him in the water; and the sailor never allows one to escape if he can prevent it. Yet, I can recall the time, when living in a shark country, that we had absolutely no fear of them, swam the channels *ad libitum*, a feat that to-day I would not consider for a moment. In fact, with no special reason, I have developed a mortal fear of sharks, a singular physiological feature, as I have often swam a channel that I not only knew abounded in sharks, but I could see their fins not one hundred feet away.

The California hammerhead is a good hard fighter, when hungry apparently without fear, and will deliberately steal fish hanging from boats. For that matter I have seen a thirteen-foot Florida shark take a fish from my line just as I was lifting it in; and all persistent tarpon anglers can relate tales of big sharks which have followed the stricken tarpon to its death. To illustrate briefly the strength of a ten-foot Catalina hammer-

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head : I hooked one and played it for several hours, and it was only stopped when the sixth boat fastened on and pulled against it. This procession towed it an hour before we again reached land from where the shark had towed me and my companion in a one hundred and twenty-five pound skiff. I held on to the line during one of these rushes to see what the shark would do, there being several boats around to pick me up, and in a downward rush, the shark almost pulled the skiff under water against its broad flat bottom.

The largest shark found at Santa Catalina is the Bone shark, which attains a length of from thirty to fifty feet. This, of course, is harpoon game, and dangerous from its habit of striking terrific side blows with its tail. The Bay of Monterey is a famous locality for these big sharks.

Many of the dog-fishes, small sharks, are good game. I have seen scores of them in the surf on the Californian coast at night, presenting a marvellous appearance, as they seemed to be fire-bodies in a fire, due to the wonderful phosphorescence here, winter or summer. Up to two or three hundred pounds nearly all the Californian sharks can be taken with the tuna or Catalina swordfish rod and line, and some really gigantic sharks have been mastered with the rod. When they are larger, a harpoon is desirable, and a sport of another adventurous kind is had.

In English waters there are many small sharks and dog-fish, which are often a nuisance. When they are in numbers, the angler may as well change his tackle, add a wire trace or leader, and with rod of medium size fish for the vermin that has ruined the fishing.

One could hardly include in the vermin the small jumping-shark, known in south-eastern England as the tope, without offending some sea anglers, as the tope has its followers and affords no little sport, especially in Herne Bay where some famous catches have been made, and tope up to sixty pounds taken with rod and reel. This in a general way might be construed into tuna or tarpon tackle, a sixteen-ounce rod with six hundred

TOPE AND OTHER LEAPING SHARKS

feet of a 24-line, a 10/° O'Shaughnessey hook, piano-wire leader or trace. Mr. Brown describes the play of the Herne Bay tope as being very exciting. In one of his trips, a large tope leaped over the boat. An acquaintance of mine had a similar experience on the New England coast, only he was not playing the shark, which in this instance was six feet long. It was doubtless startled and jumped without knowing where it was going. The tope of Herne Bay average about forty pounds, and are between five and six feet long, about the size of a little striped tiger shark I have often taken in Catalina Harbour, California, in the summer months. They averaged sixty pounds and we played them from the beach with nine or ten-ounce rods. As soon as they were hooked, they went into the air, due to the shallow water. A little larger shark, averaging eighty pounds, is common at Howland's Harbour at the island of San Clemente, a most lusty fighter, carrying off tackle and towing small boats about in a vigorous fashion. Tope angling is certainly to be commended as a sport.

CHAPTER VIII

SOME GAME FISHES OF INDIA

“*Salaam aleikoum Ya Effendi, Es salamak Ya Braheemo.*” And peace was with us all that night.’

I Go A-fishing.—Prime.

SO far as the natives of India are concerned, game fishes are practically unknown, but the officers in the British service have fully investigated the ichthyological resources of the empire, and have demonstrated that its finny life includes many fish which are game in every sense. Few regions on the globe can show so remarkable a variety of fishes as India. The waters, salt and fresh, fairly teem with them, and they constitute an important factor in the dietary of the native, who, if he is ignorant of the rod and reel, or the lance, has many original methods of taking the game, and as many peculiar ways of eating it from raw to ancient. Who does not know Nya-pi, the succulent relish of Burmah? While the salt fish of Grálandá are famous among Indian epicures.

As in France and other countries, it has been difficult to educate the people and make them appreciate the value of game laws and rules for the protection of fishes, that the future may be cared for. The unlimited millions of India have slaughtered fishes, in season and out, for thousands of years, and, doubtless, always will.

The angler in India is at once struck by the nature of the fishes; groups, like the catfish and carp, despised in many lands, here include fishes that are said to be essentially game, not to say bizarre in appearance.

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One of the best known authorities on the rod in India, Henry Sullivan Thomas, F.R.S., has told us that there is 'as good fishing to be had in India as in England'; though from the very nature of things it is, of course, very different. One writer gives the palm to the mahseer, whose praises have been sung by Kipling and many whose fortunes have been cast in India where everything, even the fishes, are strange to the man from the north or west. This author places the Indian fish ahead of the salmon in its play, and gives a most interesting number of details.

The Indian fishes include a tarpon, though a small one, many carp-like fishes of extraordinary size; some that climb trees, others that jump from rock to rock, as the *Periophthalmus* and the strange murrel, which is not at all discomfited when the water dries up in its pool, the *Ophiocephalus* (which is its scientific name) going down into the mud, forming a cell about itself, and lying dormant until the water returns. I was told by a naturalist that he brought one of these mud cases to England in his trunk, where he placed it in water, the fish coming out in good condition.

One who has read Professor Moseley's *Voyage of the Challenger* will recall his angling experiences with the flying gurnard, when the beautifully coloured fish seized his bait and a few moments later dashed into the air and soared about until it was jerked back into what might be assumed its native element. In the land of the little jumping goby, referred to, it is possible for the angler, with crab bait, to creep up on the muddy shores and angle out of water; or it is among the possibilities to lay some angling plan to fish for the climbing perch in the palms it is said to frequent, at times high above the water. Here one may meet the quaint *Anabas* travelling across country from pool to pool. One can but acknowledge the angling possibilities are at least bizarre in India.

The mahseer is often called the salmon of India, and specimens of sixty pounds have been taken; but it is of the carp family and is caught in all the hill streams of India from Assam to the Punjab, and in nearly all the streams of Southern India. It is

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not to be compared to the plebeian carp of Germany, England or America. Its admirers call it a barbel and have honoured it with the family name *Cyprinae*. To come to the point, our barbel, in the language of all nations, is *Barbus tor*, and the small specimen of three or four pounds, off hand, resembles very much the ordinary gold-fish of America, divested of the gold. Its scales are big and armour-like, the body thick and deep beneath the dorsal fin, there being a mere suggestion of a hump. Its dorsal is tall, the tail big, wide, but short; the head long, but small for the size of the body. On each side of the mouth is a barbel that might have been stolen from a Mississippi River catfish, altogether a queer-looking, composite fish is the Bawanny mahseer of the Madras Presidency, said to be the best of the tribe.

If now you are angling in the rivers of the west and north coast of India, you will find the same fish, but changed. It is longer and thicker, its tail is longer, more powerful; the dorsal has dwindled; and the head is totally different. In a word, the same fishes in different localities do not look at all alike to the non-scientific angler.

Another form of the mahseer has strange puffed-up lips, the upper turning up, the lower down, and long barbel, like a goatee. They are also strangely coloured; some have a gray back, the stomach silver, the fins a golden yellow; while the first mentioned often has a rich golden hue, a gigantic gold-fish. In fact, so strange are the differences, that one is impressed by the Day figures, that either there are more than one species, or there may be sexual differences.

In Assam, the fish is said to have a beautiful coppery bronze colour with vermilion-tinted fins. Another from Burmah is described as having a black back. The fish can be taken with a sixteen-foot salmon rod, and a spoon, or with live bait or plain fish bait or fly, all of which is described in the minutest details by Thomas in his fine and exhaustive work, *The Rod in India*. For a scientific study of Indian fishes, the reader should

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consult Day, as space permits only a very general mention of the fishes in the present volume. The best rivers for mahseer are in Mysore, the Cavery, the Bawanny, the Kistna, the Tungabudra, and the Godarery. Another mahseer is the Carnatic carp, and there are many more, nearly all good fighters on light pliable rods.

Good mahseer fishing is to be had, according to Mr. Reginald Bolster, in the rocky streams that drain the Sulliman Hills on the Punjab-Baluchistan border. The Kahà River particularly is a good stream, rising at an elevation of 4,000 feet and reaching the sea on the plains near the old fort of Harrand in the Dera-Ghazi Khan District of the Punjab. Mr. Bolster took seventy-five fish, whose aggregate weight was nearly one hundred pounds. He used a spoon and a paste of flour, which was particularly killing.

It is an interesting fact that a number of fishes will take a fly in India, whose cousins in other parts of the world would not be suspected of this habit. There are ten species of the Chilwa, a long slender silvery fish, resembling the tarpon. They are little fishes, and many of them will take a fly. The Barils (*Barilius*) afford good sport, fourteen or more kinds being known in all India. Nearly all have a trout-like habit of rising to a fly. *Barilius bola* looks not unlike a grayling, without the big dorsal. Thomas calls it the Indian trout.

I have referred to fortunate anglers. Permit me to quote from a letter to Mr. Marston, editor of the *Fishing Gazette*, from an English officer who claims to be an *unlucky* angler. To my mind, he presents an illustration of a perfect angler. I regret I cannot quote his name, but his *nom de plume* is 'Ghadran,' and his paper on mahseer fishing in Burmah in the *Gazette* of December 7, 1912, cannot fail to be of interest to anglers in the Orient. He says, and my apologies and sincere thanks are due for quoting so extensively from the paper :

I HAVE the reputation for keenness in the superlative degree, so that on being transferred by a very kindly (as I thought then) Government to

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Burma—the land of the mighty Irrawaddy and its monster mahseer—all my leisure thoughts and moments were devoted to preparation for battle with giants, and my pockets more than emptied over the task, on the principle of not spoiling the ship for a ha'porth of tar. Equipment for the fight consisted of about a mile and a quarter of line, five whole-piece bamboo rods (product of the country), whipped and ringed by myself, one nine-foot split-cane spinning-rod by Payne (New York), two fly rods, three large casting reels, the original 'Silex' (a very old companion), with a smart young brother in the shape of the 'Silex No. 2,' and the 'Meteor.' Add to the above list several smaller reels, spoons galore of huge (five-inch) dimensions, spinners, natural bait tackle, two coils of 'Yarvon,' traces of wire and gut, material for construction and repair of tackle, and the outfit is complete and worthy of the foe.

It must be remembered by those who may wonder at such an array of angling material that the supply of fresh tackle is difficult. In Burma, once launched into the jungle, the traveller has to make his own supply, and postal arrangements. Possibly a few eggs and an odd chicken or two may be obtained, but the replacement of tackle would take several weeks. Even on the Irrawaddy—the great waterway of the country—communication is not at all what it might be on the upper reaches. Burma is years behind India in development, only being given by that Government but a tithe of the large revenue produced by the former country. But, whatever the faults of the country, it held very big and sporting fish, as the following bag will show. This was made in 1908 by Major Williams, of the Devon Regiment, and another rod, and is sufficient explanation to warrant my eagerness to try the locality of such sport.

April 21.—34 pounds, 10 pounds, 17 pounds, 11 pounds. Between 8 and 11 a.m. Had four other runs.

April 22—90 pounds, 70 pounds, 42 pounds. Morning and evening.

April 23.—53 pounds, 40 pounds, 19 pounds, 8 pounds, 65 pounds. Morning up to 11 a.m.

April 24.—56 pounds, 43 pounds, 16 pounds, 51 pounds. In the morning; had other runs.

April 25.—68 pounds, 16 pounds. In the morning.

April 26.—59 pounds, 35 pounds, 9 pounds, 7 pounds. Morning and afternoon.

April 27.—65 pounds, 48 pounds, 63 pounds. Morning and afternoon. Lost two big fish besides.

April 28.—48 pounds, 34 pounds, 70 pounds. Morning only. Lost a good fish with a lot of line besides. River became unfishable until May 15.

May 15.—20 pounds, 16 pounds, 9 pounds, 27 pounds, 29 pounds. Afternoon only. Was broken once, and had three other runs.

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May 16.—62 pounds, 11 pounds, 16 pounds. Got broken twice in rocks.

May 17.—10 pounds, 5 pounds. Morning and afternoon. Broken twice.

May 18.—48 pounds, 8 pounds, 58 pounds. Morning and afternoon.

Twelve days' actual fishing. Forty-one fish landed, averaging 35½ pounds. Total weight, 1,466 pounds. Largest fish, 90 pounds; length, 60 inches; girth, 34 inches.

The best fish in the above bag is 90 pounds, and the modern and most authentic record for a mahseer caught with rod and line stands at 104 pounds, caught near Coorg, in Madras, where a lucky angler scored a century (103 pounds and 104 pounds) two seasons running, so there was a good chance of record breaking if the Irrawaddy proved as productive as in 1908. The actual bag made on the Irrawaddy is given below, together with the sport obtained on smaller rivers, and reveals a sorry attempt to get a specimen mahseer :—

Place.	No. of Fish.	Weight.	Days Fishing.	Biggest Fish.	Remarks.
Taiping and tributaries (Mole, Nampaung, Nantabet, and Tali)	24	lb. 48½	31	lb. 12 and 11½	Both caught spinning natural bait.
	26	*			
Irrawaddy . . .	6	11	22	6	One mahseer of 6 pounds and five freshwater sharks.
Indaw Lake . . .	30	24¾	6	2-2½	2½ pounds mahseer on paste. 2 pounds nga-gyi-pan on fly-spoon.
	7	*			
Totals . . .	60 33	84¼ *	59		

* Unweighed.

It would be of little interest to home readers to discuss theories to account for the lamentable failure in the Irrawaddy, but it suffices to say that no good bags have been made for two or three years, and that all the

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anglers I met had nothing but blank days to record. The season was said to be an abnormal one ; the river was in flood and cloudy, and the weather of the worst description.

I count myself an unlucky angler, and the following is an instance. At one place on the Irrawaddy (with a big reputation) I spun for nine days, morning and evening, from a big rock about thirty yards out in the stream. It was a monotonous occupation, varied by using two rods and two different kinds of casting-reels. There were only two places from which casting could be done, one on each side of the rock round which the powerful current swirled and eddied over other, but sunken, rocks, making a large backwater, which was treacherous water for heavy spoons, as it concealed many boulders with its ever-changing surface.

In my pursuit of the elusive mahseer I covered 250 miles in marching alone, without counting distances to and from fishing. Eighty miles of the Irrawaddy were either fished or looked at with a fisherman's eye. The point finally reached was between 700 and 800 miles from Rangoon, and I believe well over the frontier—but tell it not to military policemen or to deputy-commissioners of the frontier brand. From this place I travelled part of the way down stream on a bamboo raft knocked up in a few hours by Gurkhas in a very workmanlike fashion. It was a most unwieldy vessel, and myself and crew nearly found a watery grave by colliding with one of the gold-dredgers' wire cables which stretch across the river, and are lowered for traffic. In midstream the wire when loosened sinks right down, but our raft got swept towards one bank by the current, and we finally just avoided the cable, hitting it with one corner of the raft. There were a few exciting seconds, during which we were wondering what the crash would be like—if the wire would slice the raft in two portions, and what pieces would be left us to cling to and avoid being sucked under by the current. A few weeks before a Kachin boy had been swept off a similar raft and drowned. GHADGAN.

I first heard of the glories of the Rohu (*Labeo rohita*) from Kipling and was caught by the names mahseer and rohu. The latter can properly be classed among the great game fishes of India. Rohu is a large carp, looking not unlike a roach, but with the long pointed head of the carp. Its body is broad ; the dorsal fin big ; tail powerful, put together for a fight long and well contested. The fish attains a length of three feet and a weight of sixty pounds. There are other species which have been taken weighing thirty, forty and even seventy pounds,

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giants of the carp family, whose mere weight, whether taken with paste, fly or spoon, would make work for an angler and repay him for reading a little book called *Tank Fishing in India*, in which he will learn all about its delights. That the sport is becoming universal and popular is seen from the fact that the Calcutta Angling Club propagates the Rohu and others, and has, according to Thompson, placed twenty-five thousand Rohu, Catla and others in their preserves, from which younglings they have taken ten and twenty pounders.

There are in Indian waters a number of fierce fishes, which are known as fresh water sharks. If you are in Hindustan you will hear of the Bowáli. In angling in the Tamil country, it is the Wallago, Gwali in the Punjab, the Mulley of Tirhoot, and the Baralie in Assam. But it is always the *Wallago attu*, a good fighter with a sixteen-ounce salmon rod and a one and a half inch spoon. With such tackle, eight, nine and twelve pounders can be taken. The Wallago is a curious-looking fish, reminding one of the deep sea fishes which have long feelers and pseudo-electric lights on the end of them. In a word, the Wallago looks like a fish upside down, as it has a long pseudo-dorsal on the under side, with merely a wisp of a fin above, and its barbels come from the upper jaw in front of the eyes, and are a fourth of the length of its long slender body. It looks better tipped upside down. Many of these fishes are taken in tanks or reservoirs; others again only in rivers.

Among the latter is a gigantic catfish, called *Bagarius* for lack of a better name. It tips the scales at one hundred and forty pounds at its best, and rejoices in a mouth large enough to swallow any bait. In fact, one taken of this size, swallowed a fourteen-pound rohu that was being played by an angler. Day shows a picture of this big fish in his notable work; and let me say, if the story, which is absolutely true, had been told in America a thirty-foot crocodile would have taken the *Bagarius* in due turn and then been landed complacently with rod and reel. Mr. Ardwell took in four days with one rod fourteen fish,

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which weighed one thousand and sixty-five pounds. In the Punjab, this fish is known as the Goonch.

These gigantic 'cats' make a merry fight, especially the silun (*Silundia gangetica*), which is taken with a spoon. One is constantly reminded of the difference between the catfish and carp of England and India. What one Englishman thinks of the catfish is told in the following clever lines from *Punch* :

' NO CATFISH PLEASE !

' Oh do not bring the Catfish here !

The Catfish is a name of fear.

Oh, spare each stream and spring :

The Kennet Swift, the Wandle clear,

The lake, the loch, the broad, the mere,

From that detested thing !

' The Catfish is a hideous beast,

A bottom-feeder that doth feast

Upon unholy bait :

He's no addition to your meal.

He's rather richer than the eel ;

And ranker than the skate.

' His face is broad, and flat, and glum ;

He's like some monstrous miller's thumb ;

He's bearded like the pard.

Beholding him the grayling flee,

The trout take refuge in the sea,

The gudgeons go on guard !

' He grows into a startling size ;

The British matron 'twould surprise.

And raise her burning blush,

To see white catfish, large as man,

Through what the bards call " water wan "

Come with an ugly rush !

' They say the catfish climbs the trees,

And robs the roosts, and, down the breeze,

Prolongs his catterwaul.

Ah, leave him in his western flood,

Where Mississippi churns the mud ;

Don't bring him here at all !'

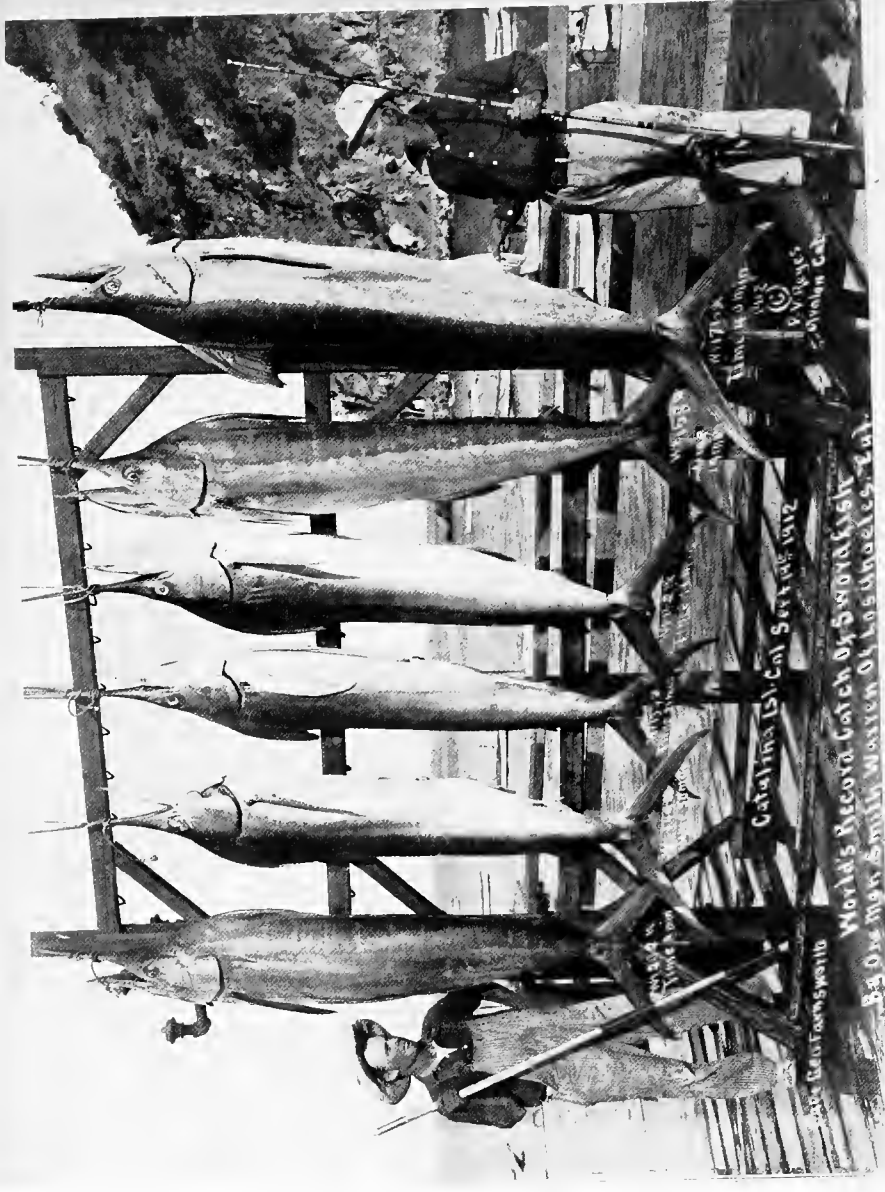


Fig. 13. World's Record Sword Fish Catch. Santa Catalina Island. Mr. Smith Warren, Member of Tuna Club, Sept. 19th, 1912. Six Catalina Sword Fish in One Day. 202 lbs., 8 minutes ; 149 lbs., 30 minutes ; 134 lbs., 21 minutes ; 162 lbs., 19 minutes ; 158 lbs., 19 minutes ; 176 lbs., 40 minutes ; 16-ounce Rod, 24 Line. Captain George Farnsworth, boatman. (Photo by Reyes). p 80.

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Another game Indian catfish is the Tengara, while the Kors in Assam has been taken at sixty pounds, and the Poongah at twenty. They all take live bait, or a spoon. One of the most extraordinary of the Indian fishes is the Chitala (*Nolopterus chitala*), a big humpback, small-headed creature, built on the lines of the sacred ox, that elbows tourists out of the way in the narrow streets of the cities of the Orient ; at least it has a great hump and a ridiculous fin on its back. They are silvery and attractive, and judged from appearances the last fish to leap. But read Thompson's enthusiastic account of the play of the fish in his *Fishing in India*.

The game fishes of India are too numerous to even enumerate in a single chapter, and I can but refer to some of the most notable, as the Batchwa, that takes a fly from March on, at Narora, and the Pupta at Delhi and Bisalpure. I have referred to the murrel or *Ophiocephalus*, one of the most remarkable of all fishes for its nest or hibernating habits. The drying up of a tank or a pond does not worry the murrel ; it merely burrows, and like a bear sleeps away the bad season, thus giving rise to the wonder of the remarkable rain of fishes, the rain merely falling in a dry pond and releasing the murrel, which I might say has been fished for by a friend with a spade, very much as the farmer digs potatoes.

In general appearance the murrel does not appeal to the western angler. He is a little too eel-like, and uncanny ; but in a general way closely resembles the beautiful kelp-fish of Santa Catalina kelp beds. Its head is small and pointed, the eye, as in the tarpon, at the end of the head. It has a long dorsal and ventral fin, calling to mind that of the California whitefish. The tail is rounded like that of the Florida jewfish, so that the angler might assume that it was a sluggish bottom-loving fish, and it is said that it frequents holes in the bank.

In angling for the murrel, mahseer tackle may be used, or a light rod and a small spinner. The Murrel looks upon a frog with a not unfriendly eye, and there are divers ways of torturing

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a live frog when he is acting in the rôle of live bait ; but if it must be done, hook him through the lips as you would a minnow, better yet, do not do it at all. The reader will recall the old, old picture in Punch, entitled 'The Comforts of Angling,' or something of the sort, showing a bibulous angler sitting on a tidal river leaning against a tree, fast asleep. He had cast a live frog, which has reached the shore and is sitting beside the angler. The tide has risen to the latter's knees, but he sleeps on, and according to the legend, all he caught was a bad cold. The moral is, not to torture a frog. 'Skittering' for pickerel with a live frog is said to be an American sport ; but it does not add to the esthetic features of angling, and certainly does not to the joy of the frog. In point of fact, all 'live bait' usages of this nature are melancholy exhibitions of man's latent ferocity, which he is gradually outgrowing. A resourceful angler can use a dead silvery bait, and by his skill make it appear alive. Another method of taking the murrel is, according to Thompson, to 'dap with a dead frog.' I am desirous that the reader should read his remarkable book on India, hence I will not explain what a 'dap' is.

Day in his *Fishes of India* mentions several species of these fishes. I think nine in all. It is said that they appeal particularly to the sport-loving Mussulmans, who can eat fish without the offering of *halla*, and are fond of the murrel. Unquestionably to land a three-foot fish with a light rod, and know that it can live for months in a dry hole six feet under the ground, that it will jump out of your basket and 'walk away' to the pond, a fish that will drown if it cannot breathe air like the angler, is a solace and desideratum.

As to eels in India, 'the imperious sea-bred monsters,' there are many, also sea snakes out at sea, in droves. Some of the eels running up to eighteen pounds, are four feet long, and appeal to the shade of Lucullus.

The salt water fishes of India are numerous, large, often hard fighters, and can be taken in many of the estuaries. The Bàmìn and various species of the bass tribe, *Lutianus*, are found here.

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One of the really great game fishes is the Bàmìn (*Polynemus tetradactylus*), with the head of a trout, the mouth of an anchovy, and the body of a tarpon. It takes a fly, which is creditable to the Bār-meen, which also is a notorious consumer of tackle, according to Thompson, who has successfully cast for it in the Pàmban channel. Colonel Osborn has written entertainingly of it.

One of the fine, hard fighting fishes of India, and which looks the part, is the Begti of Calcutta, called the Kulanji by the Canarese, the Coollon by the Malays, and the Jack or Nair fish by the European. The fish resembles wonderfully a ferocious, fighting-mad yellow perch, but he is *Lates calcarifer*, and has been taken up to sixty pounds. Silvery in colour with a rich brown sheen playing over its surface, the Indian jack is a handsome fish, and can be taken with rod and reel after the fashion of the mahseer. Here we find many allies of the Florida snapper, as the red perch, caught at Madras. The gray perch, *Chrysopheys berda*, is very attractive. Here we also find an *Elops*, a most active fish of two or three feet that will take a white fly.

The famous silver king, the tarpon, has a representative at the marine Court of India, near about where Queen Gulnare came up out of the sea. This is *Megalops cyprinoides*. It is very small, but a perfect tarpon, and what is interesting, takes a May fly with avidity, also live bait. Like the mighty American tarpon, it leaps well, when hooked. When you hear a Tamil speak of *Morāng Kendai*, you may know he is thinking of going a-fishing, and that the India fly-taking tarpon is the game, but in so hot a country you think a long time sometimes and then do not go.

It is practically impossible to even mention all the good game fishes of India, and I always remember to refer the reader to Day's splendid work on the fishes of that wonderful region, and Thompson on the sport. I can refer but briefly to such fine game as the Seer, which leaps eight feet and has a fighting weight of fifteen pounds. Like the American blue-fish, it will take a lure at full speed, trolling. Then we have the thirty-pound Chanos and many more.

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The lakes and rivers abound in fish. Kodaikànal in the Pulney Hills, a mile above the sea, contains a Baril which takes a fly, and in Lake Ootacamund you may take a number of fish. While passing, it might be mentioned that the owner of Lake Bellikal, which affords good angling, is V. Thiruvengada Swàmi Mudaliar, according to the unbelievers a most excellent name for an angler.

English trout have been introduced in some Indian waters as the Pykara River, Avelanche River and Burnfoot Lake. The Dodabetta reservoir and Kunda River have trout. The gourami found in India and Chinese waters is a hard fighting fish, and a fish of peculiar character, chiefly interesting for its nest-building habits which I have been fortunate in observing. The Gourami (*Osphromenus goramy*) is a native of China and has been introduced into India and many lands. It will grow in favourable localities to a length of six feet and attains a weight of one hundred pounds, a big, hard-pulling, hard-fighting fish ; yet it is one of the few fishes which builds a dainty nest.

In Siam, Assam and Burmah and the neighbouring islands there are many fine sea-fishes, and many interesting ones in the lakes and streams. One, the little paradise-fish, I have been told, will take a fly ; but it must be a dry fly of the smallest kind. I was once fortunate in having a pair of these beautiful little fishes under my observation for a number of days, where I could watch their nest building, which was a most interesting sight.

In wandering around the world the angler will find trout fishing in unexpected places, as at the Nilgiris, Ceylon, where the Nilgiri streams have been successfully stocked with American rainbows. The consummation of this feat was celebrated with due form, and His Excellency the Governor opened the season by landing the first fish. In Ceylon the Nuwara Eliya has been stocked with brown trout, *Salmo fario*, and rainbows. The latter stand the heat well. The Ceylon fishing club now attends to the stocking and has excellent sport.

CHAPTER IX

THE SANTA CATALINA ISLAND SWORDFISH

Fisherman. Master, I marvel how the fishes live in the sea.

Master. Why, as men do a-land : the great ones eat up the little ones.'

Pericles.

IT has been my good fortune to observe the swordfish of many seas. I have seen *Xiphias* on its spawning tour, not far from Tripoli in African waters, undisturbed by the wash of the ship. I have seen it in the Atlantic off Block Island and Boon Island ; have harpooned at least two species in Florida, but I believe the fish I saw one day at San Clemente Island, when fishing with Dr. Gifford Pinchot, made the strongest impression on me.

We were trolling for this game, sitting comfortably in the chairs of Mexican Joe's launch, side by side and facing the stern. It was a hot day in September, and there was scarcely a ripple on the deep-blue ocean save where the occasional leap of the big sunfish sent it into violent radiations, or the crash and subsequent foam, far away, told of the leaping tuna. Thinking my bait might be foul with weed, I rose, and stepping onto the little deck, reeled in. As the one-pound flying fish came up out of the clear and scintillant depths, directly at me came the biggest swordfish I had ever seen, of so splendid a blue that I could compare it only to a great tourmaline, melting into the ineffable labradorite hue of the water. I was fascinated, hypnotized, and he came up until I could have jumped onto his back or impaled myself on his sharp rapier and dagger, as the upper jaw in this species of *Tetrapterus* bears the sword, while the lower is a dagger which it carries much

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as the Italians carried them, in the left hand, in the time of Cellini.

The moment it saw me it turned, and for a second I saw the entire length of this tiger of the sea—a twelve-foot, or over, sapphire, striped with at least sixteen whitish bars which gave it a rakish and tiger-like appearance. Its large, black, hypnotic ichthyosaurian eyes were magnified until they appeared like saucers. I caught a glimpse of its keen rapier-like sword, then it melted into the blue of the *Kuro-shiwo* down which it is alleged to have travelled from Japan.

There was nothing unusual in this sociability, as it is characteristic of all the tribe I have met. The *Xiphias* of six hundred or one thousand pounds will drop off to sleep, and lie basking on the surface. On one occasion I saw two monsters ten miles south of Cape Henry, near Hatteras, slowly swimming along, not moving until the cutwater of the yacht actually ran into their tails. At our camp at San Clemente Island, California, we frequently saw the big fins cutting the water leisurely as the fish came down the coast; and they would often allow us to go within twenty or thirty feet before they would drop their big dorsal and sink, to appear shortly several hundred feet away. If there were two, as was usual, they would find each other in a seemingly incomprehensible fashion. Doubtless their eyes are far-sighted.

If asked to indicate what is the finest big game fish in the world, all things considered—strength, endurance and *spectacular characteristics*—I think I should name this fish, and that I should be supported by Dr. Gifford Pinchot, Mr. T. McD. Potter, Col. John E. Stearns, Mr. C. G. Conn, Mr. Smith-Warren and Mr. Dorsey, who are experts with this game and have taken many of them. The tuna is a marvellous fish; it stands first among the fishes that can be taken with the rod in strength, power and endurance, as seventy voting members of the Tuna Club can testify. But the average tuna is a sulker, and if the fish is in the best condition it takes a superhuman effort to kill

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it; this is why so many men have expended weeks and thousands of dollars in the effort to take one. Mr. Ross of Montreal accomplished a feat in taking his seven hundred pound tuna with rod and reel that has no parallel in the annals of big game on land or sea.

This swordfish is not by any means so strong, pound for pound, but it is strong enough to satisfy the physical longings of the average man, and the big fish at their best are almost invincible to any but an angler in good condition. To this I would add the spectacular feature of leaping in which they outdo the famous tarpon, ten to one. Again, and not to be forgotten, is the element of danger. This fish is liable to ram the boat.

In the Atlantic a similar species has been known to injure a vessel so seriously that she put into port leaking badly. There is a great difference in individuals, and this is true of all fishes. Many are not in condition, but I believe I saw the killing of a typical fish when I stood by Dr. Gifford Pinchot, Ex-U.S. Forester, one night between Santa Catalina and San Clemente islands. He had taken one fish in the morning, and about five o'clock his twenty-foot launch came into port with a request that I go out to see a swordfish jump that he had hooked some time before. I later learned that Mexican Joe, his boatman, wished me to stand by them as the fish was forcing them out to sea, and night was coming on. I took the helm from the boy who brought in the launch, but presently learned that he did not know where they were except in a general way. I knew the fish was towing them out, so took a course to the east and kept on for several miles but without finding them; then I gradually altered my course to the north and at last, when I estimated that I was three or four miles off San Clemente I saw a faint gleam on my port bow and in a short time reached them. Mexican Joe had lighted his last match hoping that I would see it, and it was the glare of this impossible signal and forlorn hope that caught my eye. I had a lantern out and they had seen me. Rounding up behind their boat I gave it to them. Pinchot was sitting facing

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the stern, playing the big fish that was towing them at a rate of four or five miles an hour.

I had a most uncomfortable time trying to keep within reach, yet not too near, and when I rounded up and was caught in the trough of the sea I would be nearly thrown out of the launch. The darkness was now intense, but the phosphorescence so vivid that they appeared to be in a sea of fire. Pinchot brought that fish to gaff fourteen times, and fourteen times it broke away and he had all the work to do over again. At last, after several hours, he shouted that Joe had gaffed the fish, and I could see their figures in a weird blaze of phosphorescent light. In attempting to get alongside, as I feared they would capsize in the small craft, I ran into them on the crest of a big sea; the blaze of light, the heavy sea, and the intense darkness tending to confusion, though I am not attempting to excuse my clumsiness. The impact nearly knocked Joe overboard and he lost his hold on the swordfish, and cried 'He's off!'

'No, he is not!' shouted the Chief Forester. 'I have him by the tail,' and as I backed off I saw the extraordinary sight of the angler holding the maddened ten-foot fish by the tail while it swung up and down, churning the sea into fire. It was a remarkably plucky thing to do under any circumstances, and I thought as I clung with one hand to the wheel, the other in the clutch of the engine, trying to hold myself in, that if I ever got into a tight place I should like to have Gifford Pinchot with me, as I would know he was there to stay, no matter what came. I made another attempt to get alongside, this time successfully. Joe had again gaffed the swordsman, and I took their line while they lashed the game to the seat; then they came aboard the launch which was turned and headed for camp, about six or seven miles in, where Governor Pardee of California had lighted a big bonfire as a beacon.

It takes but a few words to give an outline of such a battle, but it occupied several hours in which danger was always present to the two men in a two hundred-pound skiff.



Fig. 14. A Morning's Catch of Sword Fish, San Francisco, 1907.
By Col. J. W. Dorsey and Mr. W. B. ...



na Island, California. Average, about 170 lbs.
The Tuna Club. Photo by Reyes. p. 88.

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Dr. Pinchot has written his impressions of this night adventure, which were published in *Collier's Weekly* of April 6, 1912. The following is a brief extract from the article, bearing on it :

' I struck with all my might, but the huge fish, hooked, as we saw later, in the bony side of the jaw, paid no attention. Joe backed water, I reeled rapidly, and we were within fifty feet of the swordfish before he discovered what was wrong. Then out of the deep he came. Then rush followed rush, leap followed leap. High out of water sprang this splendid fish, then lunged with his lance along the surface, his big eye staring as he rose, till the impression of beauty and lithe power was enough to make a man's heart sing within him. It was a moment to be remembered for a lifetime.

' Then the fury over, the great fish started away. As rapidly as a man could row he towed our skiff a mile straight down the coast. As soon as the swordfish showed himself after the strike, the launch was sent back to camp for Dr. Charles F. Holder, who knows more of big game fishing at sea than all the rest of us put together. But Dr. Holder never had happened to take a swordfish or seen one taken. Indeed, I doubt whether two dozen, all told, have been caught in the history of angling in the Catalina waters. So the launch disappeared in the failing light, and scarcely had it done so when the swordfish turned and towed us out to sea.

' The utmost efforts of Joe with the oars and myself with the rod barely sufficed to keep us within reasonable distance of the rushing fish. Darkness was falling fast, and by the time we were three miles out in the channel I confess to many a wish and many a look for the launch. Sunset was gone when it came. Joe, wisest of all sea dogs, had been lighting matches behind my back and holding them in his circling hands for the launch to see, and so it found us. The tide was running strong, the wind rising against it, and the sea picking up. I welcomed Dr. Holder's arrival with distinct satisfaction. Afterward Joe asked me whether I had been nervous. I gave myself the benefit of the doubt, and told him " No, because the launch was with us after dark." " Well," said Joe, " the skiff would have stood a great deal more sea than the launch. The only thing I was afraid of was that the machinery of the launch would break down and the current carry her on the rocks at the Hook. We could always get in with the skiff, if there did not come a fog.

' Straight into the rising sea went the swordfish, and there was nothing to do but follow him. For a time the crescent moon shone thinly over the dim shape of the island, then moon and island disappeared together, while the great fish with a strength I could neither break nor check, dragged the boat against wind and sea. An hour went by, and then another, yet

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the swordfish apparently was as strong as ever. By this time the sea was so high, as Holder told us afterward, that at times he could not see us between the waves. It was almost pitch dark, too, so that more than once, in the effort to keep close by, he nearly ran us down.'

A Colonel of the British Army had a very similar experience in the same place, the contest being longer, and if the one hundred swordfish battles of the Tuna Club anglers of 1912 could be told they would show a series more exciting than any sport on the seven seas.

This swordfish is so common in the Santa Catalina channel in the fall, or in August, September and October, that it is called the Santa Catalina swordfish, and it is taken and seen nowhere else in America, though fairly common in Japan; hence its name, *Tetrapterus mitsukurii*. It comes in from the unknown to mate and doubtless spawn in the fall, but the young have never been seen here nor anywhere else. The tackle used for this fish is, in effect, the tuna tackle—a sixteen-ounce rod with agate guides, three hundred yards of twenty-one or twenty-four thread line, a long leader of piano-wire with several swivels, and a No. 10 hook. The bait is a flying fish, rock bass, or Bonito, trolled, and many are taken with the kite described elsewhere. These fishes feed on mackerel, menhaden, or fishes which are inclined to school. To see a big *Xiphias* dash into a school of mackerel at night, which can be seen several miles distant, as a splash of dull fire, due to phosphorescence, is a remarkable experience. The swordfish strikes to right and left, cutting down its prey for the mere lust of killing, then picks them up at leisure. The Santa Catalina swordfish approaches the islands, swims down the edges of the kelp forests, and preys upon the myriads of rock bass which infest these shades beneath the sea.

The Tuna Club swordfish record, which weighed three hundred and thirty-nine pounds, was taken by the Hon. C. G. Conn, of Elkhart, Indiana, and hangs in the Clubhouse at Avalon. In 1912 the Tuna Club reported one hundred catches for the season, representing a weight of thirty thousand pounds, and an

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average of two hundred pounds. All were taken on rod and reel. The best individual catch was that of Mr. Smith-Warren of the Tuna Club, who with Capt. George Farnsworth as boatman, landed six swordfish in one fishing. Captain Willie, a professional swordfish fisherman of New England, now of Avalon, tells me he has seen the arrival of these swordsmen of the sea at Santa Catalina, the school being made up of thousands of the big fish lying in the San Clemente channel. They undoubtedly come in from the outer banks or sea in big schools, then break up or pair.

The common Atlantic swordfish, *Xiphias gladius*, is also occasionally found in California, and I am told by Mr. T. S. Manning, honorary Secretary of the Tuna Club, that a number have been hooked; but they were unmanageable and too heavy. It is possible that this explains several of my experiences. I have had several strikes well inshore, but in deep water, by some fishes that were so irresistible that I merely pointed the rod at the unknown and let the six hundred feet of line go to save the rod. The whole line, apparently, was jerked from the reel. An old boatman of mine watched a battle to the death between a *Xiphias* and a *Tetrapterus*. They sailed about one another, occasionally charging with terrific force. I found one of these fishes, the *Tetrapterus*, that had floated into Catalina Harbour. It was pierced in several places, once through the eye, literally stabbed to death.

The great *Xiphias* has a much longer sword than its Californian cousin, and is yet uncaught with rod and reel, though Dr. Pinchot played one over an hour off Block Island, and will yet land the game. There is more or less interest in taking it with the harpoon or 'lily iron' off Cape Cod, where a fleet of schooners follow the game in summer. I have watched the vessels unloading at Boston, the holds being full of the big fishes packed in salt. The meat is in constant demand in New England.

This fish, so far as known, breeds in the Mediterranean and, doubtless, on the high seas. The young are strange little creatures,

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totally unlike the parents, both jaws being equal. In summer they lie on the surface. The hunters cruise about with a man in the top and when a fish is sighted, another man takes his place on the jib-boom, where a little platform and a stanchion with a rest to lean against are rigged. The man aloft directs the helmsman and puts the harpooner directly over the stupid and lethargic fish. Once struck, it makes off, towing the line on the end of which is a keg, which is tossed over and picked up later by the men in a dory.

One might well compare this fish to an African buffalo or rhinoceros, as it is a dangerous creature, charging boats and ships often without rhyme or reason. I knew a man who was almost spitted when rowing a boat near New York, and the sloop, *Red Hot*, of the United States Fish Commission, was rammed and sunk by one of these swordfishes. The late Professor G. Brown Goode of the Smithsonian Institution of Washington, made a list of the attacks of the swordfish on ships for a number of years, and collected, it made an appalling demonstration, showing that the fish is inquisitive, ugly and vindictive, and a menace to be counted with.

Many estimates as to the strength of a blow of a swordfish have been given. One, is that it is equivalent to nine or ten blows of a hammer weighing thirty pounds. The British ship *Dreadnaught* was struck by a swordfish after the men had hooked it, the fish turning and ramming her so that she was pumped all the way to Colombo and there 'hove down' and the hole found. The ship collected six hundred pounds insurance on the testimony of Frank Buckland and Professor Owen. The ship *Wyoming* was struck, the sword going through a four-inch plank and twelve inches in all. The crew felt the shock, but as the sword broke off it did not materially injure the ship. The sloop, *Morning Star*, Captain Taylor, was struck so heavily by a swordfish that it jarred the vessel all over. She leaked so badly that another vessel had to convoy her into port, when it was found that the sword had gone through planking, timber and ceiling. The

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plank was two inches thick, the timber five inches, the ceiling one and a half inches of white oak. The ship *Fortune* of Plymouth, Mass, had an extraordinary experience. She was struck by a big swordfish, the weapon breaking off, not causing a leak. This sword first penetrated the copper sheathing, then an inch undersheathing, a three-inch plank of hard wood, then a solid white oak timber, twelve inches thick, then a two and one-half inch hard oak ceiling, finally entering the head of an oil cask where it remained. Almost any dockyard can provide remarkable reports.

On the Florida coast there are several swordfishes which are game fishes in every sense, particularly the sailfish, *Istiophorus nigricans*, or Black swordfish. It ranges up to six or eight feet and to one hundred and fifty pounds. In general appearance it has the high domed forehead of the Santa Catalina fish. When it reaches the surface it elevates its dorsal fin, which is an enormous sail-like organ of great beauty, boomed out by many rays. The sail is blue with black spots—a most beautiful object, which the fish can lower or 'set' at pleasure. The fish is taken with tarpon tackle by trolling from a launch or sailboat, and when hooked will leap and make a spectacular fight. Palm Beach is a favourite place; also Long Key to the south, one of the finest angling resorts in Florida, where over one hundred of these fishes were taken in the spring of 1912.

Still another swordfish, *T. imperator*, is found in the Atlantic about the West India Islands. The largest of the swordfishes is found near Madagascar in the Indian Ocean. The American consul, Mr. Nicholas Pike, told me of specimens twenty-five feet in length, one of which leaped over a native proa passing through the sail. This fish had a dorsal fin of extraordinary size, eight or ten feet high, giving it the appearance at a distance of some beautiful oriental craft. Doubtless all the fishes of this striking group may be included under the head of game fishes.

The angler desiring to try a bout with these doughty swordsmen of the sea will find facilities for the capture of the sailfish

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at Palm Beach, Long Key Camp and other points in Florida. For the *Xiphias* of six hundred or one thousand pounds he should ship for a cruise with a swordfish fisherman from Boston or Block Island ; and for the Santa Catalina swordfish, from the town of Avalon, where he will find swordfish cups and albums and records of scores of battles in the rooms of the Santa Catalina Tuna Club, whose records of catches for the last year is appended to illustrate how this new game has taken its place as the great game fish of American waters. The Holder swordfish cup was won by Mr. L. G. Murphy, of Converse, Indiana, his fish weighing three hundred and eighteen pounds. The Victoria Alden cup, for the largest fish, was also won by Mr. Murphy. The McMillan medal of Mr. W. N. McMillan, of London and British East Africa, was won by Mr. C. G. Twist, Santa Ana, California. The fish weighed two hundred and eighty-one pounds. The Tuna Club medallions, gold, silver and bronze, for first, second and third largest fish during 1912, were won by Mr. L. G. Murphy. Fish weighed three hundred and eighteen pounds ; Mr. Chas. L. Griffith, two hundred and ninety-eight pounds weight of fish ; Mr. T. McD. Potter, two hundred and ninety-pound fish.

In a recent letter from Dr. Gifford Pinchot, in referring to the fishing season of 1910, at San Clemente, which I missed, being in Europe, he says :

‘ I got another swordfish in an hour and fifty minutes ; landed it with a broken rod about an hour after dark, while Amos took a three hundred pounder (weighed two hundred and seventy-eight pounds twenty-four hours out of water, after losing much blood) in an hour and nineteen minutes after one of the prettiest fights you ever saw in your life. The fish was so tame at first that Mexican Joe in the skiff with Amos tried to gaff it within three minutes after it was hooked. Fortunately he failed, for immediately after it came to life, *made one round of the skiff on its tail*, drenching both of them with water, and then made a straight away run of two hundred yards, largely above the water in great leaps. It was the prettiest fight on the whole I have ever seen any fish make. The fishing was comparatively poor this year, but the Island just as attractive as ever.’

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Mr. T. McD. Potter, Vice-President of the Tuna Club, took the third largest swordfish of the season of 1912 and he sends me the following data regarding its play—written by Mr. C. V. Barton of the Tuna Club for the *Field and Stream* :

‘ Mr. Potter had already taken to-day one swordfish weighing one hundred and ninety-four pounds (his second for the season) and he was now after a third, just to round out the day. Captain Walker pointed the *Leona's* nose toward the “doldrums” running several miles out from Seal Rocks, one of the headlands five miles from Avalon, Santa Catalina. Captain Walker’s method was to attach about seventy-five feet of six-strand line to a small silk or paper kite. The lower end of this kite string was attached to the angler’s twenty-four-strand line ten feet from the flying fish bait. The angler paid out two hundred or two hundred and fifty feet of line, letting the kite 75 feet in the air, holding the end of the angler’s line so that the bait, responding to the frequent jerks of the angler’s rod, jumped and “skittered” along the surface in a most lifelike manner.

‘ Mr. Potter now sighted the upper lobe of a tail projecting from the water and Captain Walker skilfully pointed the *Leona* around so that the skittering flying fish bait attracted the monster’s attention.

‘ Soon the angler felt a gentle nibble at the bait. As the swordfish, with all its terrible paraphernalia of offence and defence, does not rush upon the bait, and stir up the seven seas in taking it. He “poked” at the bait gently with his sword, then came an inquiring nibble, and the angler paid out line to give the fish ample opportunity to pursue its investigations further. The resistance grew stronger, the swordfish took the bait in its hard, bony, toothless mouth; a moment’s hesitation and the angler struck, and the battle was on. The swordfish leaped from the water repeatedly, circling about the boat in a vain endeavour to rid itself of the hook.

‘ The boatman aided the angler to gain line, while the latter reeled the dangerous slack and brought the fish nearer the launch. They did not want the fish to sound, as that would mean at least an extra hour of hard, heart-breaking work.

‘ There was an element of real danger in this stage of the game, as the fish rushed at the boat and the swordsman weighed about three hundred pounds. The angler was doing his fighting standing in the stern of the boat, with the butt of his sixteen-ounce rod in a belt socket, pumping and reeling in for dear life, when the boatman cried, “L-o-o-k out!”

‘ The swordfish was headed directly for the boat, coming on like a torpedo. Mr. Potter said that Captain Walker crouched down behind

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the engine. Captain Walker says, respectfully and not for publication, that Mr. Potter hunted for the inside of the boat's bottom.

'The swordfish veered when alongside, just missing the stern, and was landed after a hard struggle.'

The season of 1912 was one of the most remarkable in the history of swordfish angling at Santa Catalina. The sport lasted even into November, and the Club has records and photographs of one hundred specimens taken with sixteen-ounce rods and twenty-one or twenty-four lines. Some of the adventures of the anglers were very graphic, and not a few were startled by the extraordinary leaps of the swordfish about the boat. Mr. Warren informed me that one of his high leapers jumped so near the boat, and was so apparently coming at it on his tail, that they all dodged, expecting to be hit. One of, if not the most remarkable catch, was that of Col. J. W. Dorsey of San Francisco, a member of the Tuna Club. The following I quote from the *San Francisco Bulletin* :

'Various records have been achieved for angling prowess by sportsmen of the coast, the East and abroad, but it remained for a San Francisco angler, Colonel J. W. Dorsey, to reach the apex of deep-water fame in making a world's record catch of swordfish with a rod and line, tackle of the regulation Tuna Club requirements—a twenty-four strong cuttyhunk line and a six-foot eleven-ounce rod, with a flying-fish baited tuna hook.

'In a week's fishing with W. B. Sharpe twelve of these big fish were taken. Colonel Dorsey landed eight, the individual world's record catch of swordfish, and also the added record of having caught the five largest of this species ever taken by one angler. His largest fish scaled two hundred and forty-nine pounds. Mr. Sharpe caught four—a two hundred and sixty-pound fish, the heaviest of the take, being landed by him. Four of the fish weighed over two hundred and fifty pounds each.

'The Santa Catalina swordfish is described as long and slender in body, rarely running over three hundred pounds, the average weight being one hundred and fifty pounds, making the fish available as a rod and reel consideration. It is one of the most beautiful fish of the ocean waters, garbed in a purple coat of extraordinary brilliancy with broad, dark lateral stripes on its back and sides.

'Its sharp sword is much shorter than that of its larger cousin, the common eastern swordfish, also found in our coast waters. The weapon is

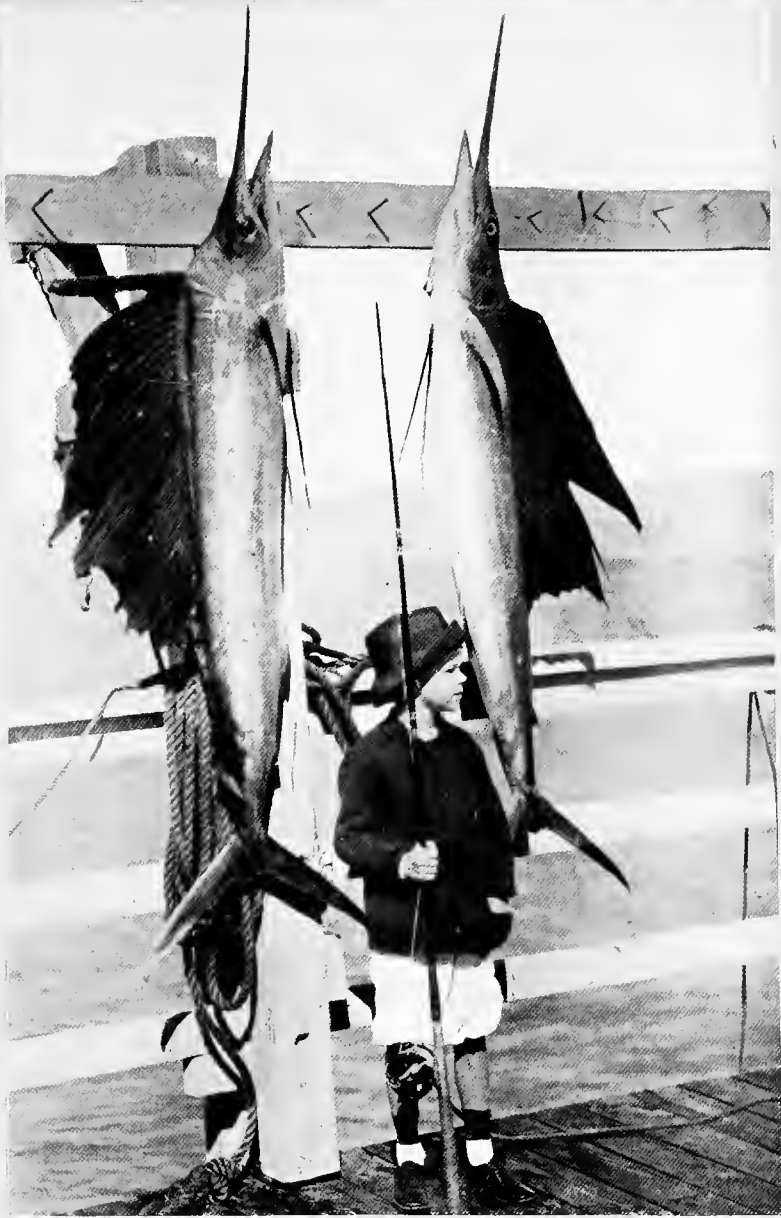


Fig. 15. Sword Fish.

Florida Sail Fish. Taken by A. M. Zabriskie, Port Chester, N.Y. p. 96.

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more of a poniard than a sword ; in fact, the fish has virtually two, as the lower jaw is also pointed, sharp and dangerous. A large black eye, silver belly, and royal purple back ; a wide crescent-shaped tail ; slender pectorals and big tall dorsal, which rests in a sheath along its back ; is the make-up of as debonair a marine *lanzknecht* as ever swam the seas.

'The swordfish is very pugnacious, some very extraordinary battles having been witnessed between these fish or in combat with other marine warriors. Data relating to the vicious nature of swordfish have been compiled, showing a list of boats and ships that have been damaged, rammed or even sunk by them, including injuries inflicted upon human beings.

'The first fish caught towed the trolling launch ten miles to sea, turning the big boat around as if it had been a skiff. The longest fight was three hours and forty-five minutes ; the average time for gaffing the fish was one hour. One fish ran out nearly one thousand feet of line, another one, supposed to be two hundred feet astern, broke water one hundred feet ahead, and in making the turn ran through the line loop and made a knot. Another one, in fighting, turned, and the heavy wire leader cut him almost to the backbone.

'A live, healthy tarpon will jump ten or twelve times. One of Colonel Dorsey's fish jumped fifty times, another one caught turned the trick forty-nine times. Many of these jumps were fifteen feet out of the water. Three fish hooked broke the line and got away. The two largest swordfish taken off Catalina prior to the above catch weighed three hundred and ninety-two pounds, and three hundred and thirty-nine pounds. The big catch enabled Colonel Dorsey's boatman, Captain Danielson, to hold a tie for a high-hook boat for the season on swordfish.'

All things considered, the swordfish of Santa Catalina takes its place as the great spectacular game fish of the world.

CHAPTER X

THE LEAPING TUNA

‘First be the fisher’s limbs compact and sound,
With solid flesh and well-braced sinews bound ;
Let due proportion every part commend,
Nor leanness shrink too much, nor fat distend.’

IF we had lived in the time of Apollo we might have seen in the home of Diana, his sister goddess, at Pisa, a picture of Neptune bringing a tuna as an offering to Jupiter, and in many cities of the Mediterranean in olden times special votive offerings were made to the gods that the season’s catch might be large. This is done to-day at Palermo, where the priest brings out the statue of the Virgin and bears it aloft, followed by the fishermen and their families. One of the festivals was called ‘Thunnaeum,’ and was a most elaborate pageant, the first tunny of the season being sacrificed to Neptune, the god of the sea. Among the ancient plays the ‘Tunny Catcher’ of Sophron, who, doubtless, influenced Theocritus, was famous. And it was Menander, in whose play occur the lines :

‘And the disturbed and muddy sea which breeds
The largest Tunnies.’

Which certainly have no analogy in fact as the big tunnies, at least to-day, prefer the clear and scintillating water of the open sea.

There are many references to the tunnies in the classics, in the fishing idyls of various nations, and in the pastorals of the fishers. To-day at Santa Catalina, California, where the professional fishermen are Venetians, Genoese, or descendants of the old races

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of the Mediterranean and Aegean seas, they doubtless invoke good luck, and the interest in the catch of the first tuna results, if not in the sacrifice of the fish to Neptune, in the accession of prizes offered by the Tuna Club for the first fish of the season, which arouses great excitement and rejoicing and telegraphing of the news to tuna anglers all over America.

I was fortunate, or unfortunate, according to the point of view, in taking the first tuna of the season one year, and was nearly sacrificed to Neptune and the sharks, as the fish capsized our boat and gave us a hard swim a mile offshore. My boatman, Jim Gardner, now living in England, saved my fish, and as I write, its big glass eyes scintillate and gleam on the wall of my study where I have sacrificed it to the honour of my courageous boatman, who not only followed me, but towed the tuna in a long swim.

When in 1898 I succeeded, after years of experimenting in the Atlantic and Pacific, in landing a one hundred and eighty-three pound tuna with a sixteen-ounce rod and twenty-one strand line, with a breaking limit of twenty-four pounds, and the following day founded the Tuna Club of Santa Catalina Island, the fact was telegraphed over the world as an extraordinary exploit which marked an epoch in sea angling. This fish, which I believe was an exceptional tuna in the finest possible condition, towed the heavy yawl ten or more miles in four hours, and died in a flurry and fight which should have bought its release. But what was supposed to be the impossible had been accomplished, and the fine fish was taken ashore, photographed, mounted and given to my boatman. Tunas had been taken before, notably by Mr. W. Greer Campbell, but not very large ones, and this catch seemed more truly to approximate the class of tuna I had seen twenty years previous, hanging in Fulton Market, New York, weighing one thousand pounds. It had been caught in a net, or harpooned, and was the inspiration which resulted in the Tuna Club years later.

The impossible had been accomplished, a new sport was born, and scores of anglers from various quarters of the globe appeared

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at the Island and tried conclusions with this most uncertain of all fishes, which appears to sail about the world on its tours of small fry devastation. In this year, 1898, the leaping tuna was so plentiful that it became a drug in the market. I have fished with a friend when each of us, including the boatman, played a fish at the same time. Again we would stop fishing, not being able to use the fish, and schools covered the smooth surface of the channel beating the water into foam. I held the coveted record a year, then Colonel C. P. Morehous, a townsman of Pasadena, and Vice-President of the Tuna Club, landed a two hundred and fifty-one pound tuna, which, in turn, created as much wonder as did the previous catch. Anglers came from all parts of the country, and thousands of dollars were expended in efforts to capture the Morehous pennant with its accumulated cups, medals and prizes. But a two hundred and sixteen-pound fish was the nearest approach to it, and the record still stands. In 1910 Mr. J. K. L. Ross, of Montreal, succeeded after many trials in landing a monster tuna weighing nearly seven hundred pounds. He did not use the twenty-four thread line, used in making records of the Tuna Club, hence his splendid catch did not affect the Tuna Club prizes. But he was made an honorary member of the club. In fact, Mr. Ross's catch stands in a class by itself, and is the great and notable event in sea angling of the century with rod and reel, no matter how large the line. A No. 39 line is a thread for such a monster fish. It was a delight, as president of the Tuna Club, to congratulate the clever and courageous angler who made history in Canadian waters in so strenuous a fashion for the anglers. Mr. Ross wrote me :—

‘ I appreciate very much indeed your congratulations on my landing a large tuna, and especially as you, above all big game fishermen, know the hard work required to land one of these kings of the big game fish. It was also very kind of the Tuna Club to elect me an honorary member of your world's famous fishing fraternity, especially as I landed this fish with a heavier line than a number 24. I never, as you know, made any application for your Tuna Club prizes as I knew perfectly well about your number 24 restriction, but as the *Field and Stream* of New York had no restrictions



Fig. 16. Sword Fish (Xiphias).

Santa Catalina Island Waters and Atlantic Ocean. Many hooked, but none landed, with rod and reel. Scores of ships have been struck by these fish. p. 100.

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in regard to size of line I entered my tuna in this prize fishing contest.

‘In regard to your question as to whether I could have landed this fish with a number 24-line, I do not think it could have been done, although I believe now that a three hundred to three hundred and fifty pounder can be landed on a 24-line provided he is well handled.

‘Next year I hope to try and land an Atlantic tuna on a 24-line. I shall have one of my rods set up with a 24-line and use the lighter line if I see a school of small tuna.’

The tunas are the most uncertain and erratic of fishes. World wanderers, they come and go without any set rules. At Santa Catalina when the record was taken they were all caught practically in the same locality between Avalon and Long Point, a distance of four miles, before the net fishermen drove them away. They drove the flying fish into the bay and could be found here any morning from June 15th to August 15th. Suddenly they changed, and for several years have neglected this locality, lying off the island to the southeast about six miles in what is called the ‘doldrums’—an offshore lee. Here they were taken at times with ease; again they would ignore the angler and pass him by. At such time we would hear of them at Melbourne, or at San Clemente, or they would be taken off the New Jersey coast ten or twenty miles, devastating the food fish at the mouth of the St. Lawrence, or caught as tunny in the Mediterranean, invoked with processions and prayers.

The leaping tuna, which I named on account of its leaps *when feeding, not on the line*, is one of several which Dr. David Starr Jordan, the eminent authority on fishes, now includes in the genus *Thunnus*. The leaping tuna, *T. thynnus*, is the largest. It is the horse mackerel of New England, the tunny of the Mediterranean, and is a giant cousin of the mackerel. It comes into Santa Catalina waters near shore in spring to spawn, and is taken with a No. 21-line, sixteen-ounce rod of split bamboo, ironwood or greenheart, and big reel of the Edwin Vom Hofe type, now so beautifully made that they compare with a watch in the nicety of their works. They hold six hundred feet of wet line and have

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divers checks or brakes which the angler can 'set'; so it is but necessary to sit and hold on to the rod; the reel is invulnerable. To this one can add the drag of Mr. Rabbeth of the Tuna Club, who has a clever device to still further handicap the game—a wonderful change from the first tuna reel of Vom Hofe I had. It had but one drag, and I might say I caught my big tuna, as did all anglers at the time, with my thumb, which was pressed upon a pad which in turn pressed upon the line. This becomes arduous in four or ten hours, but by it the angler is in touch with every motion of the fish, and with this old-fashioned tackle members of the Tuna Club have played their game from one to twenty hours.

To the delicate line is attached a piano-wire leader longer than the fish, say seven feet, which may have a number of swivels. The hook is a No. 10/°; the bait, the natural food of the tuna—the flying fish, eighteen inches long and weighing one pound and a half. This is hooked either in the lip or in such a manner that it will run naturally—a desideratum accomplished by using a fin-sinker and sewing up the mouth of the lure. Some anglers like the bait to whirl; others would have it leap by using a kite, described elsewhere, while others again use a sled which carries the bait away from the boat and fifty or one hundred feet off the quarter. With such an outfit the tuna angler embarks in his comfortable twenty-foot eight- or ten-horse power launch. The latter is designed at the Avalon shipyards and meets all the requirements of this sport or swordfishing. It is broad and eminently seaworthy. The engine is amidships; the wheel on the starboard side amidships, so the boatman, gaffer and engineer can sit with one hand on the wheel, the other on the clutch to stop and back or turn at the cry of 'strike!' The two anglers sit in the stern, facing it, holding their rods to the right and left. Some run at one speed; some at another, depending upon what the anglers think desirable.

The tuna when feeding is crazed, rushing at full speed. At such times a school will cover miles of surface in their chase of a fly-

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ing fish. I have seen a flushed flying fish off San Clemente fly or soar (the wings do not beat, the fish being a typical biplane, having two sets of fins or wings) a quarter of a mile. During this soaring it touched the water with its twisting propellor-like tail several times, never dropping and always two or three feet above the surface. Yet the tuna never lost sight of it in its long run. I was so certain of it that I told Dr. Pinchot and Mr. Stewart Edward White, who were with me, to keep their eyes on the fier at the finish and see the explosion. We all watched the extraordinary flight (?) around the fourth of a circle, when the unfortunate fish dropped, dead tired. A wave of white flocculent foam rose into the air as the racing tuna stopped, turned and seized it. There is no more splendid sight in the realm of strenuous angling than to see the tuna feeding. Up into the air he goes, ten or fifteen, or more, feet after a flying fish, perhaps catching it, more often hitting it, sending it whirling upward like a pinwheel, catching it on the return. The leap thus made is a perfect and graceful curve. The tuna has been known, but very rarely, to leap when hooked, but I have never seen it. That it would leap in shallow water there is no doubt, but with a half mile of deep-blue water below, the tuna plunges down, eternally down.

The tuna is almost invariably underway when it strikes; hence the angler is often thrown into a fever of alarm at the shrieking click and the fast-disappearing line. How to stop without breaking the latter is the exact mathematical problem, and it was during the working out of this that 'tuna fever' became a synonym of 'buck fever.' Many men would go to pieces and lose fish after fish, line and rod, before they could temper the pressure. Tunas are now taken from launches, but I prefer the small boat, or should if I should try it again, as here the fish has fair play. I took my fish from a yawl, as did Colonel Morehous, and Mr. Ross gave battle to his giant six hundred and eighty pounder, in Nova Scotian waters, in a small dinghy with two men at the oars. The angler can sit in a small skiff and be towed by the launch. The boatman casts off at the strike and backs water, so

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the skiff is underway before the entire line is exhausted. This accomplished, the angler puts more strain on the brake, and that miracle of sea angling for tuna is seen—a fish towing a boat by a number twenty-one-thread line.

Santa Catalina Island will always be the most attractive point for tuna angling as it is an ideal place. The summer climate is almost always cool and delightful. The island, sixty miles around, affords that desideratum, still water like a lake, while the fleet of perfect angling boats, one hundred and fifty or more, and skilled boatmen trained for the work, and with high ideal for sport, render the locality extremely attractive to anglers. Again, if tunas are not biting there is always something to take its place, from following the big swordfish, white sea bass, yellow-tail, or the diversions of mountain climbing in the Sierra Cabrillo of the beautiful and romantic island out in the Pacific, eighteen miles, yet within two hours sail of Los Angeles, a city of 600,000 souls. Many Englishmen have visited this isle of summer, among them England's most distinguished sea angler, Mr. F. G. Aflalo, founder of the British Sea Anglers Society, of which Lord Desborough, well known in America as a sportsman, is president. Of this locality Mr. Aflalo says in his book, *Sunset Playgrounds*, that here 'is the finest sea fishing in the world.'

If the true recital of all the tuna catches could be told it would make a fish story beyond belief when the size of the line and the rod is appreciated. Men have been towed from five to twenty-five, or more, miles in from five to twenty-four hours, and I well recall a fish of not over one hundred pounds that towed two of the best anglers of the island offshore many miles. They hooked the fish at about six o'clock in the morning near shore. Mr. E. L. Doran of the Tuna Club and I were cruising about five miles offshore at noon, to give some ladies a view of a school of sixty-foot whales, when we found the anglers practically exhausted. They could not move the fish, that was down one hundred feet or more. I volunteered to go aboard and relieve the boatman at the oars while he relieved the angler, Mr. Scudder of St. Louis.

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This was accepted, and as the whales had alarmed the ladies, Mr. Doran started to take them in, promising to return and tow us in. For some time, in a rising sea, as we were now out in the channel, I attempted to keep the boat stern to the tuna, while the boatman reeled, or tried to reel. As Jim Gardner had not made any headway he retired, and Mr. Scudder took the oars, and I bent to the rod.

Long before Mr. Scudder had, of course, given up any idea of receiving any credit for the catch, as according to the rules of the Tuna Club, the angler must have no assistance; but we were all confident that we had a colossus, and agreed to fight it out with the rod. When I took the latter I could not move the fish an inch by reeling, so I gave twenty feet of line and the boat was moved ahead, I reeling quickly to start the fish, as, without question, it was pointed head-down and swimming against us, as a salmon will do.

Hours passed until at six o'clock, twelve hours from the strike, we were twelve miles from Avalon, headed for the mainland. Avalon was out of sight, the island began to grow dim, and it was evident that Doran could not find us. There was no particular element of danger, though the boat was open—a common yawl, but a seaworthy craft; but the delights of passing the night in a rough channel were not alluring, so we held a council of war.

Mr. Scudder evidently was tired out, though he did not admit it. Jim looked as though he was worn to a 'frazzle,' to quote General Gordon, but he declared he was fit for a week yet, and that we could land the fish in the surf at San Juan Capistrano, about twenty miles distant, on the mainland. As I had once been in that surf I did not enthuse. I was the freshest of the crew as I came into it last, but I was, while extremely reticent (to keep in line with my companions), well tired out, not being accustomed to rowing by the hour in a seaway. It began to grow dark; the island looked like a purple tourmaline against a field of the cloth of gold. We could just see Doran's launch

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several miles away, hunting for us, but not going in the right direction. So we sat, lifted, tugged, pulled and tried honestly to land that tuna with a rod, then finally admitted that the tuna had us played to a standstill.

I think the point that decided us to give up was the sudden suggestion by Jim, the boatman, that our friends on the island would think we were drowned, and all the launches of Avalon would turn out to hunt the channel. It was only a few weeks previous that Jim and I had been capsized a mile offshore, and to save our companion, who could not swim, we had left him on the bottom of the yawl to make the hard swim to our broken-down launch. Jim's wife was on the latter, and when the tuna dragged him under water (he was still holding the fish) she thought he was drowning. In fact, all our wives were nervous when we went out for tuna. We were on the horns of a dilemma. No one wished to give up, but after another half hour, I, as the eldest, took the responsibility, and suggested a surrender. I gave Jim the rod, and as I lifted the line by hand, he reeled. The fish came up slowly, a dead weight ; but it came, and finally I had the tuna at the surface and Jim gaffed it and slid it in.

It was thirteen hours, I think, since Scudder had hooked the fish, not far from the point of Avalon bay. No one spoke, mere words were inadequate. The fish was scarcely a hundred pounder. It evidently had died of heart failure within a few moments, and it was foul hooked. One hook was in the belly, another in the mouth, and the fish had been side on for thirteen or more hours. We tied a towel to an oar and held it aloft, and by a chance our friend Doran saw it, and eventually reached us and towed us in ; fortunately, as I doubt if we could have made it. We arrived at Avalon at nine o'clock to find a crowd awaiting the *gigantic* fish it was supposed we had hooked. Such is fisherman's luck !

No one can appreciate the remarkable heroic qualities of the tuna at its best unless they have known it under various conditions. For days and weeks I have dragged my bait over

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thousands of mighty tunas in the bay at Long Point, Santa Catalina, as smooth as a lake, but not a fish looked at my lure. Again I have, at a distance of three miles, seen this bay a veritable maelstrom of spray, spume and silvery waves where bands of maddened tunas chased their prey—the flying fish—on to the sands. At such a time we pushed in at full speed, and in twenty minutes were in the midst of it: tunas in the air, tunas leaping, tunas skimming along the surface, tunas standing on their heads, lashing the water, while over the boat and under it went the crazed fliers, I or my companion endeavouring to manage our bending rods, at the same time dodging this way and that, to avoid being struck in the head (or glasses) by a flying fish. On one occasion a tuna flushed the flying fishes near the boat. Colonel Morehous, my companion, put both hands over his eyes, and as I dodged a flying fish not six inches from my face, another struck me in the neck nearly knocking me out of my seat and into the arms of our boatman, Jim Gardner. There was much laughter at these experiences, and to see scores of tunas in the air in a cloud of flying fishes, is one of the sights of a lifetime.

It almost seemed at times, in 1898, that the tunas came into Avalon to hunt us up. Mr. E. L. Doran, who has a record of eighteen tunas in one season, all over one hundred pounds (none others are considered or recorded), and I were starting out one morning at four or five o'clock, and I had just joined my rod, when a school of tunas rushed in and the flying fishes began to soar in every direction. The tunas boiled alongside of the launch. We appeared to be seized with a 'tuna frenzy,' though laughing heartily, and grasped our rods forgetting that we were still at anchor. A flying fish dropped almost into my lap; I caught it and hooked it on and tossed it over when, as if by magic, the bait was taken, both our rods and lines were smashed, and we sat in blank amazement at the suddenness with which the game had involved us. Collecting our rattled senses we pushed out and were shortly in the thick of the fight.

If called upon to select the most skilful tuna angler I should

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say Mr. E. L. Doran. I have been with him on scores of fishing days just for the pleasure of seeing him, a very powerful man matched against these leviathans of the tribe. When he could not stop a tuna I generally estimated the fish at over six or seven hundred pounds. In 1898 fishes of the largest size were hooked and would have been landed if larger lines were used or the methods of to-day employed. Then, we fought the fish, pulled away from it, and endeavoured to fight it down by keeping at it. The method in vogue by many to-day is to pull up over a fish and get it before it realizes it is in trouble. Again the 1912 reels have numerous brakes and adjustments ; but all are fair, as the fish is a tremendous opponent. I have seen Mr. Doran attempt to stop a sounding fish from a one hundred and fifty-pound skiff in which I had the oars, and the tuna nearly pulled the boat under water ; if the line had not broken doubtless it would have done so.

Such a tuna must have weighed eight hundred pounds, and I am confident that I have seen tunas alongside the launch that were ten feet in length. Such a fish, judging by those I have seen in New England, must have weighed a thousand pounds. A nine hundred-pound fish was taken in a net in Monterey bay. Mr. Wood of the Tuna Club hooked and played a giant tuna seven hours, then gave up, and not one man in a thousand could have made the fight he did. Then his boatman, Harry Elms, a man in fine physical training, took the rod and played it another seven hours. When this fish was reeled in its massive tail came up first. The wire leader was wound about its body ; but it was the tail of a giant, a seven or eight hundred pounder. It broke away at the gaffing, and the next day a steamer passed a gigantic tuna dead on the surface, a fish that was estimated at eight hundred pounds. In any event, it fought two of the best men of Avalon for fourteen hours.

No one should attempt this game unless in the best physical condition, and to see such a man play a big tuna at its best is like watching a gladiatorial contest.

As we have seen, the tuna is a world-wide roamer. It has



Fig. 17.

Leaps of the Santa Catalina Sword Fish on the Line

1. Leaving the Water. 2. Further Out. 3. A Long Rush on its Tail. 4. Coming at the Boat. 5. A Long Rush. 6. The Rise. 7. Coming at the Boat. Photographs by Captain Danielson, Captain Michaelis and P. V. Reyes. p. 108.

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been taken ten miles off the New Jersey coast, and off the coast of Spain and Portugal, and should be found off the English coast, as it is known to have been taken in the Lofodon Islands. The reason that Santa Catalina Island and San Clemente have become the most popular localities for this sport lies in the fact that perfectly smooth water is assured, yet twenty miles at sea. Mr. Aflalo failed to catch tuna at Madeira as the sea was too rough; again there were no proper boats. The professionals anchored their heavy craft—a condition impossible. It is possible to take many gigantic fishes with the rod and reel, but to bring this within the limitations of sport the angler must have conditions that are favourable, so that the contest will be a pleasure, not a battle with the elements when playing a fish.

As these lines are written, I read in the *Fishing Gazette* of London, of December 14, 1912, that Mr. Mark Bolt of Poole, Dorset, with a companion, Mr. Fred Brown, captured a seven hundred and twenty-eight pound tuna in Poole Harbour on November 16. The tuna was seen coming up the channel at a rapid rate of speed, but soon ran aground on a mud bank and was caught, and photographed, the picture published by Mr. R. B. Marston, with a description of the fish from the Weymouth Telegram whose editor does me the honour to quote me as an authority. I shall not be surprised to learn that Mr. Holcombe, Mr. Sterne, or Mr. Mallett, or some of the British Sea Anglers Society members, who know the delights of Ballycotton, will soon discover some tuna ground off the west coast of Ireland.

The yearly records¹ at the Tuna Club since tuna angling became a sport are as follows :

LARGEST LEAPING TUNA (*Thunnus thynnus*).

C. F. Holder, Pasadena, Cal., season 1898	183 pounds.
Col. C. P. Morehous, Pasadena, Cal., season 1899	251 „

¹ Hundreds of tunas under one hundred pounds have been caught but they are not recorded. The Club pays no attention to Tunas under that weight.

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Gen. A. W. Barrett, Los Angeles, Cal., season 1900	. 164 pounds.
Mrs. E. N. Dickerson, New York, N.Y., season 1901	. 216 "
Ernest E. Ford, Alhambra, Cal., season 1902	. 174 "
Col. John E. Stearns, Los Angeles, Cal., season 1902	. 197 "
Gen. A. W. Barrett, Los Angeles, Cal., season 1904	. 131 "
P. S. O'Mara, Salt Lake City, season 1909	. 153 "
L. G. Murphy, Converse, Ind., season 1910	. 175 $\frac{1}{4}$ "
C. B. Stockton, Los Angeles, Cal., season 1911	. 170 "

LARGEST YELLOW-FIN TUNA (*Thunnus macropterus*).

Over 50 pounds.

Arthur Jerome Eddy, Chicago, Ill., season 1906	. 60 pounds.
E. J. Polkinhorn, Tereon, Mexico, season 1907	. 50 $\frac{1}{2}$ "
F. T. Newport, Arcadia, season 1911	. 54 "

[The tuna fishing has been nearly ruined by the promiscuous netting of market-men. But in 1913 the Tuna Club secured the passage of a law that was signed by the Governor of California, recognizing three miles offshore of this island as a spawning-ground and stopping all netting. This ended a fight of twenty years standing and will result in the return of the tuna and the increase of all the great game fishes of California.]

CHAPTER XI . .

THE LITTLE TUNAS

'Vext with the puny foe, the tunnies leap,
Flounce in the stream, and toss the mantling deep ;
Ride over the foamy seas, with torture rave,
Bound into the air and dash the smoking wave.'

Oppian.

THE leaping tuna, that attains a weight of thirteen hundred pounds and travels the seas of the world, is in a class by itself ; but it has numerous relatives, which if not so large, range up to one hundred pounds and give the angler the most exciting of sports. It has been found that the government island of San Clemente, and the island of Santa Catalina, off Los Angeles county, California, some twenty miles, are the spawning grounds of all these tunas, and there is a movement on foot to have them set aside as fish refuges, so that the nets of the professional fishermen shall not interfere with the spawning, and the valuable supply of food fish be secured for all time. In July, August and September the waters within the three-mile limit are filled with spawn, the eggs of countless fishes, preyed upon by sea birds of many kinds, showing that prolific Nature has provided for the great drain upon her resources.¹

Among the lesser tunas is the one known as the yellow-fin tuna (*Thunnus maculata*), for many years accredited to Japan and Hawaii ; but it has been coming to Santa Catalina in greater or less numbers for centuries. This fish has all the habits of the leaping tuna, except that it plays more on the surface, does not sulk so much. In weight it ranges to about sixty or seventy pounds, the record being sixty pounds, by Arthur J. Eddy.

¹ See footnote p. 110.

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It is a regal fish in appearance, very sociable in its ways and habits, coming alongside with small game when 'chummed' up, yet often as clever as a trout in avoiding capture. This tuna is not so strictly a sulker, making off on the surface when hooked at such speed that unless the angler can get the launch under way and follow, all the line will be taken. This tuna is said by Dr. Jordan to be originally from Japan, and it is known at the Hawaiian Islands where the Japanese call it Shibi.

I recall no more radiant or beautiful spectacle than when fishing a few rods off the south point of Avalon bay in mid-summer. From April to November this is a summer sea. The water is an intense blue, and on the day in question it was as calm as a lake. We were drifting, some four or five boats, the boatmen tossing over dead sardines to attract the game. The ocean was so clear that one could see down into its heart a hundred feet where the brilliant beams from the sun illumined the dainty, classic shapes of jelly fishes. Here were lavender comets, with trains twenty and thirty feet in length pulsating along; clouds of *Sapphirinae*—minute crustaceans marvellous in their colours, while countless small and elegant shapes were seen standing out vividly against the deep blue of the sea.

As the sardines sank, up from the depths, as though summoned by Gulnare herself, came the tunas, the yellow-fin, smaller allies, as bonitos, or little tunas, and like gems, flashing across the range of vision, the extraordinary long-fin tuna, *Thunnus alalunga*, whose pectoral fin is nearly as long as the body.

These fishes, popularly known as albacores, were in countless numbers, and so tame that one could pick his game, by jerking away the lure from the small ones, and allowing the twenty pounders to take it. By impaling a sardine on a gaff hook I lowered it a foot beneath the surface and easily hooked a fish, and, doubtless, could have fed them from my hand. In general appearance this tuna bears a close resemblance to the leaping tuna, and if the side fins are cut off, the resemblance is very marked. Seen in the water, the back is blue, the ventral surface clear silver.



Fig. 18. The World's Record Tuna.
The Largest Tuna Ever Taken with Rod and Line (680 lbs.). Mr. J. K. L. Ross of Montreal.
p. 112.

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They attain a weight of sixty pounds, and are hard and vigorous fighters, never giving up until gaffed, affording a most exciting play. The only drawback is, they are too ready as a rule to bite, and thirty or forty pounders will give the average angling novice more exercise than he cares for.

Everything about the long-fin tuna betokens speed, aggressive, power and strength, and few game fishes afford a harder fight on the nine-ounce rod and nine-thread line the Tuna Club recommends. The ubiquitous Japanese have entered the field, and the fish is now canned as Blue Tuna. The method of taking the fish is extraordinary, at least to the American angler who is handicapped by a desire to live up to the ethics of the highest standard of sport. The Japanese have a fleet of fine thirty-foot power launches. On deck is a can containing sardines, which are kept alive by continual replenishment of the water and aeration.

Once on the ground, from one to five or six miles off Avalon, the trolling ground of the Tuna Club, in water as smooth as glass, the Japanese launch stops, the fisherman takes a bamboo rod about ten feet long in one hand, baits the short ten-foot line with a live fish and tosses it over. In his other hand, the right, he takes a long bamboo which has a spade-like end, with which he splashes the water, throwing it at the struggling live bait.

Exactly what the long-fin tuna of from twenty to thirty pounds thinks about this extraordinary performance we do not know, but the Japanese assumes that the tuna thinks a school of sardines are feeding, the single fish and the repeated splashes carrying out the delusion. Be this as it may, I trolled around such a fisherman in May, 1912, for several hours, taking very few fish, while the Japanese was fast filling his boat. The moment a long-fin tuna struck, the Oriental dropped the 'splasher,' and hauled the fish in without ceremony, baited the hook, and presently had another tuna.

The conclusion that the long-fin tuna is a very stupid fish does not detract from its fine qualities as a game fish. The Tuna

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Club recognizes this and offers many prizes for exceptional fish taken on light tackle. The long-fin tuna is one of the most valued fishes of this region as it can nearly always be relied on, and often can be taken every month in the year.

These fishes have a very wide range in warm or moderate seas the world over, migrating north and south, or in and out from some mysterious home, after the manner of birds, leaving the angler this puzzle to solve: that if cold weather is supposed to drive away certain fishes from certain localities why are they frequently brought up from regions that are many times colder? The answer may be that game fishes follow the vast sardine, anchovy and herring schools. But why do these small fishes go down into icy depths, as they are known to in California, where they are often found in the stomachs of the red rock-fish or groupers which live in water six hundred or one thousand feet deep?

Long-fin tunas have been taken in the San Clemente channel, California, that weighed one hundred pounds. The fish does not approach the surf of the mainland, hence must be followed in deep blue water in mid-channel, and is taken in such number at Santa Catalina because the island is an isolated peak, rising out of water from a half to one mile in depth; hence there is deep water at the very shores. The Tuna Club long-fin tuna or albacore records is sixty-six pounds five ounces, taken by Frank Kelly, Goshen, Ind. The records by years are as follows:

LARGEST ALBACORE (*Thunnus alalunga*).

Chas. W. Miller, Denver, Colo., season 1901 . . .	30 pounds.
Ernest Fallon, Los Angeles, Cal., season 1902 . . .	35 "
John Van Liew, Los Angeles, Cal., season 1903 . . .	38 "
Stewart Ingram, Los Angeles, Cal., season 1904 . . .	46 "
I. C. Pillster, Denver, Colo., season 1905 . . .	48 "
¹ Gustave J. Frickman, N. Y. City, season 1906 . . .	38 $\frac{3}{4}$ "
¹ A. B. Cass, Los Angeles, Cal., season 1907 . . .	41 $\frac{3}{4}$ "
¹ C. R. Sturdevant, Pasadena, Cal., season 1908 . . .	43 $\frac{3}{4}$ "

¹ Taken under tackle specifications of Light Tackle Class (p. 287).

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¹ J. W. McIntyre, Catlin, Ill., year 1908	65½ pounds.
S. A. Guy, Shreveport, La., season 1909	43¾ „
¹ W. N. McMillan, Nairobi, E. Africa, winter season 1909-10	50 „
¹ H. A. Omson, Los Angeles, Cal., season 1910	37½ „
¹ C. R. Guertler, New York, winter season 1910-11	51¾ „
¹ R. H. Hemphrump, Bloomington, Ill., season 1911	40 „
Frank Kelley, Goshen, Ind., winter season 1911-12	66 lb. 5 oz.

Closely related to the albacore are the bonitoes, two of which are found in American waters : one, *Sarda chilensis*, an important game fish of the Pacific coast. The bonito, *Sarda sarda*, is a most attractive fish, well known in the Atlantic, offshore, and in the Mediterranean Sea. Professor G. Brown Goode says of it :

‘ One of these fishes is a marvel of beauty and strength. Every line in its contour is suggestive of swift motion. The head is shaped like a minie bullet, the jaws fit together so tightly that a knife-edge could scarcely pass between, the eyes are hard, smooth, their surfaces on a perfect level with the adjoining surfaces. The shoulders are heavy and strong, the contours of the powerful masses of muscle gently and evenly merging into the straighter lines in which the contour of the body slopes back to the tail. The dorsal fin is placed in a groove into which it is received, like the blade of a clasp-knife in its handle. The pectoral and ventral fins also fit into depressions in the sides of the fish. Above and below, on the posterior third of the body, are placed the little finlets, each a little rudder with independent motions of its own, by which the course of the fish may be readily steered. The tail itself is a crescent-shaped oar, without flesh, almost without scales, composed of bundles of rays, flexible yet almost as hard as ivory. A single sweep of this powerful oar doubtless suffices to propel the bonito a hundred yards, for the polished surfaces of its body can offer little resistance in the water. I have seen a common dolphin swimming round and round a steamship advancing at the rate of twelve knots an hour, the effort being hardly perceptible. The wild duck is said to fly seventy miles in an hour. Who can calculate the speed of the bonito ? It might be done by the aid of the electrical contrivances by which is calculated the initial velocity of a projectile. The bonitoes in our sounds to-day may have been passing Cape Colony or the Land of Fire day before yesterday.’

This fish is represented at Santa Catalina by *Sarda chilensis*, the skipjack. Unlike the Atlantic species, it comes inshore at

¹ Taken under tackle specifications of Light Tackle Class.

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the islands to spawn. I have anchored my boat to a rock in a little cove at Santa Catalina and had my boatman toss over 'chum,'—or ground bait, and in a short time had these beautiful fishes all about the boat. When I cast for them with a light rod, they would come up out of the deeps like meteors and take the fish bait with a rush, affording delightful sport almost entirely on the surface. The Tuna Club record is a twenty-pound fish, taken by Miss Edith Holder in an hour and a quarter on a nine-ounce rod.

There is a group of fishes known as little tunnies (*Gymnosarda*), well represented in southern Californian waters. There are two species, both fine game fishes. One is *G. pelamis*, found in all semi-tropical seas, not common; yet at Santa Catalina it is the common catch in spring, up to fifteen or even twenty pounds. It is a hard-fighting fish, highly appreciated by the Tuna Club, that distinguishes it from *Sarda chilensis*, or skipjack, by calling it the oceanic bonito. It attains a length of two feet, and is easily recognized by the black stripes that sweep down from the back near the finlets obliquely forward, while in the *Sarda chilensis* the stripes are on the lower surface. The skipjack is chubby, thick-set, a humming-bird in its wonderful iridescence, while the oceanic bonito is long and fairly slender. Both are game fishes of the very first class.

If the reader has good luck when fishing near Malta he should take a little tunny, *G. alleterata*, very much like the above. It is also taken near Barbados and Nassau. I have never seen it in California, but have taken it off Cuba in the Gulf Stream. A hard-fighting little fish. With these might be mentioned the Frigate mackerels, *Auxis*, found in many warm seas; a world-wide wanderer, like the big tuna. On the Pacific coast the Chub mackerel, the Houttuyn of the Japanese (*Scomber japonicus*), is taken with rod and reel.



Fig 19.

A Morning with Long-fin Tuna (*Thunnus alalonga*), 9-ounce Rod. Mr. A. L. Beebe, Avalon Bay, California.

1. The Start from Tuna Club. 2. Gaffing the Tuna. 3. Weighing It. 4. Having the Picture Taken.

CHAPTER XII

THE TUNAPLANE OR KITE

The Judge : For two years you men have fished together peaceably, and yet you wrangle over this fish.

The Sportsman : You see, your honour, this is the first time we have ever caught one. }

Translantic Tales.

TUNA angling, for big tunas, which I suggested back in the seventies, tried off the Maine coast in 1875, and successfully demonstrated at Avalon, California, in 1887, has been carried around the world as a great and fascinating sport. The Tuna Club established its seventy-odd records under circumstances that challenged admiration. It accumulated prizes, cups, medallions, until there seemed no end—and still the club record of two hundred and fifty-one pounds with a twenty-one thread line remains unbeaten. Every season sees anglers going everywhere to excel this, fortunes have been expended, anglers have journeyed from England, Scotland, Germany and France ; British and American anglers have gone to Madeira, the Azores, Sicily, Australia, in an effort to defeat the record.

In California the tuna is more or less an old story, and anglers are devoting themselves to the newly discovered game fish—the Catalina swordfish, one hundred of which have been recorded at the Tuna Club this year, ranging up to the two hundred and ninety pounder, taken by T. McD. Potter, all with rod and reel. But to the stranger within the Californian gates the tuna is the piscatorial *pièce de resistance*, and all on account of its uncertainty. The tuna is the antipode of the trout in size, but in uncertainty, view the word as you will, it ranks with the smaller fish. One

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year it will sweep the seas. I have taken, with a friend, three in a few hours, and we stopped because it was slaughter. The following year a friend wrote me that the tunas were in Australia (they certainly were not in California). Now, as I write, they are foaming not a mile from the Tuna Club, but no man can hook one, and for a number of years the catch has been limited and vacillating, but followed with unabated energy by the lovers of sea angling everywhere.

To row or motor over a vast school of tunas which scorn the hook has resulted in some ingenious inventions. One, called the 'tuna sled,' looks like a diminutive sled and is devised to push the bait away from the boat that it is following and into an undisturbed field, but the most spectacular scheme appeared during the summer, and is shown in the accompanying photographs, taken for this volume by Peter V. Reyes of Avalon, California.

Avalon, the town of Santa Catalina Island, in summer is an angling community of six thousand or eight thousand persons, a rendezvous for yachts, and this year even the old habitués of the place were astonished to see anglers flying kites at sea. Some were just plain kites, others hydroplanes, or plain box affairs, but they all went up into the air, first high above the launch, then ahead or astern, as the case may be. It did not take long for the progressive curiosity of the public to discover what it meant, though every effort was made at first to conceal it. The kites had nothing to do with kite flying as a sport. They were 'tuna kites' or 'tunaplanes,' intended to simulate the action of a man in an aeroplane lifting his bait and making it leap from wave to wave, in imitation of a living flying fish. The idea originated in the mind of Captain George Farnsworth, one of the island boatmen, who has gaffed and caught scores of the largest fish of the region on tackle so light as to astonish the layman.

Two years ago when I returned from a ten days' trip with Dr. Gifford Pinchot, to San Clemente, the large outside island

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of the Santa Catalina group, we located a big school of leaping tunas about five miles to the southeast of Santa Catalina, and for several days endeavoured to take one, a most soul-grilling and exasperating proceeding when the fish will not bite. And these big tunas would not; yet there they were, ten thousand, perhaps fifty thousand, lying exactly in the right place, the off-shore lee of Santa Catalina, a region the Tuna Club anglers call the 'doldrums,' also famous for the beautiful dolphin. There was no wind, but a long swell, and when a wave passed over the school, which was lying just below the surface, we could see the splendid shapes of the giant tunas standing out against the sapphire-blue of the Santa Catalina Channel, like gems. There they were, tunas of vast size, one of which would have carried off the Morehous record and several thousand dollars' worth of cups, medals, rods, gold, silver and diamond trophies which have been accumulating in the Tuna Club and offered by enthusiastic anglers ever since I took the first *very large* tuna, one hundred and eighty-three pounds, after a battle of four hours and a tow of twelve grilling miles.

Nothing more exasperating could be imagined as we sailed and re-sailed over them, now slowing down, now at full speed, only to see them sink, then rise, as we cleared the school, rise so near the surface that it was boiling with the movement of ten thousand fins. I had landed many tunas in former years when they hunted us in the bay, and did not fish, so that my companion would have all the chances.

I devoted myself to the task of trying to devise some new scheme. While I was doing this and not accomplishing anything, and Dr. Pinchot was fishing, holding his rod with the patience of one described as smiling at grief from the top of a monument, I noticed Mr. Hooper and Mr. Murphy trying to imitate the leap of a flying fish by jerking the big eighteen-inch bait (a flying fish) from the top of a swell, letting it fall with a crash just as a flying fish does fall, with a splash, generally, to be grabbed at by the tuna which had been following it like an avenging Nemesis for

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perhaps half a mile. They did it very cleverly, and it reminded me of the time in 1900 I had in perfectly smooth water when, with a two-handed cast, I dropped my bait in front of the leader of a school and hooked it. Nothing is more enticing to the average tuna than this. If anything is the matter with a fish, it seems to madden all predatory fishes and the wounded victim is at once seized.

But all the skill and cleverness of the Tuna Club experts, Mr. Hooper and Mr. Murphy, did not, at least that day, induce the tunas to bite.

The tuna kite or tunaplane, was devised later by Captain George Farnsworth to meet this situation, and to relieve the angler from the exercise of jerking a bait eighteen inches long and weighing over a pound from wave to wave. The method of using the tunaplane is well illustrated in the accompanying Reyes pictures. When the launch reaches the ground, the angler, who sits in a comfortable chair facing the stern, takes up his sixteen-ounce, seven-foot rod, and the boatman, who has run the twenty-one thread of strand line through the agate guides, slips the line through a ring in the tunaplane or kite. An abundance of line is pulled through, then it is fastened to a leader, or trace, of piano wire about seven feet long, connected by several swivels; the hook, a number ten, is baited with a flying fish at least eighteen inches long and weighing possibly a pound and a quarter. This is the natural or most common prey of the tuna, and it is hooked in the jaw, or up through the body and lashed or sewed so that it will tow naturally. This accomplished, the boatman starts his engine, the launch moves ahead and the boatman gradually pays out line and gets his tunaplane up into the air as shown. As it rises, the angler unreels, or slacks away, and soon the machine is forty or fifty feet in air and astern. If the launch is going against the wind, the boatman can now either hold the tunakite or make the line fast while the angler takes his seat and waits for the strike, the launch running along slow or fast, according to the desire of the skipper. The game is one of trolling or

120

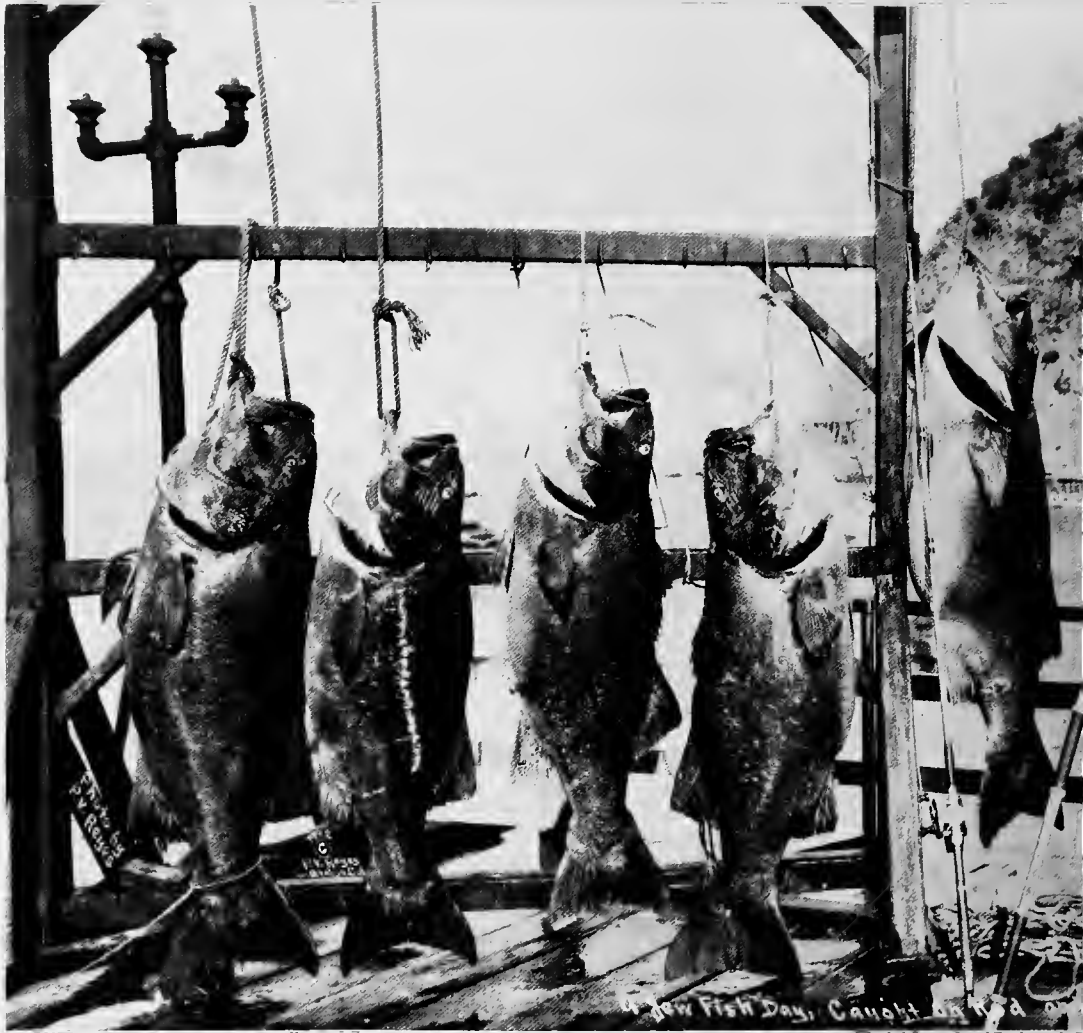


Fig. 21. A Morning's Catch of Black Sea Bass (four rods), Santa



Santa Catalina Island, California. Average, 250 lbs. Photo by Reyes. p. 120.

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THE TUNAPLANE OR KITE

towing the fifty, seventy-five or more feet of the line behind you.

Usually the line extends directly out astern, but now we perceive that it goes up into the air to the tunakite, then drops to the ocean. The reader will now see the resemblance to the aeroplane or hydroplane. Instead of fishing from one of them and so being able to jerk the line along, a smaller contrivance is conceived, and the angler in the boat lifts the bait, using the aerial tunakite as a pulley, or fulcrum, as shown. We see the launch going against the wind. Captain Farnsworth stands holding the line of the kite, which he has on a reel, and the angler has just given his line a jerk, with the result that the bait is lifted, more or less naturally, a foot or two above the water, and by the onward movement of the launch carried ahead. We can see the bait, just above the horizon, being held aloft by the kite. So natural is this leap that a friend who uses it wrote me that 'it sets nearly all fishes—long-fin tunas and others crazy,' as it jumps, or appears to jump along the surface. This works equally well in coming down the wind. Here the tunakite is shown drifting down the wind or going with the launch. Captain Farnsworth is at the wheel and holding the kite string, while the angler is seen 'giving the butt,' or throwing his tip back, which lifts the flying fish bait clear and drops it with a splash, as plainly seen in the immediate foreground just ahead of the boat, but really one hundred and fifty feet to the right. Mr. Reyes, who took the picture, is in another launch, which is out of sight.

Several tunas and big swordfishes have been taken in this way. If a tuna seizes the leaping fish the boatman stops the launch, a jerk disconnects the tunakite, which is hauled in or goes adrift, and the angler is free to play his fish.

It is obvious that this is 'machinery,' and the question may be raised that the Tuna Club, which has hedged about this sport so many restrictions that the anglers shall have no aid in any way, has taken a step backward. If the boatman so much as touches rod or line during the catch, or if the rod should break, the Club refuses to recognize it, and boatman and angler

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are on honour, so far as this is concerned. After being so particular this may be considered a step backward by some conscientious anglers, but personally I should not look at it in this light. If any one can take a one-hundred-pound tuna with rod and reel single-handed with this device he has earned his fish. Again, it is well to remember the leaping tuna is not the tarpon. It is more in line with Atlantic Coast salmon and other fishes extremely difficult to catch, testing a man's patience, integrity, his physical and mental strength. Since 1898 but about seventy men from all over the world have succeeded in taking a leaping tuna of over one hundred pounds with the Tuna Club equipment, during which time thousands have tried it and failed. These men constitute the *voting* members of the Tuna Club, and so remarkable is it, that I append the names of this piscatorial roll of honour :

Alden, Dr. B. F.	San Francisco, Cal.
Beebe, A. L.	Mystic, Conn.
Boschen, Wm. C.	New York City.
Bowerman, C. C.	Monrovia, Cal.
Brewster, E. H.	San Diego, Cal.
Brode, A. C.	Los Angeles, Cal.
Burnham, Wm. H.	Orange, Cal.
¹ Campbell, W. Greer	Long Beach, Cal.
Chamberlain, C. W..	Boston, Mass.
Conn, C. G.	Elkhart, Ind.
Connell, M. J.	Los Angeles, Cal.
Connor, J. C.	Colorado Springs, Colo.
Coxe, J. A.	Los Angeles, Cal.
Dickerson, E. N.	New York City.
Doran, E. L.	Los Angeles, Cal.
Earlscliffe, H. St. A.	Santa Barbara, Cal.
Eddy, A. Jerome	Pasadena, Cal.
Elliott, Eugene	Los Angeles, Cal.
Ford, E. E.	Alhambra, Cal.
Gaines, H. D.	New York City.
Goodfellow, W. S.	East Oakland, Cal.
Griswold, F. Gray	New York City.
Gunn, Geo. E.	Salt Lake, Utah.
Harding, F. L.	Philadelphia, Pa.

¹ Took first tuna with rod and reel at Avalon.

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Holder, Chas. F.	Pasadena, Cal.
Hunt, Jr., Wm. M.	Los Angeles, Cal.
Irvine, Jas.	San Francisco, Cal.
Jones, W. E.	Houston, Texas.
Judah, E. G.	Los Angeles, Cal.
Keeney, Jas. A.	Los Angeles, Cal.
Kendall, B. O.	Pasadena, Cal.
Kingsley, D. P.	New York City.
Kirkpatrick, Dr. J. L.	Los Angeles, Cal.
Macomber, A. Kingsley	Pasadena, Cal.
Manning, T. S.	Avalon, Cal.
Morehous, Col. C. P.	Pasadena, Cal.
Munn, A. T.	Los Angeles, Cal.
Murphy, L. G.	Converse, Ind.
Murry, F. B.	England.
Newport, Fred T.	Arcadia.
Oghorn, W. H.	Cincinnati, O.
Palmer, Dr. Edwin O.	Hollywood, Cal.
Polkinhorn, E. J.	Torreón, Coah., Mexico.
Potter, Thos. McD.	Los Angeles, Cal.
Pilsbury, Jr., Geo. E.	Los Angeles, Cal.
Rabbeth, F. J.	Redlands.
Reed, F. H.	Oklahoma City, Okla.
Rice, H. C.	Los Angeles, Cal.
Rider, Frank V.	Pasadena, Cal.
Rotherham, B. N.	Pomona, Cal.
Roberts, Jesse	Philadelphia, Pa.
Shaver, Roy F. B.	Los Angeles, Cal.
Shields, A. M.	San Francisco, Cal.
Smith, Allen H.	Glasgow, Scotland.
Stearns, Col. Jno. E.	Los Angeles, Cal.
Stockton, C. B.	Los Angeles, Cal.
Streeter, L. P.	Chicago, Ill.
Twist, Charles G.	Santa Ana, Cal.
Tyler, A. E.	New York City.
Tyson, Geo.	Boston, Mass.
Warren, Smith	Los Angeles, Cal.
Williams, Ben	Los Angeles, Cal.
Wiltsee, E. A.	San Francisco, Cal.
Wright, C. Irving	Berkeley, Cal.

It is an expensive pastime to follow, as thousands do follow it, the kind of men who want a tiger, an elephant, a lion, a

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buffalo ; and the leaping tuna of one hundred and eighty or two hundred pounds is not only in this class, but ahead of them, so far as the physical exertion is concerned in taking them. I have an acquaintance who wears what he calls his ' three-thousand dollar button.' It is the blue button of the Tuna Club given members who take a one-hundred-pound tuna. Its real value was not over two or three dollars, but it really cost him three thousand dollars. Another angler has, according to his own estimate, spent ten thousand dollars and has not landed a one-hundred-pounder yet. Izabu is not with him. Others have taken one or two tunas on the first trial. If the tuna could be taken at any time and always found when wanted, it would be no honour to catch one. It is the uncertainty, the fickleness, the cleverness in not biting, that places trout, salmon and other great game fish in the front rank. It is nothing for some men to kill a few salmon that cost them over one thousand dollars for a few a year, and so it is with the leaping tuna. The cleverest angler knows nothing about the tuna. He knows that it is due in June and that it may disappear some time in August, or it may stay until October in some years. It will carry off everything—lines, tackle, towing boats ; playing men almost to their death in bouts from sixteen to twenty hours ; setting men with red blood in their veins wild—to suddenly disappear for a year, becoming coy for several years, to come in some day unheralded out of the unknown, to play havoc with patient anglers. It is this uncertainty, this impossibleness, that fascinates anglers, and always will, which brings them year after year from England and France and almost every European country. Hence, when undergoing such inroads on purse and patience, it would seem that the ' tunakite or plane,' to imitate the leap of the stricken flying fish, should not be objected to, nor shall I personally object some day to see an airship come along, lift a launch and shoot up into the air for a bird's-eye view of the game. It is well in these days not to be surprised at anything, and to cultivate the so-called stoicism of the American Indian.

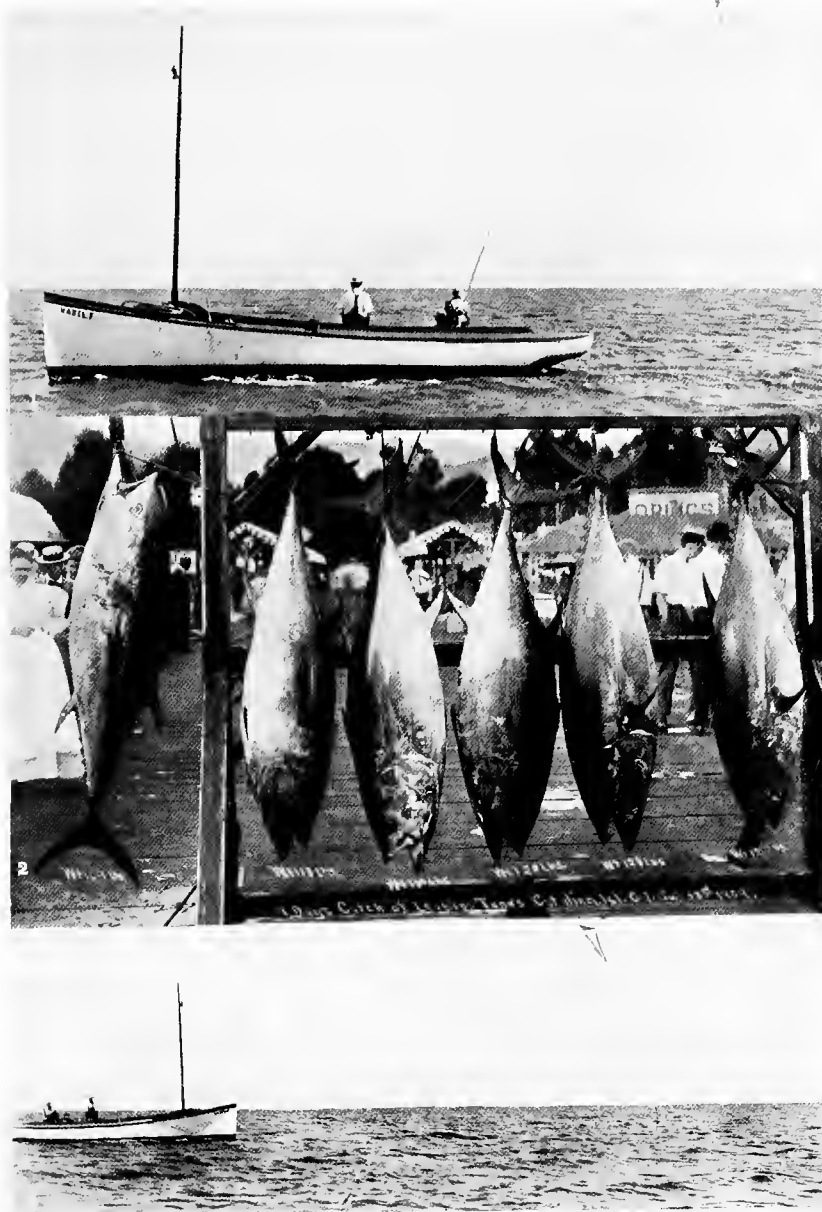


Fig. 20.

Leaping Tuna, Southern California Islands. Taking them with a kite—imitating leap of Flying Fish. Photo by Reyes. p. 124.

CHAPTER XIII

THE BLACK SEA BASS AND OTHER LARGE FISH

'But why, good fisherman,
Am I thought meet for you, that never yet
Had angling rod cast towards me?'

Moll Cutpurse (1611).

THE ardent trout lover or angler is rarely a devoted sea angler. If pressed for a reason he will often tell you that the joys of scenery, the radiant streams and meadows that reach away to the sky-line, the flowers and Waltonian diversifications, are entirely absent.

This may be true in some localities, but not in all, as the sea has its gardens, its vales of peace, its meadows rich with algae, its deep and abysmal cañons, its mountains and wealth of glorious colours. In fact, as I close my eyes and pass in review the scenes I have observed beneath the sea on the Florida reefs and on the slopes of the great island mountains of Santa Catalina and San Clemente, I can hardly conceive of anything more beautiful in the fairest gardens of the land from California to England and again to Mortola of Sir Thomas Hanbury on the Riviera, which I hold in delightful remembrance.

Sea and land gardens are equally beautiful, but so entirely different that they cannot be compared, and I confess that in waters where there is nothing but fish, and nothing to see, mere fishing palls on the imagination.

To me, one great charm of sea angling lies in the fact that in pursuit of the game the angler is led into the fairest and most beautiful oceanic regions, where Nature is always at her best.

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The very earliest writers and dreamers recognized this. The fisher eclogues found place in the works of Sannazaro before 1503, and this author gave his contemporaries pastorals like those of Virgil, except that they were of the fishes, anglers and the sea. Theocritus gave us marine pastorals, and the Iliad abounds in descriptions of life afield and refers to angling.

No waters are more beautiful than those of England if we remember the sea anemones of the pools and think of them as the animal flowers of the sea. This can be realized after a storm when the sea-wrack is piled upon the sands, and the gardens of the sea have been devastated. Every colour of the rainbow scintillates in the sunlight and tells the story of the fishes.

Possibly in the semi-tropics, the water is clearer, at least it is smoother, and in Bermuda the angler is regaled with real gardens of the sea, inhabited by fishes which vie with the living flowers. For many years I lived in the heart of a group of coral islands of the same character as Bermuda, in the Gulf near Havana—the Garden Key of the Tortugas group. Every day was devoted to angling of some sort or description, varied with studies of the reef, diving into its channels or wading along its streets and lanes of coral at low tide. I was always impressed by the self-evident fact that there were gardens of the sea, mountains covered with verdure, plains, prairies, plantations, and diversities only to be compared to those of the land. The colouring was particularly beautiful, especially off the coral reef as it merged into deeper water. Here the east wind sent a sea continually in, which had piled up a line of dead coral rock a mile or more in length, and bare at low tide—an island in embryo. Twenty or thirty feet out beyond this was a famous fishing ground for a large variety of fishes, which swam over a forest of radiant beauty. On calm days when the sleepy swell was just sufficient to sway the gorgonian trees, I often drifted along the reef or waded out, waist-deep, and cast my lure of crayfish, sardine or mullet into the rialto of the fishes.

The bottom was covered with a carpet of weed of hues which

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appeared to have been painted by the setting sun in deep reds, vermilion, pink, splashes of blue and yellow. From this grew, apparently, countless reticulated fans and plumes of brown, vivid golden-yellow, rose and lavender. These were gorgonias, cousins of the corals, and as they waved to and fro, bending in the mysterious inward rush of water, the change of tint and tone was kaleidoscopic and marvellous beyond description. Some of the fans resembling velvet, rose four feet from the bottom; beneath them were flat branches of the leaf coral in browns or olives, taking countless shapes. Others were in the form of great mounds, or hollowed out like classic vases in which brilliant angel-fishes poised, or the gaily painted yellowtail or parrot-fish hid.

At such time the gulf, as far as the eye could reach, would be a sheet of glass, not a ripple disturbing its surface; and moving out from the shore until the water was fifty or one hundred feet in depth, it was so clear, so crystalline, that every object, even to the delicate reddish shells on the gorgonias, could be seen and the black echinii in the crevices, or the deeper black of the *Cypreae*. No garden of the land had more beauties, while the myriads of fishes carried out the idea of birds as they moved to and fro.

In various parts of the world large bass-like fishes are found which resemble bass in shape if in no other way. There were two dwellers in this garden of the gorgonias, of gigantic size; one called the black grouper, the other the jewfish. One was a heavy logy giant, often found in deep holes and crevices; the other, the black grouper, in mid-water. The jewfish might be called the hippopotamus of the sea, as individuals weighing one thousand pounds have been taken. The average is three or four hundred pounds, and the large specimens, while they cannot be classed as a game fish and are practically impossible to the man with the rod, on a hand-line afford no little excitement. I have taken them while shark fishing, and believed I had a shark until the ponderous big-mouth creature came up the sands, the whole party on the line.

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We frequently fished for jewfish when watching for turtles on hot nights on the key beaches where every wave seemed to ignite and sent its lambent flames hissing up the sand. At Port Aransas and Galveston it is one of the sports to angle for jewfish with the rod at night along the pass—a vigorous and athletic pastime.

The black grouper or *méro de lo alto* (*Garruza nigrita*) is another fish, and is taken weighing five hundred or more pounds. In its smaller weights, one hundred or one hundred and fifty pounds, it affords no little sport with rod and reel. Practically a deep-water fish, it often came into the outer keys where they dropped quickly into the channel, and at night frequented the great lagoons to feed on the countless crayfish, which wandered abroad at night, and other easily-caught game.

If we cross from the Gulf of Mexico into the Gulf of California we shall enter the more or less restricted territory of a fine big bass-like fish, the black sea bass (*Stereolepis gigas*), found in large numbers at almost any locality in the Gulf and alongshore as far as Monterey on the coast of California. Compared to the Florida jewfish, this big game is a greyhound. Many of the male fishes are finely proportioned and bear a striking resemblance, fin for fin, to the ordinary big-mouth black bass, if we can imagine a bass six or seven feet in length, and weighing four or five hundred pounds.

The big bass has all the game qualities of the black bass, though, naturally, it has not the quickness of movement, nor does it leap under any circumstances; but it will dart at a bait so suddenly as to nearly demoralize the angler. I have frequently in rapidly hauling in a whitefish, been startled by the sudden and tremendous rush of this goliath of the fishes as it shot upward, making a miniature maelstrom as it missed the fish, turned and dashed out of sight.

This fish is extremely common at Santa Catalina Island, where, from June until October it is an every-day catch with rod and reel and a 24-thread line, so light that it is difficult to make the



Fig. 22.

Giant Saw Fish, taken with rod and reel by Mr. S. O. Vanderpoel, of New York, in Florida.
p. 128.

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layman believe the stories told at the town of Avalon. A large individual, over one hundred and fifty pounds in weight, has, I think, been taken with a nine-ounce rod and nine-thread line—the light tackle originated by Mr. Arthur Jerome Eddy, of the Tuna Club, the distinguished angler, fencer, author and playwright.

Up to 1886 the black sea bass was always taken with a hand-line. The first one I caught was with a ' syndicate ' of five anglers. Mexican Joe, our boatman, hooked it and handed the rod to me. I was satisfied in about five minutes, my arms being nearly wrenched from their sockets, and passed the line to my companion next to me, who succumbed in about the same time. We all tried conclusions with this three or four hundred-pound fish, and I fancy our laughing boatman landed it.

This was the preliminary in 1886. Later I landed many of the fish, single handed, and one seventy-five or eighty pounder on a nine-ounce rod and nine-thread line ; not a remarkable fish, as I thought it was a yellowtail. By a curious series of fatalities I never succeeded in taking a large black sea bass with rod and reel, nor did I take the first in this manner although I tried repeatedly. But I was compensated in being with a gallant officer—General Charles Viele, of the Cavalry—when he accomplished this feat, supposed to be practically impossible. While he was being towed about by the fish I lost tips, rods and lines from the anchored launch, the big game evidently enjoying themselves at my expense.

My next trial was a failure. I hooked a fish, the colossal sort that are never seen. At the strike the boatman cast off the buoy, and away we went out to sea at about four miles an hour. I was using a tuna sixteen-ounce rod and line of twenty-four strands, which would lift a weight of forty-eight pounds, and I put on forty-seven pounds of tension and pressure, as near as I could estimate ; but I doubt if the giant ever felt it. My efforts were so futile, I was so utterly unable to make any impression on the monster, which was growing larger in my mind's eye all the time, that presently my two companions began to make certain

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remarks calculated to arouse one's dormant energies, and I threw all my strength into the contest and believe I did gain a few feet. But I lost them very quickly, and we were still moving out to sea, and the boatman was holding back with both oars, for we were in a staunch heavy rowboat.

My friends now began to question my physical and mental powers and qualifications for landing *any* kind of game, and I was rapidly arriving at the conclusion that I had a real monster that no one could land. When fully convinced that this was the case, I handed the rod to one of my companions—an old tuna angler—and sat back to enjoy his discomfort. He tugged and hauled, looked surprised, then worried, while I made choice and timely criticisms. But the fish kept on and on, apparently unmoved, and at last, after a half hour's struggle, either my friend or the big bass broke the line. I doubt if either of us had lifted him ten feet. He moved steadily on and on down the side of the big mountain of Santa Catalina, and when the line severed he had garnered nearly six hundred feet.

The black sea bass attains a weight of one thousand pounds in the Gulf of California, but this fish, which we played for an hour, must have weighed—what it weighed I leave to the reader's imagination. The black sea bass comes in from outer banks or deeps in May or June to spawn, and is met with in schools at times. Its favourite grounds are beds of long kelp that rises up to the surface in water fifty or one hundred feet and surrounds the islands of California and Mexico and some of the mainland shores. Where it actually spawns, or where the young go, I have never determined, nor have I seen a young fish or heard of any one who has seen one smaller than three or four pounds. Where the very young go or stay is a mystery not confined alone to the progeny of the black sea bass, but to most of the big game fishes here. They come to spawn; the females are filled with eggs; they return every year, but the young elude observation in an extraordinary manner.

The big bass is a most graceful fish in the water and very social.

THE BLACK SEA BASS

It has no hesitation in coming up under a boat when four or five lines are out, or to a wharf. I have watched it about my bait in the deep green kelpian forests and on the side of the island mountain of San Clemente, where it moved about coyly, glancing at the bait from the side, as I have seen the gray snapper—one of the cleverest of fishes—passing it by to turn and come back, acting with great caution. When convinced that there was no danger it took the bait between its lips for a second, then dropped it and went through the operation again; all of which explained the nibbling I frequently had noticed at the strike, and showing the angler should not strike immediately, but give line until the bait is surely taken.

In fishing with tuna rod, reel and line, the boat, a launch, is anchored, and the anchor rope made fast to a buoy, as there is no time to haul up. The bait is a live whitefish, or six or seven pounds of albacore or barracuda. This is lowered to the bottom, then hauled up three or four feet. When the strike comes it is indicated by the slow click of the reel; the boatman casts off the buoy, the angler slacks away five, ten or more feet of line, and does not strike until the line is moving rapidly away. Then he gives the fish the 'butt' with all his strength; the response comes in a terrific rush which with a hand-line would pull a man overboard if he held on, and on one occasion almost pulled a light, one hundred and twenty-five pound skiff I was in, under water.

After several rushes the bass settles down into a steady swim out to sea and into deeper water, while the angler endeavours to stop him by 'pumping' and other methods he may have at his command. There is a great difference in the fishes. Some will tow a boat a long distance and defy the angler. Others will give in soon. But the average fish can be taken in from a half hour to an hour. When it reaches the surface the bass is generally *hors de combat* and presents an extraordinary appearance; but it frequently makes violent rushes, tossing water over the boat, and into the faces of the men.

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The boatman now gaffs it with a long gaff, and after killing it, a block and tackle are rigged and it is hoisted aboard the launch and laid across the deck. This is still fishing, but the fish can be taken by the method known in England as 'trailing.' The big hook is baited with a live white-fish through the lip, and a pipe sinker above sufficiently heavy to carry it down. The launch then moves slowly along 'trolling' the bait in water fifty feet deep, but near the bottom along the edge of the kelp forest. This is called trolling, and nearly all the fishing here is either bottom fishing or surface trolling, though when fishes like the yellowtail are very plentiful the launch is often stopped and bait, 'chum' (ground baiting), cut up and scattered about to keep the fish about the boat, the angler casting with his rod. At such times the water is perfectly clear and the fishes can be seen.

The black sea bass is occasionally taken from wharves on the mainland, that is, it is hooked, but the line is led ashore and the monster bass hauled ignominiously up the sands.

The black sea bass does not rank with the tuna or swordfish, but the Tuna Club recognizes it as a game fish and there are cups and medals fished for each season. If one is in need of exercise of a strenuous quality accompanied by excitement often of a sensational character, the sport can be heartily and unre-servedly commended. The great fish is interesting as it has so restricted a range, being a Californian and Lower Californian fish. The small individuals of one hundred or fifty pounds are very fair eating. At some of the banquets of the Tuna Club such an one has been baked entire, and brought in after the fashion of the boar's head in old England.

The rod records of the Tuna Club are carefully kept and some are as follows: The largest catch of black sea bass, and the world's record, is held by Mr. L. G. Murphy. His bass, taken on the southwest coast of Santa Catalina Island, weighed four hundred and thirty-six pounds—a ponderous contribution to sea angling records in California or elsewhere. The records of the club by the year are as follows:

THE BLACK SEA BASS

LARGEST BLACK SEA BASS (*Stereolepis gigas*).

F. V. Rider, Avalon, Cal., season 1898	327 pounds.
T. S. Manning, Avalon, Cal., season 1899	372 "
F. S. Schenck, Brooklyn, N. Y., season 1900	384 "
C. A. Thomas, Pomona, Cal., season 1901	384 "
H. T. Kendall, Pasadena, Cal., season 1902	419 "
Edward Llewellyn, Los Angeles, season 1903	425 "
H. L. Smith, New York City, season 1904	402 "
L. G. Murphy, Converse, Ind., season 1905	436 "
C. H. Earle, Los Angeles, Cal., season 1906	372 "
C. J. Tripp, Los Angeles, Cal., season 1907	427 "
Lloyd B. Newell, Los Angeles, Cal., season 1908	380 "
R. C. Baird, San Francisco, Cal., season 1909	394 "
Jesse Roberts, Philadelphia, Pa., season 1910	385 "
Judge J. S. Dempsey, Madisonville, Ky., season 1911	430½ "
S. W. Guthrie, season 1912	427 "

Some large sawfishes have been taken with rod and reel in Florida, the combat being exciting and dangerous. I have had a large sawfish bury the ivory teeth which arm its long sword-like snout in the soft wood of my boat, suggestive of what it would have done had I been in the way. In hauling a sawfish alongside, it has a disagreeable habit of suddenly raising itself on its tail, or lifting its head out of water and striking to right and left. One of the largest of these fishes ever taken with a rod was hooked, played and landed by Mr. S. Oakley Vanderpoel of New York, near Key West. Mr. Vanderpoel was fishing with a sixteen-ounce rod and a twenty-four thread line, and for four hours and forty minutes it was give and take for the mastery, the great fish making desperate lunges and towing the small boat about in every direction. When it was finally brought to gaff and triced up alongside the gangway of the yacht, its proportions became evident. It was fourteen feet one inch long, over seven feet around, and estimated to weigh five hundred pounds. In all probability, it weighed nearer one thousand pounds, as the scales upon which it was weighed were limited to five hundred pounds.

The sawfish is a strange combination of shark and ray. Its saw is unique in the armament of fishes, calling to mind the sword of the swordfish.

CHAPTER XIV

THE WHITE SEA BASS AND WEAKFISH

‘His drumming heart cheers up his burning eye.’

Rape of Lucrece.

IN the quaint *Praise of New Netherland*, written by one Jacob Steendam in 1661, he refers to the White Sea Bass family :

‘You’ve weakfish, carp and turbot, pike and plaice,
There’s not a pool or water trail,
Where swam not myriads of the finny race.’

The weakfish belongs to the generic tribe of *Cynoscion*, of which there are three species on the Atlantic coast. For two centuries thousands of anglers in and about New York have gone down the bay for them, from childhood to old age. The *American Field and Stream*, devoted to the elevation of sport, has just concluded a remarkable tournament in which it offered valuable cups and prizes for large weakfish taken on special tackle, the kind that means generous and fair play. In glancing over the lists, I observe the following records, which show the average size of the weakfish taken by anglers to-day : Owen E. Houghton, Esq., nine pounds four ounces ; Dr. Henry F. Deane, eight and one quarter pounds ; Walter E. Sawyer, eight pounds four ounces.

The weakfish is known as the Squeteague, an Indian name, the drummer, yellow-fin, squil, sea-trout, gray trout and other names, from the Bay of Fundy to the coast of Florida, where I have taken it at the mouth of the St. Mary’s River. The various species are found all around the Gulf, being chiefly known as

WHITE SEA BASS AND WEAKFISH

'sea trout,' merely because they are spotted and bear a superficial resemblance to this fish.

Mr. F. G. Aflalo, England's distinguished sea angler, in his *Sunshine and Sport in Florida and the West Indies*, says that the 'so-called trout or sea trout, is perhaps the most game of any of the smaller fishes of Florida, and specifically at Useppa,' and he advises 'an old trout rod and float tackle.'

It is a valuable food fish, and the weakfish (*Cynoscion regale*) is considered one of the fine, though small, game fishes of the Atlantic. Three and four pounders are the average, ten pounds being not uncommon; while the record is a thirty pounder, that being the maximum weight. The New York anglers look for them with the bluefish in May when large schools arrive, and then it can be found in various parts of the bay and along the coast. The fish is a good fighter, quick in movement, and when taken on an eight-ounce rod is a game fish in all the term implies; and conversely is helpless on the big billiard, cue-like rods often used by anglers.

The weakfish has a *penchant* for crab bait, shrimp or clams, and as they play on the surface and in the strong tide, the line can be paid out—an ideal condition. In playing the weakfish there is but one thing to remember, its jaws are weak and many fish are lost by the tearing out of the hook.

In colour the weakfish is given to silver, adapting itself, darker or lighter, to its surroundings. Scattered over it are dark irregular spots or blotches, some of which form into undulating lines. It has two fine, expressive dorsals; the tail is large, powerful and incurving; the lower jaw slightly protruding, giving the fish an expression of determination. The eye is expressive and well proportioned. The lower fins often have a slightly yellowish hue, and when freshly landed the fish is a picture, animated, scintillant and beautiful. This is the weakfish you will find around New York and New Jersey; and the Asbury Park Angling Club members, of which I have the honour to be one, tell of notable catches.

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On the New Jersey coast and in the Chesapeake Bay (where I have taken it) down to Georgia and Florida, you may find another weakfish, *C. nebulosus*, or the spotted sea-trout, on which the spots are very pronounced. Along this entire country, including Hatteras, it is one of the important food fishes. On the Indian River of Florida it runs up to twelve pounds, and is taken with a phantom minnow, spoon, or bait of a varied kind. Another species, *C. nothus*, of a gray silvery tint, ranges in a general way along the Georgia, Florida and Gulf of Mexico waters. It has a dark, often blackish, lower jaw. The spotted trout is very common at Pensacola and Key West, though I have fished the Tortugas group about sixty miles west, winter and summer, and do not recall it.

At nearly all of the places, and I recall 'Old Point' in Virginia, the mouth of the St. John's and St. Mary's, these fishes are present with the channel-bass and others; but in nine cases out of ten, their game and fighting qualities are utterly lost, due to the use of big poles or hand-lines in taking them. An eight-ounce split bamboo rod, with the reel above the grip, is heavy enough for the average weakfish. I observe that Mr. Turner-Turner in his *Big Fish in Florida*, refers to the 'trout' at *Boca Grand* as taking a *grilse-fly*.

This interesting and valuable fish to the inhabitants of so many American states has no representative in Europe; but when the Panama Canal is finished, the way will be opened, and the field of the Pacific coast presented for a variety of weakfish angling that, to my mind, is not incomparable to sea-trout fishing. In a word, here, and especially in California, is the 'spotted trout' or bluefish, *Cynoscion parvipinnis*, a radiant little fish of six or seven pounds, which I have often taken at Santa Catalina and along the mainland of California, and which is found from this island south to Mazatlan, and in the Gulf of California, where I have taken it near Guaymas. California is famed for big things, and among them may be included its fishes, particularly the game fishes of the weakfish family. Here we find them

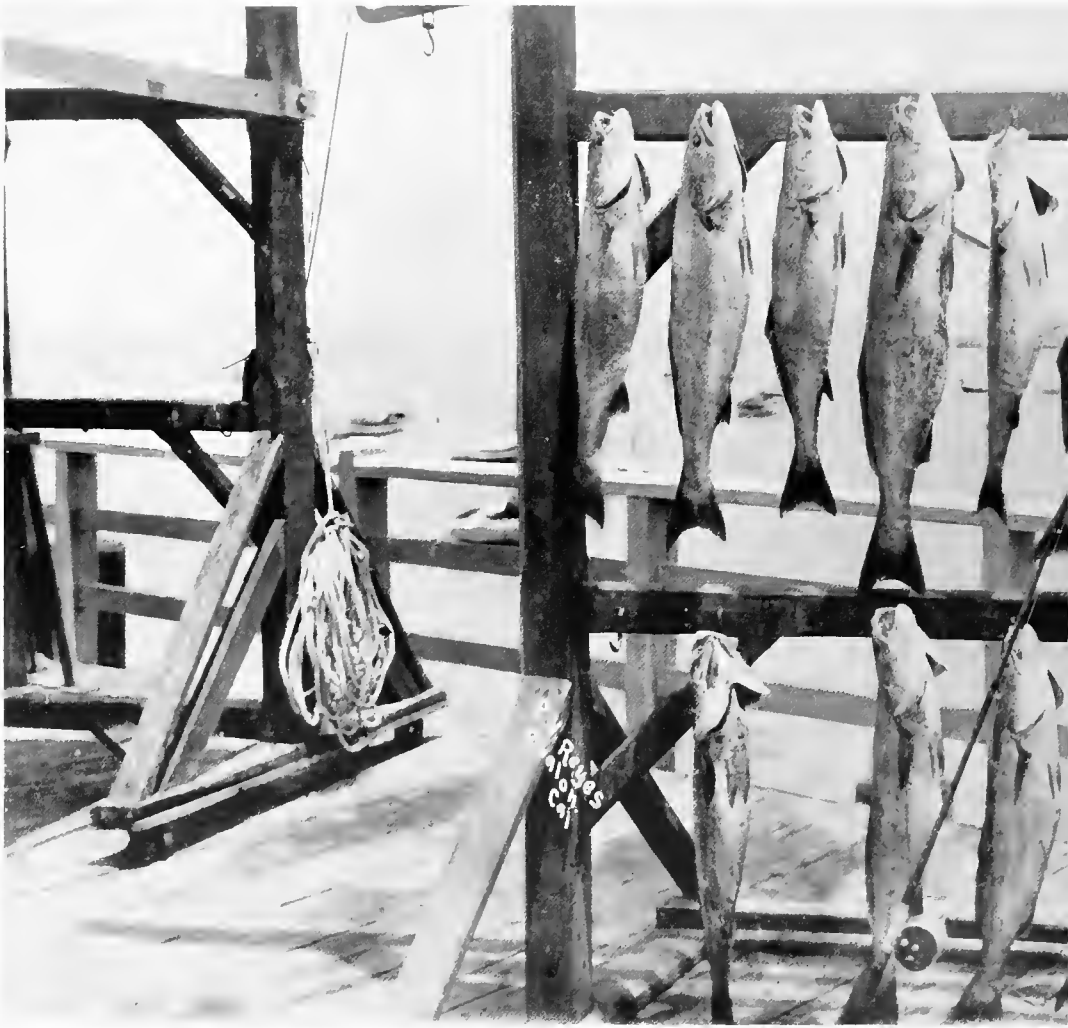
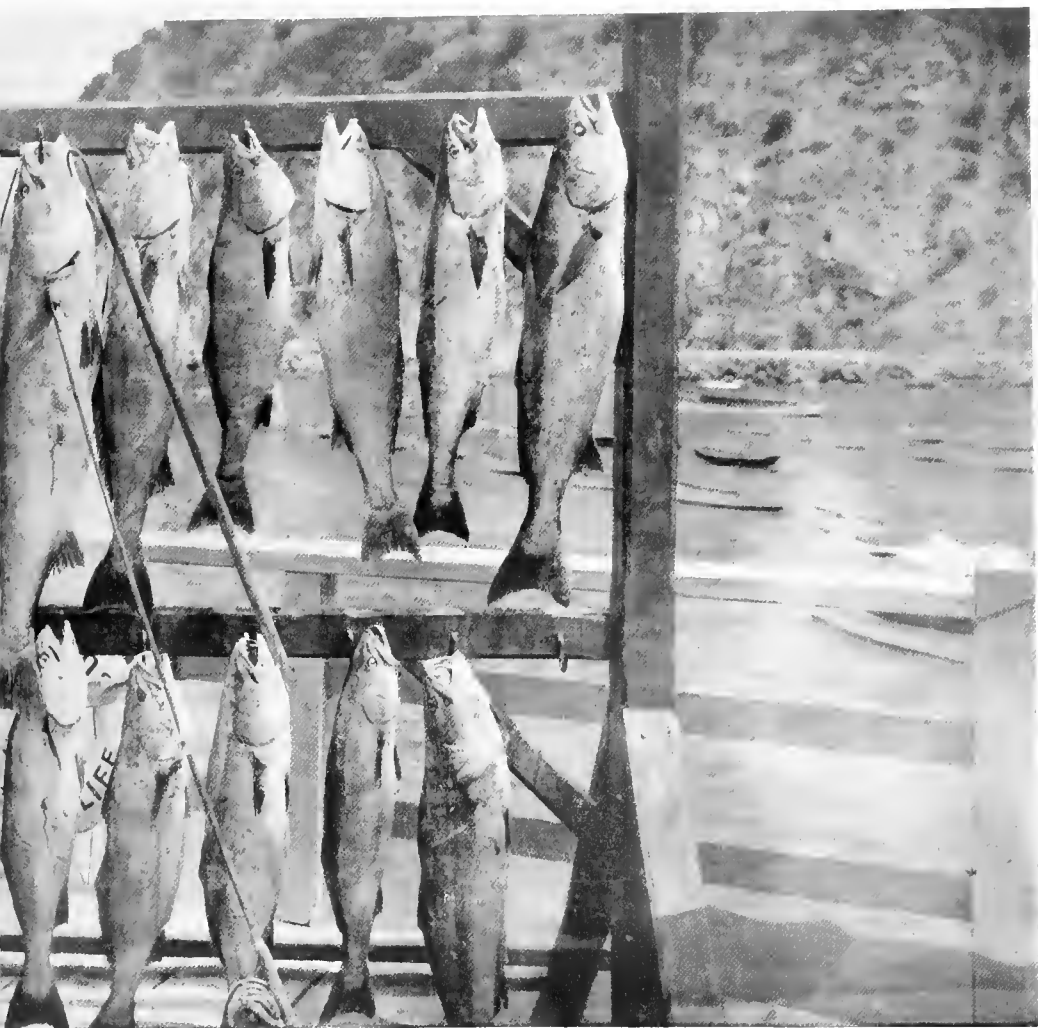


Fig. 23. A Morning's Catch of White Sea Bass (four rods).



atalina Island, California. Average, 35 lbs. Photo by Reyes. p. 136.

WHITE SEA BASS AND WEAKFISH

known as the White Sea Bass, veritable monsters compared to the little weakfish of the Atlantic. There are two species: *C. macdonaldi* of the Gulf of California, which attains a length of four or more feet and a weight of two hundred pounds, and *C. nobilis* of Santa Catalina, which ranges up to one hundred, though eighty pounds is the largest I have seen, and a fifty-three or four pounder the largest I have landed with a rod. The record of the Tuna Club was taken some years ago by Mr. C. H. Harding of Philadelphia, who caught a sixty-pound fish after a gallant and graphic contest for supremacy; and other notable catches by Tuna Club members are as follows:

LARGEST WHITE SEA BASS (*Cynoscion nobilis*).

Edward M. Boggs, Oakland, Cal., season 1899	58 pounds.
Wm. P. Adams, Chicago, Ill., season 1903	52 "
C. H. Harding, Philadelphia, Pa., season 1904	60 "
E. C. Wilson, Denver, Colo., season 1905	36 "
¹ A. L. Beebe, Portland, Ore., season 1906	34 "
¹ Arthur J. Eddy, Chicago, Ill., season 1906	34 "
¹ Mrs. E. H. Brewster, Avalon, season 1907	53 "
¹ S. A. Barron, San Dimas, Cal., season 1908.	40 "
¹ A. L. Beebe, Portland, Ore., season 1908	40 "
² A. L. Beebe, Portland, Ore., season 1909	46 $\frac{3}{4}$ "
¹ J. W. Frey, Los Angeles, Cal., winter season 1909-10	51 $\frac{1}{4}$ "
¹ Benjamin Thaw, Pittsburg, Pa., season 1910	44 "
¹ A. E. Eaton, Avalon, winter season 1910-11	38 "
¹ Guy Beddinger, Chicago, Ill., season 1911	44 "
John B. Dempsey, Cleveland, Ohio, winter season 1911-12	46 "

These bass are liable, as the yellowtail and *Caranx* of Florida, to a sudden madness or insatiate and overwhelming frenzy or blood lust. At such times large schools will start at full speed, sweep up the coast like a band of ravenous wolves, enter the bays, as Avalon, driving small fry and even squids ten feet long before them, and creating a panic in fishdom. At such a time they will

¹ Taken under tackle specifications of Light Tackle Class.

² Taken under tackle specifications of Three-Six Class.

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bite at any lure, even a white rag. I have seen a dozen boats hooked on to these fishes being towed this way and that in Avalon bay, men and women shouting and screaming as they hooked or lost the game. I recall seeing one light skiff being towed rapidly from one side of the bay to the other, the sole occupant a woman, who held a stout hand-line on which was a white sea bass that later on was found to weigh eighty pounds.

My own experience was no less laughable. Mr. Frank T. Rider of Pasadena and I occupied a light flat bottom boat and were standing, he in the bow, I in the stern, casting with our rods. We both immediately hooked large fishes, Mr. Rider's rushing directly ahead, while mine surged off astern, so that we presented the ludicrous appearance of a piscatorial tug of war. If I remember correctly, we saved the day. Mr. Rider's fish weighed fifty-four pounds, and mine fifty-one. Mrs. Rider took with her light rod several of these large and splendid fishes, which departed as rapidly as they came.

The bass are, in a sense, night feeders, though I believe this is true of almost all fishes. The bass devotes its nights to charging the elusive flying fish. By standing on an elevation, at times the little bay of Avalon can be seen a seething mass of phosphorescence, as these fishes rush about, after the active fliers which come out on the beach. Often a dozen will be found in the anchored boats in the morning. Several people have been struck by flying fish which were flushed by sea bass. On one occasion a lady I was rowing turned to avoid a flying fish, which struck her in the back. A woman sitting on the beach one night was almost thrown into hysterics by having a flying fish, chased by sea bass, alight in her lap.

These splendid white sea bass completely fill the imagination of the angler as to what an oceanic game fish should be. They recall the salmon; are long, slender, yet well proportioned, sedate, dignified, with undoubted cunning, at times scorning all the appliances of the angler.

In colour the fish is gray above, or olive in the water, but

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out of it a splendid peacock-blue, almost iridescent, especially about the head. The belly is a rich silver.

The Gulf of California species is plentiful near the bores of the Rio Colorado. It enters the little bays or indentations north of Tiburon, especially near Altar, following up the tidal bores to feed upon the small fry. Colonel C. P. Morehous of the *Tuñā* Club informed me that he cast for them from the beach here and took specimens that ran up to one hundred pounds. I caught them in the lagoon off the Rio Yaqui, though not of this size, and had some interesting contests with them along the picturesque coast north of Guaymas. The Hon. C. G. Conn, who has made the trip in his yacht *Comfort* from Santa Catalina to the Gulf several times, is, doubtless, more familiar with this fish at its largest size than any other American angler. His photographs show some extraordinary fishes, both as to size and weight; bass that required heavy tackle, muscle and endurance to play and bring to gaff.

It is more than useless to attempt to compare the game qualities of various fishes, hence I can but say that the white sea bass of the Santa Catalina Channel averages well with the yellowtail. In several instances, I have taken five of these fishes in a single forenoon, not one hundred feet from the shore of Avalon Bay, each fish weighing fifty pounds, and each fish giving me a play beyond criticism. Again, I have trolled and cast over a school of twenty, thirty, forty, fifty pounders for days and never had a strike. Still again, I have heard anglers say that taking the white sea bass was like 'logging.'

The moral of all this is that no two fishes are alike, and no two of any kind agree in fighting or other qualities. I have fought hours with a tuna, and the following year saw a man, who had never taken a fish larger than a trout, land a tuna in ten minutes, a catch which convinced him that all the stories about the desperate playing of this fish were pigments of the imagination. The explanation is that a certain fish may be sick, starved, weak from spawning, or incapacitated for a struggle

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for various reasons, while the next tuna, the following day, may be a tiger and a devastator of tackle. This is true of all fishes and the experience of all seasoned anglers. It is this very uncertainty that makes angling what it is, and I hold that to see a school of white sea bass of the largest size lying in the great kelp beds is worth while, even if they will not bite.

This fish has been seen as far north as Vancouver, but this is rare. At Santa Cruz it abounds and is taken in nets. The Bay of Monterey is a favourite feeding ground ; but the locality best adapted for the angler is Santa Catalina, where the Tuna Club displays some fine specimens, and collections of photographs of the catches of fifteen or more years.

The fishes come in large schools in April or May, depending upon the season. Their arrival is the occasion of a movement of anglers from many places to Avalon, anglers leaving orders with the Tuna Club to telegraph them on the arrival of the fish. The tackle is the nine-ounce rod of the Club, a number nine line, piano wire trace or leader, and a number 10/° hook, all of which can be obtained at the tackle shops of Avalon. The bait is a flying fish eighteen inches long, the *bonne bouche* of the white sea bass.

I was drifting over the kelp beds of Avalon one day with Dr. David Starr Jordan, President of Stanford University, and the authority on the fishes of America, when suddenly we passed over a school of big bass. We were passengers on a glass-bottom boat, which some anglers affect, that they may see the fish, the strike, and all that is going on. We were looking down through the glass window, and as it magnified slightly, it appeared as if we could almost touch the bass. They were about four feet in length, forty or fifty pounders, floating or poisoning in the interstices of the big vine—splendid and impressive pictures of dignity and power.

They paid no attention to the boat, sociability being a characteristic. We observed them a while and passed on ; but I stored up the memory of the place and found it several days later.

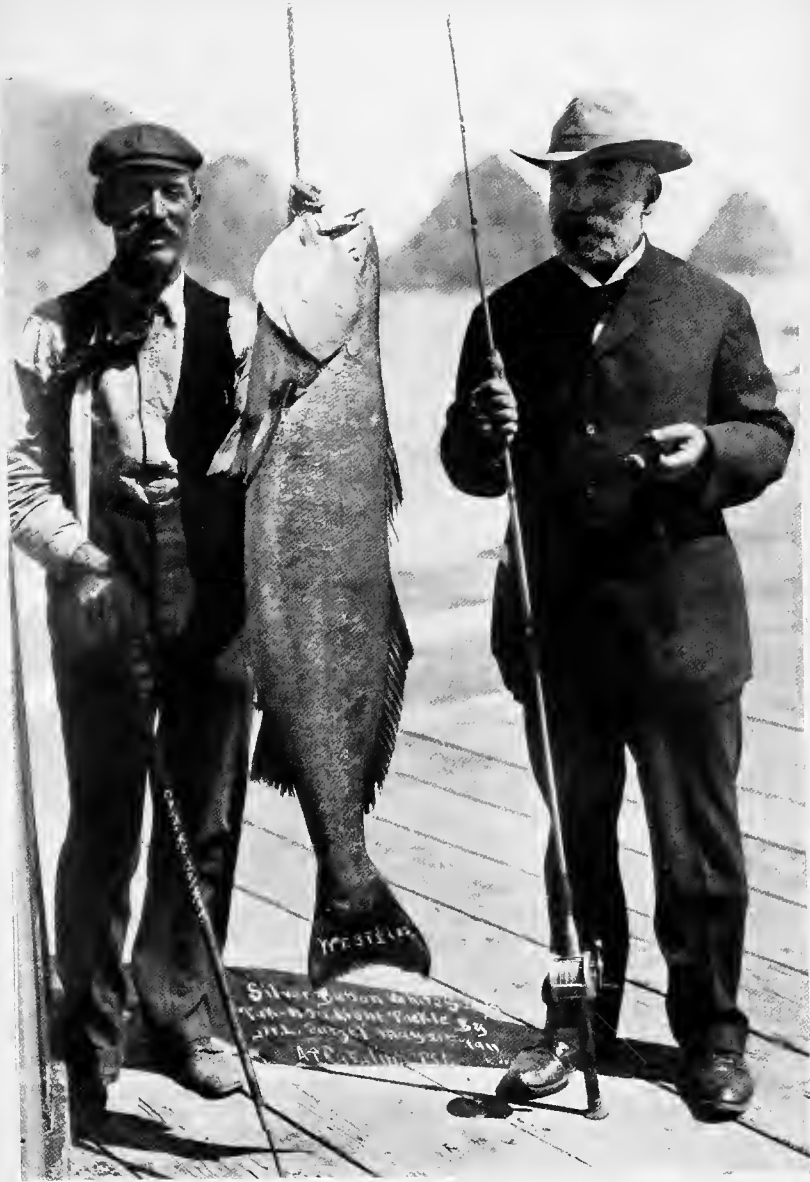


Fig. 24.

White Sea Bass. $39\frac{1}{2}$ lbs. on a 9-ounce Rod. By Dr. L. Putzel, 1911, in Avalon Bay, California. p. 140.

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As I trolled a flying fish by the spot I had a strike. I saw the boiling water at the surface, the swirl, and sprang to my feet and watched the subsequent proceeding. The bass had shot up from below and seized the fish just forward of the tail. It lay on the surface innocent of the hook or me, and worked the bait about as a snake will a frog, trying to point it down its throat head-first. Fully five minutes was required in this operation. Meanwhile I stood ready and when the bait disappeared and the bass started ahead, I reeled in the slack of my line and struck, the little line humming in the sunshine like the string of a lute.

Back came a violent blow as the bass shot ahead, bearing off hard, tearing the line from the reel to the brazen song of the click. Twenty, thirty, fifty, one hundred feet gone before I could stop the fish, and then it was but to change its direction. I was standing, resting the butt in my leather belt, hence could watch the play which was almost entirely on the surface. Several times this fine fish completely circled the boat, and it was only after a spirited contest of half an hour that I began to gain and brought it alongside, to see it rush away one hundred feet or more at sight of the gaff, and involve me again in the toils. No fish could have made a finer fight, nor a more gallant play for its life. When at last it came surging along the quarter on short line, and I led it into the sphere of action of the gaffer, who gaffed it cleverly directly under the mouth, held it for a moment while it tossed the spray over the boat, I confess that my triumph was tempered by more than a tinge of remorse.

‘The pleasantest angling is to see the fish
Cut with her golden oars the silver stream
And greedily devour the treacherous bait.’

One cannot but regret that so gallant a fighter could not have escaped; at least it had every chance, a thread of a line, that used for five-pound black bass in the streams of Canada.

The white sea bass often enter the Bay of Avalon and lie

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beneath large schools of anchovies or sardines. I have seen the same at Monterey. If the angler will cast an empty hook into the throng, impale a live fish, then pay out line, in a moment he will have a strike. Apparently, the bass is unable to resist the temptation of a live bait or a wounded fish. The Wilson spoon is at times an effective lure for this fish, day and night, when other baits fail. I have trolled for hours off the coast and tried everything but live bait when hundreds of the biggest bass were lying in the kelp in plain sight, yet never deigned to notice me.

In Florida almost invariably I towed a four-foot, boat-shaped car of wire mesh and wood with a door in the top. This my boatman filled with live bait, if we were going to fish for cavally, and it was always irresistible. If the boatmen of Santa Catalina would adopt this plan, or build small wells in their boats, after the fashion of Florida smacks, they would rarely draw a blank with the big weakfish of the Pacific coast.

CHAPTER XV

WINDOWS FOR SEA ANGLERS

“I wonder why they have three classes of tickets in a glass-bottom fishing boat,” queried the tenderfoot, who had a third-class ticket. Just then the anchor went down and the captain sang out: “First-class passengers, fish; second-class, bait hooks; third-class, clean fish.”

Avalon Ancient Story.

GLASS-BOTTOM boats were not invented for anglers, but I conceived the idea in 1862, on the Florida reef (as doubtless others had before me), to enable us to find rare corals and the rare queen conch in comparatively deep water, upon which I would dive down and bring them up. At Santa Catalina Island, California, an extraordinary fleet of glass-bottom craft has been developed by the exigencies of the situation, and mainly used to enable the passengers to examine the splendid sea bottom, the floating gardens of the sea. Many anglers rent the small glass-bottom boats and fish from them, sitting comfortably and gazing down through the plate-glass window, so watching the game as it approaches and takes the lure.

No picture of the imagination could be more beautiful than these Catalina submarine gardens. They are well named, as they are literal gardens of the sea, a band of green seaweed, of infinite variety, size and shape, encircling the sides of a mountain peak twenty-two miles long and from four to six wide which rises from a base nearly a mile beneath the sea to an altitude of one-half mile above it. The shores are precipitous and abrupt; the zone of seaweed is just at the surface and encircles the entire island. In the bays at the mouths of the cañons, as Avalon, Descanso, Cabrillo and others, there is shoal water and a sandy

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bottom. The most attractive picture the angler sees through the glass-bottom boat is the maze of vines in blue water, popularly known as kelp. These plants of the sea are of vast length, often one or two hundred feet, with huge leaves which coil and writhe in the current, lying on the surface at low tide or deeply covered at the flood, but always the home and resort and protection of a score of animals of the sea and many game fishes.

We may in imagination follow the angler in the glass-bottom boat, peering down into the ocean through the plates of glass. They slightly magnify, and as the boat moves along every object upon the bottom is seen with great distinctness: delicate surf-fishes of silvery hue, imitating the bottom; famous in that their young are born alive; small flat-fishes related to the flounder, or halibut, whose eye passes around so that in the adult fish both are upon one side, the upper. We can see the delicate furrows in the sand that the incoming waves carve on the bottom of the sea. There is the trail of the trochus shell, a veritable submarine plow, that deflects to avoid the attractive collar egg-case of another shell. Deeper becomes the water, and we begin to see the diaphanous haze or colour of the sea, now a faint, tremulous green, or a suggestion of blue. A school of frightened sardines dash into view, eyes staring, black, white, a flash of silver, and they are gone. Small kelp-fishes, sinuous and dust-coloured, are seen on the bottom; a sea-anemone that would fill a saucer lies in the sand, covered with bits of shell—a queer defence. Deeper still becomes the water, and a series of ejaculations come from the voyagers as into view merge the radiant gardens of the sea. If a moving-picture machine were projecting its views into the water a better idea of a novel moving-picture could not be imagined, as every moment there is a change—new plants, new fishes, strange animals, and the gentle waves aid in this, by unfolding and folding the splendid verdure of the sea. It is indeed a moving-picture, and each observer peers down into the home of some of the most interesting and little-known of ocean wonders.

The boat is now within a few feet of the shore, the stern in



Fig. 25. The Sand Bass. Santa Catalina Island, Pacific Ocean.
Photo from life by Reyes. p. 144.

WINDOWS FOR SEA ANGLERS

water but two or three feet, the bow over blue water, so sharp is the descent, and the observer sees that he or she is looking at the side of a submarine mountain, on the slopes of which is an ocean forest, in which the sardine bait dangles. There is a gentle swell, and as a wave comes surging in, it lifts the masses of olive, golden and brownish weed, folding it gently toward the shore, then sending it back undulating and coiling, to be repeated again and again. Every time this veil is lifted some strange fish or animal is uncovered. Now it is a sea-slug, a huge black animal, perhaps a foot long, with flapping, wing-like organs over its back and short antennae or feelers. If this creature is disturbed it throws out a splendid purple ink in resentment, which is irritating enough to stop any predatory fish. Over almost every green, algae-covered stone lies another slug, the holothurian or sea-cucumber, eaten by the Chinese. It is a cousin to the star-fishes, and in it lives a little silvery fish, the *Fierasfer*.

Under every rock with its investment of coralline, red, blue or yellow sponge, is seen a jet-black array of bristles *en charge*. This is the black echinus, not the same fellow of Florida, but with shorter spines, equally disagreeable, a living pincushion. Near it are two long spines waving to and fro, telling of the crayfish, green instead of yellow, as in Florida; in fact, the looker-on at this marine moving-picture show soon becomes aware that almost all the animals differ from those of the Atlantic or other parts of the world. All this time the guide is describing the wonders, and that he has the various points named, the 'Grand Cañon,' the 'Yosemite,' etc., and gives to the various animals weird and uncanny names, does not lessen the gaiety of the scene or situation. Sprawled over a rock is the octopus or devil-fish, emitting its cloud of ink. Specimens have been seen on the coast with a radial spread of twelve or fifteen feet. Watch it poise and crouch, then send out one of its snaky legs or tentacles at a hapless crab. If the observers are very lucky they will see a cousin, the paper nautilus, which is found here at certain seasons.

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and one of the rarest and most interesting animals elsewhere. It builds a shell of diaphanous material by holding up its two shell-secreting arms, and in them secretes its soft shell, here depositing its eggs. But the shell is not essential to it, being a mere cradle for the eggs, and the argonaut will leave it and wander about, and at times deserts it altogether. After a storm twenty of these radiantly beautiful shells have been found on the island beaches.

As the boat moves out into deeper water, dragging the bait, the pictures change, and we now see a wonderful mosaic. The huge leaves of kelp are massed, and through them bits of vivid turquoise-blue, the colour of the ocean, appear more than ordinarily vivid contrasted with the greens of the kelp, ranging from dark to light green, yellow and olive. The sun sends visible beams and shafts of light down through the azure windows, so that each delicate jellyfish and many minute animals, as *Sapphirinae* and *Salpae*, stand out in brilliant relief, forming with the loops and portières a charming scene, only to be imagined in the deeps of the Californian seas. Each leaf is a study, as it is ornamented, silvered, with dainty corallines in fantastic shapes. Here are crabs of red and green clinging to it, so deftly disguised by nature that it is almost impossible to see them, having assumed this colouring as a protection. Down through the windows, and the interstices of the kelp, is a deep, blue mass, so vivid as to be startling. The boat stops, and we make it out to be a school of perch, lying so closely together that they appear to be a solid mass of azure, their backs a vivid blue seen through the blue of the ocean depths. The water is so clear here that one may see the bottom in forty or more feet.

As the boat drifts on we see the rocks and realize that we are looking down the side of a precipitous mountain. Here altogether new creatures are seen; great crabs, huge sea-anemones, some of smaller size and of a brilliant red hue, looking like strawberries. Wedged in the rocks is a small shark with a white spine in front of each fin, one of the most ancient types, related to the

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Port Jackson shark. In a little sandy bay is a black corkscrew-like object, the egg, Nature having provided this case to prevent it from washing ashore. Almost from the start, in the kelp, but never on the sand, we have seen a brilliantly coloured, orange-red fish, the red angel-fish, so tame or inquisitive that it can be very carefully studied. With it are many rock-bass with beautiful eyes, and young blue-eyed perch, and on rare occasions the sand-bass.

Directly before us, seen as the kelp rolls away, and then only when pointed out, is the most remarkable of all these fishes, the big kelp-fish. Now you see it, now you do not, though it is directly under your eyes, but so extraordinary is its resemblance to the kelp that even the skilled observer loses this wonderful mimic as it winds back and forth before his eyes. The reason of this is that the kelp-fish assumes the exact colour of the weed. It has a long fin and is mottled, just as are the leaves, with dashes of white, resembling the corallines. This is sufficient in itself to disguise the fish, but as though not satisfied, it hangs in the kelp, head up, or down, in a perpendicular position, so its resemblance to a part of the leaf is exact. Very like a bird it is in the tops of these kelpian forests, one hundred feet above the bottom. Like a bird, it builds a nest by winding a cord of eggs about small bunches of weed ; the male, in brilliant nuptial colours, watching over it and violently attacking other fishes.

Crouching amid the rocks we see two kinds of sculpins, with large heads and extraordinary fins, wonderful mimics of their surroundings. The fish with the bands is the convict-fish, a very mild-mannered little fish. Projecting from some crevice will be seen a sharp-nosed fish with mouth open, displaying snake-like teeth. This is the local sea-serpent, moray or sea eel, which attains a length of four feet ; a most disagreeable creature when taken into a boat, coiling and striking like a snake and quite as vicious. This is an ally of the fish to which the epicures of old Rome fed slaves, to improve the flavour. Up out of the blue depths may come a ponderous form six or seven feet in length, a perfect black bass, yet moving slowly and with certain dignity through

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the great arches of kelp. This is the black sea-bass, peculiar to California.

As we slowly drift along we suddenly come upon a school of beautiful and shapely fishes. They resemble salmon, but are darker above and silvery below. None are less than four feet in length, and they weigh not less than forty or fifty pounds—a sight for the angler. They are white sea-bass, one of the finest game fighters of the region. If the boat drifts clear of the kelp into blue water we may catch a glimpse of the most beautiful of all the Californian fishes, the Dorado, or dolphin, a game fish which attains a weight of seventy or more pounds. The long, sharp-nosed fishes are barracudas. The sight of hundreds of eyes as we drift over them is one to be remembered. The barracuda invariably runs in schools while its Florida relative is solitary. Coming up from the bottom is the attractive whitefish, and the sheepshead, the latter fish with a massive, domed head of velvet-black and white lower jaw, its body alternate red and black stripes. This is a friendly and familiar fish. Its young are blue and very attractive. If very lucky, and in the summer season when the glass-bottom boat is crossing deep water from point to point, the observer may see the fine Catalina swordfish, the most spectacular of game fishes. When hooked he constitutes a whole moving-picture, as he jumps forty or fifty times, in frantic and fierce endeavours to escape.

In deeper water the bonito, the albacore and on rare occasions a leaping tuna may be seen. Some years ago a school of large tunas came into Avalon Bay, and those who chanced to be in glass-bottom boats saw scores of them dashing away, while the glass was fairly obstructed by flying fishes seeking the bottom of the boat in terror. When the boat with a window drifts slowly over greater depths the moving-picture show is often made up of remarkable jelly-fishes. One, a white and lavender-tinted meteor, has been seen in early spring with a train of tentacles estimated at fifty feet in length. Often they fairly cloy the water, and scores can be seen pulsating by. A remarkable black jelly-fish is

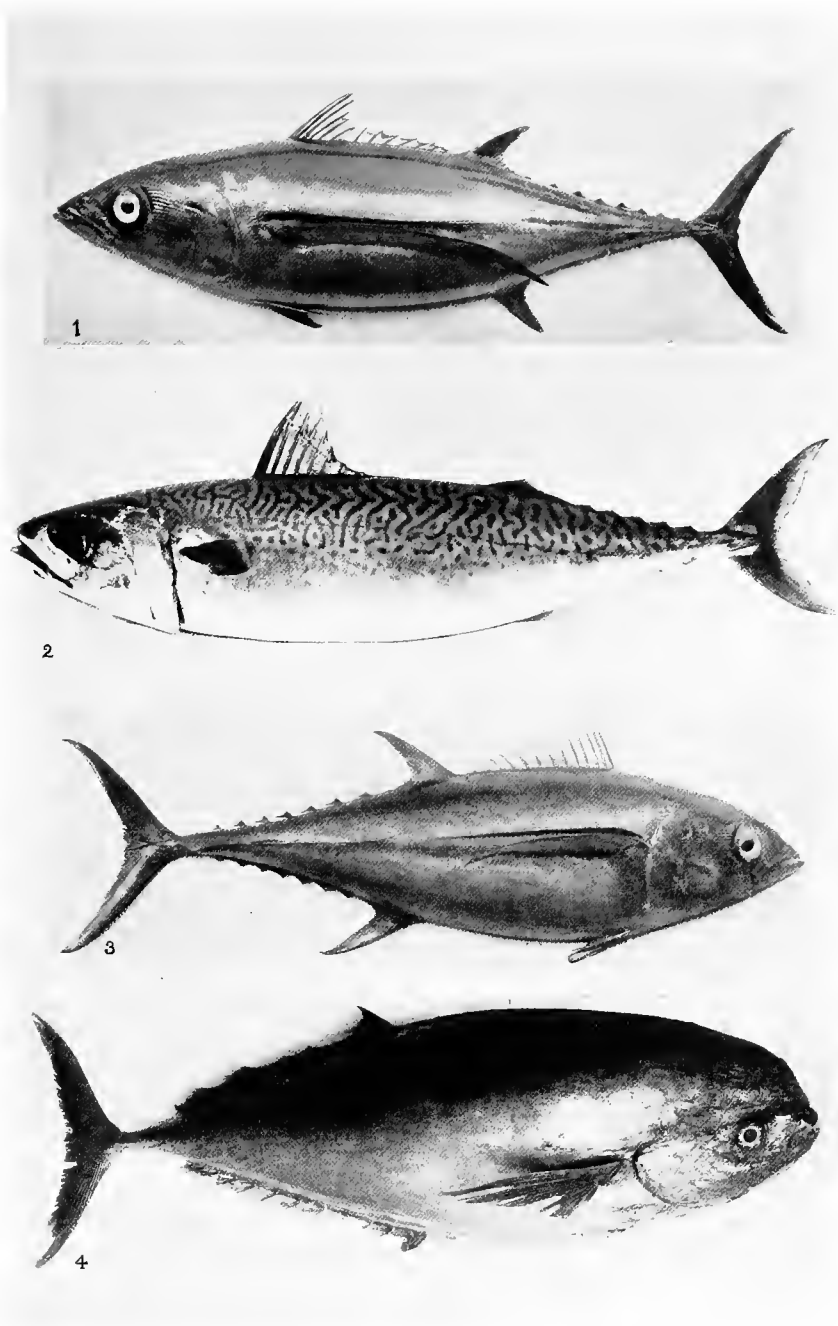


Fig. 26. Game Fishes of North America. (Pacific Ocean).

1. Long-fin Tuna. 2. Pacific Mackerel. 3. Yellow-fin Tuna. 4. Luvarus Jack.
Photo by Reyes, taken in Santa Catalina Channel

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to be seen, and in the summer if a small glass-bottom boat is rowed offshore a short distance a veritable fiesta of these wonders of the sea will be witnessed. Some are in chains or rings ; others appear like fluted vases, and every possible shape and figure may be observed. If a more graphic scene is desired take the glass-bottom boat at night and drift around the kelp beds. Then all nature seems ablaze ; myriads of worms, invisible during the day, now come whirling to the surface and glow like lamps. Every drop of water when disturbed is a blaze of light, and in the depths a large barrel-shaped object, the *Pyrosoma*, is seen, sparkling with blue light. Minute objects of all colours of the rainbow flash under the glass, and the sea appears to be filled with meteors, comets and rains of fiery matter—a moving-picture staged in the dark recesses of the sea.

All this time we have been drifting on. The shining lure, a fresh sardine, has dangled in plain view ten feet below the window. Suddenly, up from the abysmal deeps of vivid blue, shoots a meteor-like form in green, blue, yellow and silver. It is a fish four feet in length, splendidly active. It darts by the lure and the azure sea seems to open as it disappears, as in wild confusion you grasp the rod and attempt to stop the shrieking click. You have seen through the window the yellowtail strike, and now the question is how to land him.

CHAPTER XVI

THE YELLOWTAIL OF CALIFORNIA

'Long as a salmon, if not so stout,
And springy and swift as a mountain trout.'

Innes Randolph.

YOUR angler, ancient or modern, does not give himself over entirely to luck or chance. At a little town outside of Herculaneum I noticed a wave of lava from Vesuvius perched on the top of a stone wall, arrested in an extraordinary manner. My cicerone informed me that the flow had been arrested by a statue of the Virgin held up by the local priest. The simple villagers took no chances, and not so far away, across the Mediterranean beyond Sorrento and Capri, they bring out the Virgin to propitiate luck in fishing. In Japan the angler or the fisherman appeals to Ebisu, the god of the fishermen, whose statue, holding a fish, you may see in all Japanese collections. You may buy prayers to Ebisu in the shape of long red ribbons of paper, which are to be burned to the god. In very old times nearly all fishermen gave votive offerings. It may have been a coin tossed into the fountain of Trevi at Rome, or a procession at Messina or an offering of eels at the altar of the temple of Neptune. To-day the votive offering is more often the salutation, 'good luck!' or the verse of Walton where Piscator says to Corydon, 'Propitious fortune bless my floating quill.'

When one goes yellowtail angling, whether in a launch or glass-bottom boat, no one wishes him good luck or serves up eels to the gods, for the very reason that if there is a yellowtail about, it is more than a chance that he will take the lure, as he is the fish of the people of Southern California, as the bluefish is to the dwellers

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in the North Atlantic states. I have seen the bay of Avalon, ordinarily as smooth as glass, turned into a miniature maelstrom by seemingly ten thousand fishes, and all over twenty pounders. They came in like a raging band of wolves and tinted the waters of the beautiful crescent a golden hue. The roar of the waters quickly attracted the attention of the townspeople, and men, women and children ran for lines and rods, and then for the beach.

I was one of the fortunates who secured a boat and drifted in the midst of the utterly frantic school that was driving a large shoal of anchovies in upon the shore, charging into the mass, glutting themselves, killing from mere blood lust and frenzy, utterly crazed with excitement and lost to all sense of security as they surged along the surface to catch the small fry that made loud splashes, the combined sound of which produced a roar as of the sea breaking on some distant beach, while the waters of the bay were converted into silvery foam, as though a weird windless storm was tearing along the surface.

The yellowtails drove the anchovies in upon the beach where they formed a solid mass into which the insatiate wolves, for such they seemed, plunged. The anglers rapidly increased in numbers, and casting out from the beach had strikes on the instant, as the open water was alive with big fishes racing up and down with the speed of light. In a short time twenty or more yellowtails had been landed and were threshing about on the beach, the situation being rendered more animated by the shouts and cries of the victorious anglers on beach or wharf or in boats, and by the continual augmentation of numbers with fishing tackle of all sorts and kinds. The anglers in boats were being towed this and that way, the big fishes breaking the heavy hand-lines, taking hooks, or fouling other lines. As I looked downward as I played a fish I could see three or four lines beneath me belonging to other boats, all approaching ultimate and fatal confusion.

I had landed in a short time three or four yellowtails, then

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stopped to view the excitement, the result of this extraordinary scene. Children stood, knee-deep, in the water throwing out the small fry in pails. Anglers lined the beach, all endeavouring to cast into the throng; as a consequence, the lines became inextricably fouled or entangled, and a war of words followed. Big fish carried away lines or broke them. One man fell off the wharf, partly jerked over by a big fish, yet swam, holding his rod up, and ultimately saved the game.

For a half hour this extraordinary 'run' of yellowtails continued, when they withdrew as suddenly as they had appeared, passing up the coast, leaving the population of Avalon, dazed with excitement, to collect and count the spoils, which, fortunately, could be used and were shipped to Los Angeles. The fish that gave this remarkable illustration of its fighting, game and pugnacious qualities, is well named the yellowtail, but is known also as the white salmon, to which it is not related. It looks not unlike the chinook salmon, but is longer, more slender, and graceful, an ideal fish in form and beauty of personal appearance. It is from three to nearly five feet long, and ranges up to eighty pounds in exceptional fishes; painted with the yellows of California in old gold or lemon tints on its tail and fins, while from head to tail is a brilliant yellow stripe, making it a marine cavalryman. The upper portion is olive-green; the lower a bright silver purely minted and without a blemish. The tail is powerful and forked. The head large, jaws powerful, mouth large, and the eye full and brilliantly coloured. The dorsal fin is long and prominent, as its specific name *dorsalis* indicates.

Such is the fish of the people of Southern California, *Seriola dorsalis*; a distant cousin of the mackerel-like fishes, a nearly ally of the Florida amber-fish and the little striped pilot-fishes found about sharks and large swordfishes. It has kinsmen in numerous amber fishes in various parts of the world, as *S. hippos* of Australia, the 'Sampson fish,' *S. lalandi*, of the West Indies and east coast of Florida, and the big *S. dumerili* of the Mediterranean. I have seen a photograph of a seventy-pound amber fish



Fig. 27.

A Lady's Catch. 28 lb. Yellow Tail, by Mrs. M. C. Dickinson, Avalon Bay, Cal., U.S.A. p. 152.

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from Hawaii, and the same fish is known as Ao in Japan. If you wish to trace the ancestry of this splendid fighter a fossil has been found in Tuscany that was once the bottom of some ancient sea.

The yellowtail is found in its greatest numbers, at its best, at San Clemente and Santa Catalina islands, ranging south to Mazatlan and north to the bay of Monterey. It is migratory, appearing in April and disappearing in December, though if the winter is dry, mild and stormless, large numbers remain about the islands, and I have taken them from the wharf at Avalon every month in the year. Exactly where the myriads of these big game fishes go in winter is not known, but I have seen individuals taken on the grouper banks in seven hundred feet of water in February; hence they may descend to deep water or go offshore to some deep bank into

‘The vast unseen mansions of the deep
Where secret groves with liquid amber weep,
Where blushing sprays of knotty coral spread,
And glint the azure with a deeper red.’

While this California amber fish charges its prey in shoals, at times, in the summer, it breaks up into small groups of four or five up to twenty, not swimming together entirely, but associating together. So that if you toss over some bait four or five fishes may be expected, showing that they are swimming together.

The tyro can catch the yellowtail providing he has the strength, and they are caught daily at Avalon in summer by men, women and children. Yet I have seen a woman almost pulled overboard by a yellowtail, children jerked from the wharf, and men thrown into the toils of the hysterical frenzy of inaction known as buck fever to the extent of trembling, dropping the rod, completely overwhelmed. This is due to the fact that the rush of the fish and its continued struggles are almost irresistible. In trolling the fish strikes on the run, the reel makes a blare of

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sounds, and the rush down is a splendid example of power and peculiarly characteristic of the fish. Zip-zip-zip! it will go, each impetus tearing off feet and yards of line, and there is but one thing to do—let it go. Then the fish will sulk like a salmon. I have often looked down and watched a fish fighting on a friend's line, its side against him, head down, fighting every inch and foot and fathom, often breaking away to take it all again, never giving up.

I cannot better convey to the indulgent reader my own impression of the yellowtail than to describe several days' fishing experience with it in May and in September. It should be said that the yellowtail is so common, so always in evidence, that it is taken as a matter of course, but I venture the opinion that there is no fish in the sea of its size and weight, that is a better or more sustained and courageous fighter. For this reason the directors of the Tuna Club devote particular attention to it in deference to these points with a view to prevent the over-fishing of the free biter and to elevate its catch to a high standard, with fair play as a basis. In other words, the yellowtail is a splendid game fish, and the Club insists that its members, at least, shall give it the advantage. Hence when an angler takes a thirty or forty pounder on Tuna Club tackle he has accomplished something worth the while, and proved himself an angler of finesse and skill. The prizes are given in the chapter on Angling Clubs.

The tackle is of two kinds: (1) the nine-ounce rod. This was devised by Mr. Arthur Jerome Eddy of Pasadena and Chicago, and is sufficiently large to take a sixty- or seventy-pound fish in an hour or so. It was with this tackle that Mr. Wm. H. Simpson of Whalley, Lancashire, England, took the record fish of the Club, sixty and one half pounds. This fine fish, which has never been beaten, has been placed in the fish department of the British Museum, with a replica of the rod and line; (2) the so-called 3-6 rod. This was suggested by Mr. T. McDaniel Potter of Los Angeles, a director of the Club, to render the capture of the yellowtail more difficult. The 3-6 Club was organized to specialize the

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tackle, but is a class of the Tuna Club. So many 'buttons' and prizes may seem puerile and unnecessary to the seasoned angler, but there is method in the madness. Thousands of men visit the islands and nearly all fish. It is fair to say that fifty per cent. have never heard of the ethics or high standards of sport, or even dreamed that a fish should be given a fighting chance for its life. If such men were not attended to, and taught, they would go out with four or five hand-lines or small ropes and their definition of sport would be to see *how many* fish they could bring in. In 1886 this was the every-day disgrace of the most beautiful sea angling region in the world. Boats went out with a number of hand-lines and tons of yellowtails were brought in, many to be hung up and photographed, then thrown into the channel.

Listen to William C. Prime on this subject in *I Go a-Fishing*, written years ago :

' There is always that distinction to keep in mind between going to get fish and going a-fishing. There is no possibility of convincing the general run of people that the old angler has his enjoyment in the going for fish, and that the getting of fish is but a minor part of the day's pleasure. This distinction grows more and more marked as we grow older, The young angler—I speak of young in experience, not young in years—the angler who has not had many years of enjoyment in the gentle art, *counts much on the fullness of his basket*, on the rivalry with companions, on the glitter of his catch, when to appreciate the innumerable joys which dwell on the banks and in the waters of the rivers and lakes, and which are surely to be taken whenever one goes a-fishing. And therefore the old angler has always a successful day, catching that which he went out to catch with great certainty, and coming home with a load of beauty in his heart, and beauty to talk and tell about, though there be not a fish in his creel.'

It was to stop this gross over-fishing, and to inculcate an idea of sport as it is understood by civilized people, by gentlemen, that the Tuna Club is organized for gentlemen, and it is a matter of gratification to the distinguished men who joined the Club, and lent to it their moral support, that a complete

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and utter change has been brought about at this greatest of the world's angling centres. There is not a boatman at Avalon who will provide a patron with a hand-line. Such an appliance is not carried, and you must fish according to the fair and eminently just rules of the Club or take a rowboat and row yourself. The result is that the outfit of the men, the fine rods and reels, the sportsmanlike lines, appeal to the novice and he tries for the buttons or the various prizes, valued at several thousand dollars, offered by the Club in all classes of angling. The result has been, the Club has stopped the waste, inculcated a fine sportsmanlike feeling, and caused the adoption of a high standard, that has been copied by allied clubs and associations all over the country. The club considers this a step toward the consummation of the hoped-for conservation of the sea fishes, a desideratum devoutly needed all over America. I trust the reader will pardon this digression, which will suggest that the anglers of America and England have the honour of the sport at heart, and that a killing is not the only object in view.

In fishing for yellowtail it is usual to use either a 6/° or 10/° hook when the fish run to but twenty-five pounds, and sardine bait with a short-swivelled piano-wire leader. If the fish are running up to forty pounds, as they frequently do at San Clemente, where Mr. Simpson took his sixty and one-half pound fish, a larger hook is used, of the O'Shaughnessey type, and the bait is a flying fish, which is about eighteen inches long, weighing from a pound to a pound and a half. The line is doubled for six or eight feet near the wire leader or trace. The fish is gaffed, never netted, the gaff handle being five or eight feet long and often fastened to the launch with a rope.

Such a bait is paid out from the multiplying reel, which holds six hundred feet of line, until the eighty or one hundred feet is out ; then the launch moves slowly alongshore, at times not one hundred feet from it, following the line of kelp with which the islands here are surrounded. The ground is in the lee, and while twenty or forty miles offshore, the water is smooth as an inland lake, pro-



Fig. 28. Yellow Tail Fishing. Light Tackle (6-oz. Rods, 6 Thread Lines). Experts of the Tuna Club, California, U.S.A., Playing 25-pound Albacore and Yellow Tail on 6-oz. Rods, off Cabrillo Santa Catalina, California.

1. Mr. H. Ormsby Phillips, of Pasadena, at a critical moment. 2. Mr. Joseph Banning's Rod after 30 minutes. 3. Mr. Banning playing a Bonito. 4. Going Home—the boatmen steering with long strings fastened to the wheel amidships. 5. Mr. Phillips's Catch with a 6-oz. Rod. (Photo by Mr. H. Ormsby Phillips and Mr. Banning). p. 156.

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tected by the lofty cliffs or mountains. The water is a blue of indescribable beauty and intensity, and filled with radiant jelly fishes and other forms, and affording vistas into the halls and parterres formed by the kelpian forests which, olive-hued, are veritable palaces of the sea and through which the blue of the ocean forms a splendid picture.

While passing the lofty cliffs which reach away up into deep cañons, we may glance at the convenient equipment of the anglers. If he is angling with 3-6 or very light tackle he wears a belt with a leather socket in which he places the butt of the rod when he is playing the fish, thus obtaining a fulcrum; or he may use a flat-face rubber cap that fits on to the silver tip of the butt, and which can be pressed against the body without trouble. If he is using a heavier rod there is attached to his seat, between his legs, a larger socket for the butt. This is really intended for tuna, swordfish and black sea bass—a necessary fulcrum; but it can be used for a large yellowtail.

When the strike comes, the engineer, gaffer and steersman, who sits directly behind the angler (who are seated in comfortable chairs facing the stern), stops the boat and allows the angler to play the fish to a finish, and generally in twenty minutes it is brought to the gaff. If the fishes are extremely plentiful the launch is stopped altogether and allowed to drift, while the boatman tosses over sardines or anchovies and keeps the yellow-tails about the boat, the angler casting for them with a short line. Nearly all the yellowtail fishing is between Avalon bay and Church Rock, within five or six miles, or about a large sea-lion rookery. The fleet of twenty or thirty launches reaches the ground in an hour or less; is always inshore near the rocks, and generally, when the conditions are at their best, obtain between eight and twelve yellowtails, averaging twenty-five pounds—a satisfying bag.

While the yellowtail will come within a few feet of the boat, and take a bait, and at times will take any lure, and can be caught by the merest tyro, he is again a very Cagliostro of the

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sea in cleverness and tranquil obliviousness to the wiles of the angler.

In May, 1912, Dr. Gifford Pinchot, ex-U.S. Forester in the Roosevelt régime, joined me at Santa Catalina and by nine o'clock one morning we were fifteen miles up the island at Ship Rock, a peak-like rock which rises precipitously a mile off Cabrillo near the Isthmus. The ocean was perfectly calm, and we had no sooner arrived than we saw large yellowtails in or near the kelp, and the moment a sardine bait sank twenty feet, not ten feet from the Rock, we both had strikes. The boatman immediately started the launch offshore and we held the fish to keep them out of the kelp for which they will make. Once well out he stopped, and we played two of the hardest fighting fish any one would wish to hook, and their desperate plays, rushes and surges, threatening rod and line. The fishes gaffed, we moved in again until the cutwater of the launch almost hit the moss-covered rock down from which hung the weird but resplendent draperies of the sea. The water was as blue as liquid sapphire, and clear as crystal. Into it Felice José Presiado, which is Mexican Joe's real name, would toss a handful of anchovies, at which, out of the depths, as though summoned by a genie, would come the splendid golden-vestured forms of six or ten large yellowtails. Over we cast with but ten or twenty feet of line out. Presto! *bang-zip-zee!* and the game was on, without the slightest delay.

I am not going to weary the indulgent reader by prolonging this fantasy piscatorial, but we continued, experimenting with all sorts of tackle and rods to observe the relative power of the fishes, until we had landed fourteen, none of which weighed less than twenty pounds and some I think ranged up to thirty pounds. Every fish was a fighter in the best condition, and each one forced us to play fifteen, twenty or more minutes, at a rate that would have worn out any one not accustomed to it. As it was, I put most of the work on my indulgent companion by shirking my share.

This was a typical day's fishing. In September I found myself a guest of Judge Banning in his summer home at Cabrillo,
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overlooking Ship Rock, and telling the story of our remarkable luck. It resulted in my going out with Mr. J. B. Banning, Jr., and a young lady angler who was desirous to see so animated a scene. We had the Rock to ourselves. The conditions were much the same as on the occasion related, though it was blowing; but in the lee of the big rock the water was smooth. Acting as boatman, I tossed over a handful of anchovies, and with the abandon which comes with successes summoned the game from the deeps. I was eminently successful, as up out of the beautiful water appeared six or more huge yellowtails, twenty-five and thirty pounders. They came directly to the surface, not five or ten feet from the boat, making the water boil, shooting here and there, turning in graceful curves and picking up the anchovies one by one—a sight for the gods, especially the Tritons and those who go a-fishing. Quickly the anchovies were all eaten and all that was left were the two delicious baits sinking lower and lower.

It is needless to dwell upon this painful scene, but the facts are, being patient and persistent anglers, determined to give that young lady a fish, Mr. Banning and I fed those demure and educated monsters from nine in the morning until one o'clock in the afternoon, and they ate and ate and ate, very much as 'A fisherwoman had chestnuts in her lap, and munched, and munched, and munched.'

Taking the free bait, alongside, deep, at the surface, and in every fashion, but never that I could see did they once glance at the same bait that concealed the hook. There are times when patience slips from the monument and scowls at grief, and I can but draw a veil over the memory of this painful experience, which has occurred more than once in the experience of every angler, whether with yellowtail, trout, salmon or tuna, and which illustrates the astuteness and cleverness and adds to the value as a game fish of the famous yellowtail.

If this fish could be taken in shallow water it would have no equal in the world, as it would have all the tricks of the salmon

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excepting that of leaping, and twice its strength. But once did I have the game in such a location. This was at San Clemente, where there is a wide ledge of shallow water between Mosquito Cañon and the Hook at the east end. There is, perhaps, two acres of water here of a depth of ten or fifteen feet. One morning I discovered a big school of yellowtails well inshore. I made a cast into the school, hooked a big one, and enjoyed its splendid play on the surface for a half hour. At one time it had nearly five hundred feet of line out in a splendid rush directly on the surface. Then I stood up on the stern deck and having the fish on a six-ounce rod, bade my boatman to go after it at full speed, while I reeled.

So we played it, rushing this and that way. The moment I got near it the fine creature would turn and dash up the coast to the north, taking nearly all my six hundred feet by the time we turned. Then we went after it at racing speed, shouting with laughter and excitement, cheered on by the spectators in several boats, and all in water as clear and smooth as a lake. I nearly had the fish before it discovered the game I was playing, then it made a sudden rush past us and seaward, reached the edge of blue water, and like a meteor, dashed down the side of the submerged mountain into the depths from which I was forced to 'pump' it up—a startling contrast to the joy and excitement of the few moments before.

At times when the yellowtail will not bite it can be taken by lowering the bait to the bottom, and if the angler will take a car filled with live sardines and tow it, using live bait, he may always catch them. At least I have never known them to resist this lure, though I am prepared to believe, so clever is the fish, that such an occasion might arise. It is said that sea fishes are not intelligent, but I recall at least two exceptions: the gray snapper of Florida, and the yellowtail or amber fish of Santa Catalina; the finest trace cannot deceive them. As a rule, the yellowtail will bite and it constitutes the largest and surest catch in this region of great game fishes. Some of the

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Fig. 29.

1. Perch in Hanging Gardens, Avalon Bay, California.
2. White Fish, Southern California Islands. (Photographed from life by Reyes). p. 160.

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rod records of the Tuna Club of Santa Catalina Island are as follows :

LARGEST YELLOWTAIL (*Seriola dorsalis*).

F. V. Rider, Avalon, Cal., season 1898	41 pounds.
F. S. Gerrish, Jacksonville, Fla., season 1899.	37 "
R. F. Stocking, Los Angeles, Cal., season 1899	48 "
T. S. Manning, Avalon, Cal., season 1901	33 "
Dr. Trowbridge, Fresno, Cal., season 1902	47½ "
F. P. Newport, Los Angeles, Cal., season 1903	46 "
H. Meyst, Chicago, Ill., season 1904	44 "
I. E. Pflueger, Akron, Ohio, season 1905	43 "
¹ A. A. Carraher, Avalon, Cal., season 1906	38½ "
¹ Edward C. Sacks, Butte, Mont., season 1907	41¾ "
¹ t. W. W. Simpson, England, season 1908	60½ "
¹ C. E. Ellis, Spokane, Wash., season 1909	48¾ "
² C. G. Conn, Avalon, Cal., winter season 1909-1910	40½ "
¹ Dr. B. F. Alden, San Francisco, season 1910	45¼ "
¹ Mrs. Evelyne Garrett, Los Angeles, winter season 1910-11	45 "
¹ Morris, S. Phillips, Redlands, Cal., season 1911	42 "

¹ Taken under tackle specifications of Light Tackle Class.

² Taken under tackle specifications of Three-Six Class.

CHAPTER XVII

THE SMALL PACIFIC COAST SEA FISHES

'A shoal of dolphins tumbling in wild glee,
Glowed with such orient tints, they might have been
The rainbow's offspring, where it met the ocean.'

Montgomery.

THE game fishes of the Pacific coast of North America are so large, and their capture on light tackle has attracted so much attention, that the small fry are completely lost sight of except by local anglers.

The long mainland beaches of California, in the majority of instances without rocks or anything to relieve them, receive the heavy swell of the Pacific, raised by a local wind incorrectly called 'trade,' which comes up about noon daily and by two or three o'clock is a fresh, stirring breeze. Early in the morning it may be dead calm, but by eleven or twelve o'clock this mysterious breeze begins. It is moderate in Southern California, but after Point Concepcion is passed, in about latitude thirty-two degrees, it is felt more severely.

This surf keeps off most of the fishes except at such localities as San Luis Obispo, Monterey and Redondo, where fairly deep water comes in near shore. But in the surf are found certain fishes which afford no little sport, and from the lines of the railway south of Los Angeles, and between it and San Diego, many anglers will be seen either standing on the sands, like the New Jersey anglers, or wading in and casting. The fish so caught is very attractive, known as the kingfish or California whiting (*Menticirrus undulatus*). Others, caught off sandy beaches

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alongshore, are the yellow-fin, roncador (*Umbrina roncador*), the California *Roncador stearnsi*, also called the 'spot-fin croaker,' from the spot or black ocellus at the base of the pectoral fin. There is also a little roncador (croaker) in California, *Genyonemus lineatus*. The roncador or yellow-fin has been taken by Mr. T. McD. Potter outside the surf on sandy bottom at Silver Cañon, Santa Catalina Island, and is one of the most beautiful fishes of these waters; ablaze with golden-yellow tints, its fins a bright yellow.

One might fish for some of these fishes forever with sardine bait, and never catch one. They have a *penchant* for clam bait, abalone or crab, particularly the former, and by using a light rod no little sport can be had. Herein lies the sport to be found at many unexpected places—the tackle should be graded to suit the game. To fish for roncador with fish bait at Santa Catalina or San Clemente, or at the long beaches on the mainland, would draw a blank; they must have the proper bait. To fish for these four-, five- or six-pound fishes with a sixteen-ounce rod is to draw a 'sporting' blank—as they are slaughtered. A stiff trout rod is more to the point, and with it the angler will find enjoyment.

This is true of many small fishes of the Californian coast. The angler in trolling for yellowtail or white sea bass is often annoyed by the rock bass, a fish which ranges up to eight or more pounds, but averages three or four pounds. On a heavy rod this fish gives up at once; it is obliged to, and so has become known as a pest. If the angler will rig up a two- or three-ounce, ten-foot split cane or bamboo rod with a light linen line, and fish with a small sardine or a small spoon, he will find fair sport with these attractive fishes, whose name is legion, and which have the most beautiful eyes of all the fishes—veritable gems, blue, green and gold. The common name for these fishes is rock-bass. The Green rock-bass, *Sebastodus flavidus*, the Black rock-bass, *S. mystimus*, the Orange rock-bass or Rasciera, *S. miniatus*. This is a very large and richly coloured group of fishes. Some allied forms are called Groupers—rich red fishes, but beyond

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the reach of rod fishermen, and taken with hand-lines in six hundred feet of water.

Possibly the finest game fish of this region among the small fishes is the Blanquillo or whitefish, *Caulolatilus princeps*. This is peculiar to Southern California and found principally at the islands, San Clemente being a favourite locality. When fishing with Dr. Gifford Pinchot in 1910 we found a rock one day rising to within ten feet of the surface then dropping to a great depth. The side of this precipice was richly covered with weed, and alive with fishes of many tones. The zone of thirty or forty feet was evidently devoted to the blanquillo, as the moment the lure reached this depth the strike came, and a slight jerk sufficed to inaugurate the sport, that was always fast and furious. The fishes were twelve or fifteen inches long and some weighed ten or twelve pounds, giving on our little 3-6 rods sport of the finest description.

There was but one drawback ; it was practically impossible to get the bait down without hooking a fish, and in a short time it palled on us—an excellent illustration of the fact that while angling is supposed to be the taking of fishes, if the angler catches too many he loses interest in the sport. What makes angling a sport and saves it from market fishing, is the uncertainty and the fact that nearly all fishes are capricious, and it rarely happens that the angler catches more than he desires.

I took so many whitefishes that day on the side of that beautiful mountain of the sea, up whose sapphire sides Queen Gulnare might have appeared at any moment, that I have never felt quite the same regarding a blanquillo since. Yet our consciences were free as there were several Venetian fishermen of Los Angeles near by, to whom all we could catch was a gift from the gods, a fish panic being on, or rather a stringency, which I firmly believe we alleviated.

The blanquillo is a demure fish, yet attractive in its quiet colours. It resembles a dolphin somewhat, having a large high head and a long splendid dorsal and ventral fin. Its colour is



Fig. 30. Rock-Bass, Santa Catalina, Southern California. (Photo from life by Reyes)

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olive with flashes of blue and lavender. It is a most graceful fish in the water and game in every sense if the angler will always remember the light rod and generous light tackle. The best fishing I have had with the blanquillo was when the current (tidal) was running at San Clemente. By tossing out bait the fishes were induced to come to the surface thirty or forty feet astern of the yacht, and could be taken without sinkers.

The reader will be impressed by the fact that Southern California has so many fishes peculiar to that particular region.

‘ Out in the golden sunshine,
Throw we the net and line,
The silvery lines to-day,
Flash in the silvery spray,
So throw the line, throw-yo, heave-ho.’

If Merivale had thrown the line at Santa Catalina for whitefish he would often have taken a fish called the sheepshead, but not related to the fish of that name in Florida. It has a prodigious head, well domed, like the swordfish ; in the males striped black and red ; the under jaw vivid white, the lower jaw black. The head is as black as velvet ; its eyes are red, and unlike those of most fishes, are very moveable and have a fashion of roaming around in a comical manner. The females are liable to be all red or brown, or almost white, and do not have the big-domed forehead or the stripes.

The sheepshead is taken in rocky places ; in fact, it prefers such, but is fond of roaming into shallow water with sandy bottom, and is a very curious and sociable fish. It will take sardine bait when hungry, but prefers crab, crayfish, clam or abalone, and with its sheeplike teeth, projecting, sharp and stout, it is capable of capturing any of this food. The ten or fifteen pounders are fine fighters, and intersperse long rushes and runs with a variety of manœuvres, calculated to try the heart of light rods and lines which should be employed. This fish is very amenable to friendly advances. I had an individual under view in an aquarium for some months where it became very tame, and would poise and

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permit the keeper to scratch its back, which suggests that there is such a thing as tickling a salmon.

In these prolific waters, the heart of the Black Current of Japan, that like a vast river of the ocean, flows down the Santa Catalina channel, tempering the surrounding country, the watchful angler is always being surprised at some new arrival or some fish which by all rights belongs to the tropics, lower Mexico, Hawaii or Japan. The rarest and most beautiful fishes of the world appear to be fairly common here. I venture to say that almost every opah, or ribbon fish (*Regalecus*) ever taken is a matter of record, and the well posted ichthyologist can tell you in which museum each one is to be found. A twenty-five foot specimen of the ribbon fish was picked up near Newport Landing, and I have seen five or six at Avalon, and had the really wonderful luck of seeing one alive and secured a photograph of it. Another was seen by a diver from a glass-bottom boat. The men went down into the long kelp leaves and caught the long sluggish ribbon of silver and brought it to the surface. It was over ten feet in length, about a half inch thick, and six or eight inches high, with a splendid series of vermilion plumes over its head the dorsal spines.

In the Tuna Club at Avalon you may see the rare Luvarus Jack. I have never met a person who has observed the fish. It weighed twenty or more pounds, was two feet high—a gleaming mass of silver, with scarlet fins. More dazzling yet is the opah, which resembles a sunfish in shape, but is a veritable moon, with a wonderful and ethereal investment of colours, a disc of silver veiled in old rose. The specimen in the Tuna Club was taken in a net, but a Long Beach angler caught one when trolling in the San Clemente channel. The opah and Luvarus are game fishes, but this is probably the first one ever taken with a line.

These fishes, excepting the Luvarus and opah, are taken with medium-weight rods, but there are many smaller fishes here which should be fished for with five- or six-ounce rods. If this is done, good sport will be the result. Under this head I would

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include the Californian mackerel, which differs from the Eastern form ; a livelier game fish, but not so palatable. I have taken these fishes on an eight-ounce ten-foot trout rod and had excellent sport, the two or three pounders making savage rushes, and in strength comparable to four- or five-pound trout. The mackerel are taken here from wharves, or from boats trolling, but the most satisfactory method is to find the school, and lie off and cast for them.

In shallow water is found a group of three little fishes which are rarely caught in these waters as they are found mainly at the islands where the big fishes fill the eye. When they are tried, anglers overlook the fact that they have a very small mouth requiring a small hook, and they do not take fish bait ; crayfish, abalone or crab appealing to them entirely. They are the blue-eyed perch, the blacksmith, and the so-called pompano, not a pompano at all. The former attains a weight of six pounds, and is a very muscular plump fish, with beautiful eyes. On a trout rod it will surprise the angler by the wild rushes it makes, testing a light rod to the limit. Here also is the long silvery jack smelt, caught with the rod, calling to mind the bony fish ; the sea-trout, or bluefish, really a *Cynoscion*, or squeteague. In the bays will be found schools of lusty mullet, taken by some anglers with the rod by means of dough, or some equally marvellous 'portions.'

From the literary deeps of some of the ancient authors receipts of extraordinary baits can be had. We are told by John Williamson, Gent., to use pastes and various unguents, and he drops into rhyme to impress it upon the memory thus :

'To fish with nat'ral flies whene'er you chuse,
Observe the season, and provide for use ;
Observe the fish, as round for Prey they rove,
And take your Baits where best they seem to love.
For search all Nature, and this Truth you'll find,
Variety, that Mistress of Mankind,
Is not to Species, nor to Sex confin'd.'

Then we are advised to boil down the leg of a young kitten,

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with wax and sheep-suet, mixed with bean or wheat flour. If you wish to force a fish to bite try the following, by Monsieur Charras, Apothecary Royal to the French king, Louis XIV :

Equal parts of Man's Fat, Cat's Fat, powdered Mummy, cummin-seed, oil of Anise and Spike, two grains of Civet, and Camphire. Anoint the last six inches of the line with an ointment made of these ingredients and it will be found irresistible : a Tear of Gum Ivy is recommended, with half an ounce of Assafoetida. This is said to be very fetching for gudgeons. Any of these baits would not only arrest the attention of a mullet, but could be depended on to arrest the attention of Banquo's ghost.

The various towns of California, as Santa Monica, Redondo, Long Beach, Newport, Huntington Beach, Naples, Ocean Park, Venice and others have extraordinary piers running out into the sea beyond the breakers. No commerce is expected, ships come not nor do they go, except at Redondo ; in fact, the more elaborate the dock, the more debarred is it, apparently, from the possibility of a ship landing there, though at one pier there is a replica of the ship which bore Cabrillo, the discoverer, to these waters. But this is bogus, being a restaurant and resting on logs, like the ship ' Nonesuch ' of fable—' with-three decks and no bottom.'

The explanation of these piers, with no hope or expectation or wish for commerce, is that they are fishing or angling piers, virtual villages in some instances of shops, built out into the ocean. On some when the fish are running you may see two or more hundred men, women and children, all fishing with long bamboo rods for surf-fish, roncador, sea-trout, jack-smelt, mackerel, croakers, and hoping for yellowtail, sea-bass and big game which frequently come. No better evidence that there is a love of angling among all peoples can be seen than in this angling contingent, some of whom sleep on the piers Saturday night, or hard by, to secure a position Sunday when all the piers are crowded. It is free fishing, and on each pier is a shop where one can rent or purchase rod, reel and line and all kinds

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Fig. 31. Small Game Fishes (Fly Rod) of Southern California Shores and Island.
1. Blacksmith Fish. 2. Roncador (Croaker). 3. White Perch. 4. Spot Perch. 5. Surf
Fish. 6. Striped Perch. (Photographed from life, by Reyes at Avalon). p. 168.

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of bait. Often great quantities of fish are taken, and the patience of Ovid and Oppian is exemplified as a virtue of the ages.

There is a fine halibut taken on sandy bottom in Southern California, the Tuna Club having a record sixty pounder; but smaller specimens are the rule, taken in lagoons and at the mouth of the island cañons. In deep water, but found at the surface, in shoals or schools, is a beautiful little fish, the bonito. I should call it the humming-bird of the sea, so radiant is it, so bathed in myriads of colours and tints. It is a mackerel-like fish, a cousin of the tunas; very thick-set, but a type of activity, its tail moving so rapidly that it can scarcely be seen. I have taken this little fish within a few feet of the shore at Santa Catalina, where it abounds in countless numbers. The most interesting place to observe it is a mile off Avalon in the sapphire-blue of the Kuro-shiwo. Here great bands of bonitos roam with the albacore, and when the launch is stopped and the boatman tosses over a handful of bait to attract the fish the sight is an extraordinary one. The ocean is a vivid blue; dark when cloudy, a light turquoise when the sun shines. Great beams of light can be seen penetrating the deeps, illuming the myriads of iridescent and translucent animals which fill every drop of this semi-tropic sea. The result is that a wealth of weird and fascinating animals are exhibited and seemingly magnified, their colours being brilliant and beautiful beyond expression. Here are bands of minute crustaceans of every hue of the rainbow, gems of the 'dark unfathomed caves,' so like the real gems that the name *Sapphirinae* has been given them. Some are sapphires, others pink diamonds; here a group of rubies or emeralds; others again range from Kunzite to tourmaline, all so minute that when placed under the naked eye they can scarcely be seen. Yet when drifting in this cerulean sea it has the appearance at times of having been dusted with gems.

Pulsating, into these living gems comes a living comet with a head a foot or two feet across. Its colour is that of ice, variegated with bands of dark lavender. Away from it extends a sweeping

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tail fifteen or twenty feet in length, tinted, splashed with pink and lavender. Other jelly-fishes as large as the closed fist are turquoise of the more delicate hue, while here and there the most delicate and radiant forms appear, from the classic shape of *Circe* to the glorious *Pyrosoma* which illumines the sea at night.

Such are but a few of the forms which fill this blue sun-room of the upper ocean, up through which the little bonito rushes, its back coloured by the artist that painted the blue of the eternal deeps ; a living tourmaline that is even more beautiful when caught, its silvery skin blazing and flashing with ten thousand tints and coruscations. Well can the angler hesitate to devastate the sea. At least these delightful objects are among the compensations when the fish do not bite, as is sometimes the case.

There is another, the oceanic bonito, a larger, longer fish, taken in the spring months off the islands of Santa Catalina and San Clemente. It runs up to fifteen pounds and is a game fish in every sense. When coursing these radiant seas in pursuit of game of various kinds, the angler often goes several miles at sea to the southwest of Santa Catalina in what he calls the 'doldrums,' or a point where the wind dies down and is nearly always a dead calm, due to the lee afforded by the island. Here great patches of kelp often collect, under which at times are found the resplendent dolphin, *Coryphaena hippurus*. In the heroic poem, 'The Shield of Heracles,' supposed by some to be by Hesiod, we read :

' And in the midst,
Full many dolphins chased the fry and showed
As though they swam the waters, to and fro,
Darting tumultuous. Two of silver scale
Panting above the wave, the fishes mute
Gorged, that beneath them shook their quivering fins.'

This is the fish which changes colour so rapidly and presents so amazing an appearance as it comes in. Montgomery in his *Pelican Island*, says :

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' A shoal of dolphins tumbling in wild glee,
Glowed with such orient tints they might have been
The rainbow's offering, where it met the ocean.'

The Tuna Club has a dolphin cup, presented by Dr. Mattison, and recognizes the beautiful fish as one of the hard fighters of the sea, comparing well with the yellowtail. I have seen them caught off the Santa Catalina 'doldrums,' and lying on the deck, I gazed down into the deep blue water and saw this golden-green harlequin of the sea come slowly up on Mr. Potter's line, changing colour from green to yellow to old gold, blue and other hues—a marvellous spectacle. I have taken the Atlantic species from among the sargasso weed patches not far from Bahama, and in the Gulf Stream, and know it to be a fine game fish. But it has never been my good fortune to take one in California though I have hunted the seas many days.

Another rare fish at Santa Catalina, game in every sense, is the Lady fish, *Albula vulpes*, that has been taken here and at Santa Monica two feet in length. It is a singular appearing silvery fish that performs many strange antics when hooked. Approximating the English conger, taken by the members of the British Sea Anglers Society, is a murray, common in Southern California, also called the Conger eel (*Gymnothorax modax*). Specimens over six feet in length and weighing forty pounds have been taken. It is a ferocious appearing fish and coils like a snake, and looks like one.

The California barracuda, *Sphyræna argentea*, is one of the commonest of the small game fishes, arriving in vast schools early in the spring, and breaking up. It is taken with rod and reel near shore. Its maximum size is about fifteen pounds. On a light rod it will often make an interesting play, but calling to mind the fresh-water pickerel.

The Spanish mackerel, *Scomberomorus sierra*, is taken at Santa Catalina and San Clemente occasionally, but is not common. Equally rare is the Pomfret, *Brama raii*, while the

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California pompano, *Peprilus simillima*, is very common at times at Santa Catalina near Seal Rocks. Other small but common fishes often caught are 'Johnny Verde,' *Paralabrax nebulifer*, the spotted *Cabrilla*, and the *Medialuna*, the latter particularly common at Santa Catalina and a fine game fish of three or four pounds when caught on a trout rod. A small hook is necessary, and the fish will not take fish bait unless very hungry; crayfish, clam or abalone (*haliotis*) is the lure of its choice. I have found Long Point, five miles from Avalon, an especially good place for this attractive blue-tinted little fish.

There are a number of small sharks on the Southern Californian coast which afford the same sport as the British tope. One known as the leopard shark, very common in Catalina Harbour, attains a weight of sixty pounds and leaps when hooked. The young bonito sharks, caught in the open ocean, four or five feet in length, are also game worthy the name, and leap high and well when in the toils.

The list of small fishes of this locality, which could be fairly included under the head of game fishes, is very large, suggestive of the sport available to the angler who does not care for the more strenuous exercise with the greater game. I am indebted to Mr. Charles V. Barton of the Tuna Club for the following data of the small shore fishes, on which he is an authority :

'The principal game fish of Southern California waters taken from shore or pier with hook and line are the California surf-whiting (*Menticirrhus undulatus*), the yellow-fin and the spot-fin croaker (*Roncador stearnsi*).

'The California surf-whiting, by reason of its gameness and superior excellence as food, leads all the rest in the fancy of the Southern California light-tackle angler. It ranges from a quarter of a pound to ten pounds in weight. Eight and a half pounds is the largest registration on the records of the Southern California Rod and Reel Club. It is an extremely powerful fish, living as it does in or near the surf, and its body is shaped so as to withstand the crash and pressure of the breakers. Its principal food is the sand-crab, so called, which burrows in the wet sand and is washed into the water by the receding rollers.

'The flesh of the surf-whiting is firm, sweet, and dainty, and is preferred by many to that of any other salt-water fish. This fish is also known



Fig. 32.

The Pacific Barracuda, 8, 9 and 12 lbs., taken by William E. Hale, on 9-ounce Rod.
Santa Catalina, California

José Felice Presiado (Mexican Joe), a Famous Gaffer.
p. 172.

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locally as "surf-fish" and "corbina," but called erroneously by the Mexicans "scarbina."

'The best specimens are taken by casting from the beach into the surf, though the larger proportion of anglers fish from the pier. Beach fishing necessitates wading into the surf, making a very hard day's work. Tackle used is the regulation nine-ounce rod and nine-thread line, though many use a six-ounce rod and six-thread line. Recently some anglers have brought the four-ounce rod equipped with a six-thread line into use. Any lighter line frays quickly in the flinty sand.

'Large clams or sand-crabs are used for bait, and hooks ranging from number five to number two according to the conditions. Three hooks and a three-ounce sinker are commonly used.

'The California surf-whiting fights hard, never giving up so long as an atom of strength remains. It is also "foxy," and the inexperienced angler finds that there is many a slip between the strike and the landing. It is a past master in the cunning art of freeing its mouth from the hook. It is a finny foeman worthy of any angler's skill. The surf-whiting is taken from Mexican waters up to Santa Barbara, although few are taken north of Santa Monica bay.

'The yellow-fin, though not a roncador or croaker, is in many respects a second cousin, at least it is a game fish, but has not the endurance or smartness of the surf-whiting. It goes as high as five or six pounds in weight. It is taken in the surf, or directly back of the breakers, as a usual thing, though many contend that it is a deep-water fish. It runs in schools, and has a liking for coming in with the evening flood-tide to feed on sand-crabs. It strikes "like a house afire," but tires faster than the surf-whiting, and is apt to hook itself more securely.

'The warm months are best for catching both the surf-whiting and the yellow-fin, though a few are taken the year round. The yellow-fin seem to go to deep water during the cold months; the surf-whiting is seen in great numbers in winter but it is loath to take the hook.

'The spot-fin croaker (*Roncador stearnsi*) really and truly "croaks." It has a large black spot at the base of the pectoral fins, whence its name. It goes as high as fourteen or fifteen pounds in weight. The largest taken with hook and line in recent years weighed a little over twelve pounds. The croaker is a powerful, dogged fighter, and the big fellows strain light tackle to the limit in heavy surf and near the barnacle-incrusted piles of the piers; but it is not in the class of the surf-whiting. The spot-fin croaker is edible, but does not rank with the surf-whiting, pompano, sea-trout, and others that might be named.

'The yellow-fin roncador (*Umbrina roncador*) is a beautiful fish, and a livelier fighter than its cousin the spot-fin croaker.

'There is also a fish called locally the china croaker, with a broad black

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band across one shoulder ; but it is neither as large nor as plentiful as the spot-fin. All the croakers are taken the year round in the breakers, back of the breakers, and in the bays. The same tackle is used for yellow-fin and croakers as for the surf-whiting.

'Pismo clams, a large quahaug clam, are used chiefly for bait in angling for all the varieties named in the foregoing ; sand-crabs are used in the summer when the shells are soft. The surf-whiting and the croaker bite equally well on either, but the yellow-fin (likewise the sharks) are partial to sand-crabs.

'Many pier fishermen fish almost exclusively for the smaller fish, such as mackerel, pompano, smelt and herring, which call for long cane rods and half a dozen very small hooks. Pompano bite best on shark or craw-fish bait, while mackerel are partial to the flesh of their own kind.

'Rock-bass, halibut, and in season, sea-trout, are also taken from the piers. The sea-trout, which is nothing more or less than a young white sea-bass, running from one to six and eight pounds, is best taken with live sardines for bait. Halibut run from two or three pounds up to thirty and thirty-five pounds.

'Several varieties of sharks and stingarees are numerous in Southern Californian waters, particularly during the warm months. While they are not classed as game fish are very apt to seize the angler's bait, and they put up a very interesting argument, and are great tackle smashers.'

Affecting the rocks and the great kelp beds is the Atka fish (*Pleurogrammus*), common among the Aleutian Islands where it is called Atka mackerel. Dr. Jordan says that when hooked in water over twenty feet deep it comes up readily, but as soon as it sees the boat, dashes away and makes an extraordinary fight for liberty. His ship was out of provisions, so nine men began to fish for the Atka mackerel. In four hours they landed five hundred and eighty-five fish, or seventeen fish per line per hour, all of which were used by the crew. The fish averaged about two and one-half pounds each, and were beautifully coloured. The dorsal was large, calling to mind that of the whitefish ; the pectoral fins very large, the body yellow, with jet-black cross-bars.

Allied to them is the blue-cod, which I have taken at Santa Catalina nearly four feet in length and weighing thirty or more pounds. It is a large, long, slender savage-looking fish, the

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inside of the mouth of my catch a vivid blue. I succeeded in keeping this fish, or another, alive, placed it in a tank, and secured an excellent photograph of it. The cods, tom-cods, codlings, hakes, are common catches in the northern waters of the Pacific coast.

There are several hundred fishes very little known that could be included in a rational and liberal definition of a game fish of sea, river or lake, which could be mentioned in this connection, all found in Atlantic or Pacific, United States or Canada, and the Gulf of Mexico, showing the wealth of material for the angler or the consumer of fish.

CHAPTER XVIII

GAME FISHES OF SPAIN, FRANCE AND PORTUGAL

'Oh! not in camp or court
Our best delights we find,
But in the far resort
With water, wood and wind,
Where Nature works
And beauty lurks
In all her craft enshrined.'

Stoddart.

IT was Eben G. Scott who said, 'The forest, the ocean, the desert, these are where exhausted Antaeus renews his strength at the touch of mother earth; the sky, the winds, the waters, the trees, the rocks, the stars, *these are the counsellors that feelingly persuade him what he is.*' How true this is every true angler knows, and knows well, whether he is

'Wading down some purling brook in June,
Where the mountain laurel and the wild rose is just abloom,'

or breasting the strong winds along a rocky shore, or following up some deep cañon in the mountains where the soft wind whispers in the pines a requiem that fills the air with incense. It matters little where the angler is, he is sure to possess that love of the open, of the uncontaminated, that enables him to renew his strength at the touch of wind or waters. The angler sees things that no one else can. He has a second and a third sight; inanimate things in their deepest perversity are often a joy; and he revels in the fact that all the good things of nature are his to enjoy and to own. I know not how it is with the gentle reader

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Fig. 33. Angling in Italy.

1. Fishing Boats Coming Into Naples. 2. Hauling the Seine at Mentone. 3. Surf Fishing at Genoa. p. 176.

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or the fierce critic ; but to be happy, man must have this capacity of wholesale enjoyment, of seeing something in all things. I am aware that this is at times called the artistic temperament, this seeing things that apparently do not exist, but nevertheless, I believe it is worthy of cultivation and is a strong factor in the evolution of man from savagery to civilization. This occurred to me in France one winter day, when I watched a group of anglers fishing in the Seine, where they had to keep moving or the line would freeze to the rod. Again in Rome when I stood and watched a freezing angler cast into the muddy waters of the Tiber ; and again on the Riviera at Menton, on the Italian line, men and boys were fishing for echini, eating them *au naturel*, and happy.

Often at Biarritz, France, the rocks are seen lined with sea-anglers armed with rods of extraordinary length, some being forty feet long, or twice the length of a salmon rod. Vicomte Henri de France states that although many of these sea-anglers have reels they prefer not to use them. The line, about as long as the rod, is sufficient for all purposes, and when the rod is raised the fish and the four hooks come in much quicker than if reeled. In fact, the rod is so cumbersome that two hands are necessary to handle it.

It is difficult to find a land where there is no fishing. If such does exist, man soon comes to the rescue, as in the case of Argentina, whose inland waters a few years ago had no finny game ; now, thanks to the official *camaraderie* of England, Germany, and America, it has whitefish, quinnat salmon, brook trout, lake trout, blue-back salmon, silver salmon, steelhead, rainbow trout, land-locked salmon, Atlantic salmon and European brown trout, four million two hundred and sixty thousand four hundred eggs having been placed in its waters between 1904 and 1909 with most satisfactory results.

In a previous chapter, I have referred to the fishes of the Mediterranean as having an extraordinary resemblance to the fauna of the Hawaiian Islands, an item of interest to the angler.

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If I am not mistaken, Spain and the shores of France and Italy along the Maritime Alps are neglected by the expert sea-angler and without cause, as here is a wonderful field for the man or the woman with a rod ; a visit to the markets of Marseilles, Naples and Genoa proved it to me. If the fish are not biting in Italy, the angler can go and look at them, alive and beautiful, in the Naples Aquarium ; and learn about the wonderful work of Dr. Dohrn in the Zoölogical Station where are living fish pictures, more beautiful than can be described. Here the angler can survey the field and try conclusions, as I did, with a morose but determined electric ray.

In going south from England with angling in view, Spain should not be disdained, as beyond the Pyrenees, in the romantic valleys of Navarre, there are trout streams more than alluring, whether it is the Bidasoa with headquarters at the Palacio Reparacea, Oyeregui, Provincia de Navarra of the Marqués Eugenio Uztáriz, for he is not above giving good service to good anglers ; or the Minho or Rio Ason. There is not so much angling red-tape in Spain. You must take out a licence, but it costs only five peseta, with the stamp of the Governor of the province 'thrown in.' Spain is a land of romance and fine rivers, and the Bidasoa, from the mountains to the sea, is an ideal trout stream. It flows along, now peacefully, now breaking into rapids, through historic valleys, where there are trout not over one pound in weight, but excellent as hard fighting game. As for sea fishing, all the ports in the Bay of Biscay provide it from sea-bream to mullet ; and the towns, as San Sebastian, Santander, Benedo, Biradeo, Oveles and San Vicente on the bay, are extremely picturesque. They also abound in clever fishermen, many of whom have never seen a rod or a fly.

Among the trout streams from San Sebastian and Bilbao is the Deva, the country calling to mind Southern California and its snow-capped Sierra Madre and Sierra Nevada. Among the rivers are the Anson, Esla, Douro, Ebro, from the mouth of which you can see Majorca, which I saw one night in the haze, long to

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be remembered. Indeed, all the south coast reminded me of California. On the north coast is the Nalon, and there are countless rivers, as the Orbigo, Cares, Mimho and Navia, which rise in the Caribbean mountains, and abound in trout.

Santander is an interesting province on the Anson. The angler may make his headquarters at the little town of Ampuero, which Mr. Walker M. Gallichan, an English author and angler, owns by right of angling discovery, as here one day in early spring, he astonished the natives by taking samlet and many trout with a fly, and hooked a two pounder. That it is an attractive water is evident from the fact that he compares it to the Yare, which I have fished for grayling; and which seemed, to me, at least, near Alburgh Hall, the home of my host, a most beautiful river. 'The average weight of the trout in the Anson,' says Mr. Gallichan, 'is one-half pound; but the strength and gameness of the fish are astonishing, and I would rather catch these lively half pounders than fish double their weight in certain English and Welsh rivers.'

The Anson would be a good salmon stream were it not for the netting in its pools, and the fact that the Alcalde of Gibaja, who owned the salmon rights, sold them at auction at one time, hence the fish are ruthlessly slaughtered. Medium-sized blue dun, partridge and green flies are very taking on the beautiful river, with its quaint and primitive Basques, as yet unspoilt. This river is famed for its sea-trout, possibly steelhead or sea run of the brown trout. The best season is in March, while the salmon are most plentiful in the summer and the brook trout in February.

Other good Spanish trout streams are the Besaya in the province of Santander, with the town of Torrelavega as a base and the Pas, where at Renedo, one can find good service. The angler who has fished in Colorado will find a counterpart here in climatic curiosities, as the rivers are liable to sudden and extraordinary rises, due to a rain up on the divide or in the mountains. In all the north of Spain in early spring, the angler may expect changes, and sudden showers, and should go pre-

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pared. Many little rivers can be found in North and Central Spain and in Portugal, well worth the adventure with rod and reel, the Douro and upper reaches, the Minho, Mondego, Tagus, Zatas, Guadiana and the many streams rising in the Sierra Morena, Sierra Toledos, Sierra Guadari and Sierra Estrella being more or less alluring to the angler.

The reader proposing to angle in Spain will do well to read *Wild Spain*, Bush and Chapman, *The Angler's Diary*, published by the Field, and *Travel in Spain*, by the enthusiastic angler and delightful writer already referred to, Mr. Walter M. Gallichan. Angling in Spain has its compensations, as some one has said, in its scenery, the wild and beautiful mountains and interesting people, and the sea-angler especially will find by following along shore through Portugal around to the ports of the Mediterranean, many localities where sport may be had of an exciting character. At certain places the tuna is taken, and the Mediterranean is the headquarters of the greatest tunny fishing in the world, especially at Palermo, where thousands of fishes are taken with huge nets, the hauling of which, filled with the big fish, is a spectacle to remember. Here too, is the great Atlantic swordfish, *Xiphias*, which comes here to spawn, and is followed by the Italians, a lookout being stationed on a tall mast to sight the fish, the men rowing and invoking the saints for good luck. So far one of these great swordfishes of four hundred pounds has not been taken with a rod; but Dr. Gifford Pinchot, the founder of American forestry, has played one for some time in American waters, and will, I am confident, ultimately land one. Several have been hooked at Santa Catalina, but they were of such size that the launches could not get under way before the reel was stripped. There is a real element of danger here, as this swordfish is as ugly as a rhinoceros, and charges with as little reason; hence, when this sport is established, non-sinkable launches should be used. The long series of casualties from this source recorded by Professor G. Brown Goode will justify the caution.

The sea-angler particularly will find on the north coast of

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Spain practically a virgin field, easily reached from Southampton. The coast is cut up with many bays, indentations and fjords, all of which afford sport of some kind, according to Mr. Walter M. Gallichan, who has made a special study of this new fishing ground. According to this author, tuna of large size are taken off the mouths of the Portuguese rivers, or, to use his exact words, 'of fabulous weight.' Sea-trout up to seven and eight pounds are to be had in Galacia, in tide waters, a noble game. Here, too, are fine bass and big pollack, grey mullet, which appeal to many anglers on light tackle.

Mr. Gallichan states that the best centres for the sea and river angler are Ribadeo, a little village at the mouth of the River Eo, Vivero, Ferrol and Puente de Eume. For the lover of sea-trout angling, he recommends Coruña, Corcubion, Pontevedra and Vigo. The latter is particularly preferred, as it is the port of several lines of English steamers. Here one can find twenty or thirty kinds of fine fishes, many of extraordinary appearance, as the Merluza. The congers here are large, and the bass can be taken on salmon rods with a fly, especially off the Isle of Cies. A spoon is also used for bass and sea-trout.

Into Vigo Bay the Berdugo river flows, and its mouth is a famous place for sea-trout. For sea angling, the angler is advised to bring heavy tackle. Mr. Gallichan says regarding the important factor of reaching this place, 'The cost of a holiday in Spain would not amount to more than a holiday in Scotland or Ireland, if the angler's wants are moderate. The sea voyage in summer is delightful, and the Royal Mail ships touch at Cherbourg and Coruña on the way to Vigo. Fishermen who dislike a sea passage can travel overland in about forty-eight hours, *via* Paris, Irun, and Venta de Baños to Coruña or Vigo.' I may add that the prospective angler in Portugal or Spain will find this author's book, *Travel in Spain*, invaluable, not as a guide only, but for its literary charm.

France has suffered from poaching and indiscriminate fishing for years; and if the Republic will heed the requests of its

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distinguished anglers, as Prince d'Arenberg, President of the Casting Club of France, the fine sporting rivers of France will soon come into their own, as years ago they abounded in trout and salmon. Such was the Chateaudin (Finisterre) that, once filled with fish, is now practically empty ; and France imports from six hundred to seven hundred thousand kilogramms of salmon, worth twenty million francs, in seven years. Despite this extraordinary neglect on the part of the French, they are most enthusiastic anglers ; and on summer days, holidays or Sundays, fifty thousand anglers swarm the banks of their beautiful rivers. No country has more beautiful summer streams, and those of Brittany have passed into song.

Of special charm are the rivers Scorff and Ellée and the Quimperlé, which reach the ocean near Poulda. The latter was once famous for its salmon, which were netted beyond the limit of patience ; yet M. Paul Gaillard tried an experiment with the adjacent streams, and in ten years brought up these rivers to the standard of any in Scotland, affording him one hundred and thirteen salmon one season, and thirteen in a single day. The streams became famous for their trout, the result of the stopping of poaching, re-stocking and intelligent care. If this was tried in all the French rivers, a great national asset would be revitalized and added to France.

The lover of trout fishing will find the rivers of Brittany delightful in every sense ; and if the trout are scarce, the angler may solace himself with the thousand and one charms of this fascinating country. With sea angling it is different, it is of the best, and the sea-angler should make his headquarters at Quimperlé Pont, Scorff and Pont Oven. Trout, grayling, salmon, pike, perch, club and sturgeon, tunny, and many more are the attractions on river and sea coast.

The salmon flies of France are darker than those used in England, but the English flies are used. The trouble with France, doubtless, is that, as also in America, the ignorant politician attempts to make votes with the ' people ' by winking at poach-

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ing ; classing all those who would conserve the fisheries as ' aristocrats, millionaires, etc.' To defeat this, France will have to educate the people as to the value of sport to a nation ; but more important, the educated men, the aristocracy of France, should enter politics and curb the ignorant. Then every river in France would be a part of the national income, and a valuable asset to the State and people.

Many of the French rivers are delightful, and those between Brest and St. Malo are mostly free. In Brittany the angler will find fair trout fishing near Guinzamp, Lannion, Huelgoat, St. Nicolas du Pelem, Pontrient. Sea angling is good at St. Malo, pollock, conger, bass, particularly at the mouth of the Rance, plaice, bream, and nearly all the fishes common in English waters.

If one would see the real sea anglers of France, he should go to Boulogne, whose fisherfolk eulogized the town in the famous lines :

' Bright jewel of the Channel wide,
Bird of the soft and snowy breast,
Better belov'd than all beside,
Poised lightly by the wave's white crest.
Boulogne ! 'Tis thou whose beauty rare
With every other nation vies,
Whose maidens innocent and fair
Reflect the heavens in their eyes !
Since all thy soldiers
Are brave and gay,
And thy daughters' glances
Drive peace away.
So lovely city, thy spell divine
Thou castest on me, my heart is thine !
There are beauteous cities
Wherever I stray,
Famous and fruitful,
Sunny and gay ;
But frowning I turn me
Away from them all.
Boulogne ever woos me
With siren call ! '

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From here starts the finest equipped fleet of market-fishermen in Europe, including over five hundred vessels and six thousand men and boys. The fishes are soles, bass, cod, smelt, whiting, pollack, mullet, cod, eels and many more. It is a most interesting experience to take a trip with some of these fishermen or trawlers, and learn of the chances and risks taken by the toilers of the sea to supply the market with fish.

CHAPTER XIX

ALONG THE RIVIERA

'Twas where o'er the sea
Delicious gardens hung, green galleries,
And marble terraces in many a flight,
And fairy arches flung from cliff to cliff,
Bewildering, enchanting, . . .'

IT is not well to become wildly excited regarding the angling possibilities of the Riviera. I remember when going from Paris to Marseilles having with me what tackle the porters in Paris had not devastated or broken. I intended to fish all along the shore—Marseilles, Cannes, Monte Carlo, Menton, and so on to Italy ; but I fished Marseilles from a cabriolet most comfortably. I had an abundance of time, so devoted myself to a psychological study of the driver, whose ingenuity in lengthening out the drive, isolating me on places where the drawbridge went up, and taking me to the points I did not wish to see, were more than remarkable.

The fish market was interesting, but most of the game was brought in from the outer waters, and I found that almost every mile of sea coast was zealously dragged day and night with seines ; between times men and boys hunted for all kinds of sea game and poached on the rivers. Lax game laws, or none, over-netting, have destroyed the opportunities of the man with the rod, though at certain localities where deep water comes in-shore, as at Biarritz, there is some sport. The fishing-boats with their lateen-sails are extremely picturesque. I watched them from the old church Notre Dame de la Garde at Marseilles, where there is one of the most interesting collections of

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offerings of various objects by resident fishermen and seamen in Europe—compensations to the angler.

The most remarkable fishery in the world, however, is found in the Mediterranean. I refer to the tunny fisheries at Sicily, where vast nets are used to entrap the great fishes, the catch being an event well worth witnessing. It has its headquarters at Sicily where the tunny attains a weight of one thousand pounds. Every year the largest fish is presented at the shrine of St. Sebastian, the patron saint of Sicilian fishermen; and generally brings them good luck. The first tunas of the season enter the Straits of Gibraltar in April. They are known as the 'Tunny of Arrival,' and are very soon sighted by the fishermen of the Balearic Islands and in a month reach Sicily. The big school which comes up from the South African coast divides into three general parts; one goes south by Tunis and Algiers, reaching the Adriatic and even the Bosphorus; the second and largest follows along the north coast of Sicily, passing through the Straits of Messina, and is taken as far east as Syracuse; while the third school reaches Corsica and Sardinia. It is from this school that the supply of tuna for Genoa and Naples comes.

The coming and going of the tunny is as uncertain as at Santa Catalina; hence the saints are invoked, and their statues carried through the streets, the men appealing to them in song as they follow. Sometimes the big schools are preceded by young fish weighing from twenty to fifty pounds. The tunny comes to the quiet waters of this sea to spawn, as it does to the lee of Santa Catalina. By July they disappear. They sometimes remain in these waters, as at Santa Catalina, California, all the year round, and from now are taken until October off the coast of Spain and Portugal, where they are called the 'Tunny of Return.' No one knows where they winter.

The tunny in an economic sense is the salmon of the sea. When they are reported from the Balearic Isles, which I recall with deep pleasure, the invocation to the saints begins, and the nets, miles in length and valued at ten thousand or more dollars,

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are taken out and set, like an elephant fence, to guide the tuna into the *camera di morte*. The tunny is like a London cab-driver; he invariably turns to the left, and many Sicilians will be found who for this reason think the great fish is blind in the right eye. The nets are arranged on this principle. When as many tunas have entered as can be managed, the 'gate' is closed and the net is hauled, forcing the fish to the surface where they are killed, and the net set again. The fish are sent to the canneries and some to the markets. An enormous sum is invested in this fishery; and you may buy tunny or tuna in almost any city in the world, though now some of it comes from the waters of Santa Catalina; but in this case it is the long-fin tuna or albacore. One firm, the Florios, have millions of francs invested in the nets, and in good years clear two million francs.

Several members of the Tuna Club, among them Mr. H. St. A. Earlscliff of Santa Barbara, have visited these grounds and endeavoured to take these tuna with rod and reel. Mr. Aflalo has tried them, making a special trip to Madeira, as it were, intercepting them there; but so far, if I am not mistaken, but few have been landed with a rod, nor do I understand that they will bite, at least this was the experience of Mr. Earlscliff, to whom I am indebted for this information, who advises Palermo as an angling headquarters in May. The trip from Naples to Palermo by boat or train is made in one night: and I can conceive of no more beautiful trip than the one I made from Genoa to Naples by sea, passing Sardinia, Corsica and the beautiful islands near Naples, Ischia and others.

Many interesting experiments are being made with American fishes in Italy by Giuseppe Besana of Lombardy. Rainbow trout, chinook salmon, brook trout, black bass, sunfish and others have been placed in the small ponds of the Piscicoltura Borghi at Varano. Of these, the sunfish has done better than desired, doubtless, and the rainbow is doing well; also the black bass, which promises a treat to Italian anglers in a few years when the splendid fishes are well established.

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One of the most charming vistas I recall in Italy was from my hotel in Genoa, where I saw the jagged peaks of Corsica or Sardinia rising in the crimson haze of an Italian sunrise, which reminded me that there were trout to be taken in the old home of Napoleon.

The Golo is the largest trout stream, rising back of Corte in the high and rugged country, and reaching the sea about twelve miles from Bastia. It is made up by the Basco and Tartagine. I left Italy just before the best season, February 9, before the winter snows had melted. Like all the trout streams in Spain, France or Italy, it has been poached and netted beyond reason, yet there are trout ranging from a fourth of a pound to two pounds.

The point of departure of the angler should be Ponte Leccia, where the Hotel Cynos serves man and beast, and is often filled with English and American anglers. The best angling is the stretch between the bridge at Ponte Leccia and the Station. There is also good fishing in the Tartagine, a tributary of the Golo, and in the Asco and Gravona, the latter reaching the sea a mile or two south of Ajaccio, an interesting place. Still another little trout river is the Liamone, which rises near Monte Retto and its tributaries, Crussini and Fiume Grosso. By the end of March the trout fishing is at its best here. Into the Gulf of Valencia near Propnano runs the Rizzanese, abounding in small trout.

CHAPTER XX

ANGLING IN AUSTRIA, GERMANY AND THE ITALIAN LAKES

'I have two or three hobbies : I have given a long life to the collection and study of early illustration in books. I have devoted a good deal of time to the study of ancient art. I have filled my house with a collection of pottery and porcelain. I live, when in town, among these associations, but all my life, my heart, is shut up in my rod case, until I get away from town, and then it escapes and enjoys its beating.'

M. C. Prime.

From letter to Mr. Robert B. Marston.

THE angler in Europe has a most fascinating field. Perhaps he is in the Black Forest, with some of the famous anglers of the Fly Fishers Club of London, or of the Casting Club of France, which Prince d'Arenberg has made known over the world ; or it may be he is on the placid, radiantly beautiful waters of the Italian lakes, or among the countless lakes, rivers and streams of Alpine Austria. Everywhere the angler is more than compensated by the splendid scenery, if angling luck is against him. For anglers the Tyrol offers many attractions ; and there is a region of lakes and rivers near the city of Salzburg, called the Salzkammergut, lying partly in Upper Austria and partly in Styria, which for its game fishes and fine scenery appeals particularly to British and American anglers. It is a wild and splendid Alpine country, uncontaminated by the public, yet provided with inns and hotels, so the angler may enjoy the sport in comfort, or rough it as he sees fit.

The best season here is from the middle of June to September, earlier or later, depending upon the season. The waters are mostly controlled by the government ; and Austria is to be con-

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gratulated that the Emperor and his officials long ago recognized that angling is a national asset of prime importance. They have conserved the fisheries, stocked the streams and lakes with the best fishes, and are reaping the reward of an influx of wealthy anglers, which means the taking of large sums to the region, which find their way to the working classes, and where it is most needed—a consummation devoutly to be wished for in all lands where there is fine scenery and sport, all of which is ennobling and expanding to the dweller and to the visitor.

In this wonderful maze of mountains, calling to mind the scenery in British Columbia, we find several large lakes, as Toplitz, Traun, Hallstätter and Grundl; including with the associated streams about two hundred miles of carefully protected and preserved streams under the control of the State. Here you may see that remarkable thing—a professional fisherman using a fly. He has no streams for net fishing, the waters being kept for the angler, who knows that millions of young trout and grayling have been introduced for his benefit. The lakes also abound in pike and big lake trout.

In entering this region, it is necessary for the angler to obtain a licence, which goes to the Forestry Service, and the details of which are entered in the *Fishing Book*. The fee for fishing all over the country in any season is about five dollars American, or £1 English, equivalent to 24 K.; or for two fishing grounds 75 K.; three, 90 K.; four, 105 K.; five, 120 K., and so on. Aside from this, there is the regular licence fee or certificate amounting to 11 K. 20 h., which is much less than the hunting and fishing State privilege in America.

No angler objects, knowing that the amount is used to prepare the rivers for him and keep them well stocked. The sportsman may, if he desires, take out what is known as a 'general sport' licence, covering eight grounds. This will cost 168 K., or £7, or \$35.00. This is obtained from the direction of the I. and R. Department of Woods and Forests in Gmunden. The licence is for the streams only, and should be carried to show inspectors on

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demand. All this sounds formidable, but spells good fly fishing for all time. If France and other countries would protect the fisheries and permit such clubs as the Casting Club of France to outline a conservation policy, they would find the result most beneficial, a new national asset would come into being. The poacher and the professional net fisherman are the enemies to be considered, and when it is remembered that these people are biased by ignorance and avarice, it is evident that for their own benefit they should be controlled and forced to abide by the laws that intelligence and forethought dictate.

The conditions of angling here will naturally surprise the visiting angler, yet he has the sport; all the fish the angler takes belonging to the State, the sport alone goes to the man with the rod. The State demands that the angler shall take a guide or gillie, whose compensation is set at 1 K. 60 h. to 2 K. per half day, and 3 K. to 4 K. for a full day. The guide is a skilful fly fisher, and it is his duty to see that his patron secures a good catch and every convenience.

It is his official duty to net the fish, and to place them in a tub or vessel of water which he carries; in a word, secure them for the administration. The reason for this claim by the government, is that the fish are extremely valuable here, and they are a possession of the State. This does not mean that the angler cannot take away any of his fish, as he can have them all by paying the gillie for the State the market value of his catch, less twenty per cent. This can all be arranged in advance by the angler taking a day ticket and paying a special fee of 10 K. or 14 K., supposed to cover the purchase price of an average catch at that time. In this case, the angler need not take the official fish receiver, and can place his catch in a creel and carry it off.

I would advise taking the gillie, as it is certainly a novel experience to have a good guide who is thoroughly posted, and who wheels along the bank of the stream a portable aquarium containing the catch, alive and fresh at the end of the day. There

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is a piquancy about this that must appeal to one. The laws are extremely fair and just. Thus, if an angler pays his fees, and there is a terrific rain or flood and his fishing is ruined, the money is refunded. In fact, angling in Austria is very delightful and interesting from its very antipodes of similar sport elsewhere. Listen to this, which I take from the official book : — ‘ The Forest Administration will do everything in its power to advance and to protect the interests of amateur fishermen, and will on request give information and advice as to the best accommodation available.’ What more would a reasonable angler desire ? Would that every real trout stream in America could be closed to everything but fly fishing.

The angler in the Tyrol should apply for his licence several days ahead by letter or telegram, and when he arrives, he will find it ready ; so there will be no waste of time. Prepared with licence and equipment, one is ready to enjoy the really wonderful country where the lakes are gems in their settings of green.

Traun Lake is particularly beautiful ; a cleft in the mountains, which wind about it, and rise from it precipitately. The little town of Hallstätt is a delight in itself, well paying the angler if he did not see a fish. Gosan Lake recalls Lake Louise in the Canadian Rockies, especially as it is seen in Henry Joseph Breuer’s famous masterpiece, looking up the lake with glaciers, or vast fields of snow on the distant mountains.

The fishing in the Traun extends from the mouth eight miles up-stream, and abounds in fine trout of over a pound weight, and ranging up to seven. The best fish is a cross between *Salmo fario* and *S. lacustris*. Two-pound grayling have also been taken from this water, and nowhere can more delightful fly fishing be found than this, where the art loved by Walton has been known for many years. The flies recommended are March Brown, Red Spinner, Fern fly, Orange sedge, Wasp fly, Governor, Alder fly, May fly, and August Dun. The big trout, like all trout, have a *penchant* for live minnows. In this part of the country one meets, or should meet, Mr. Anton

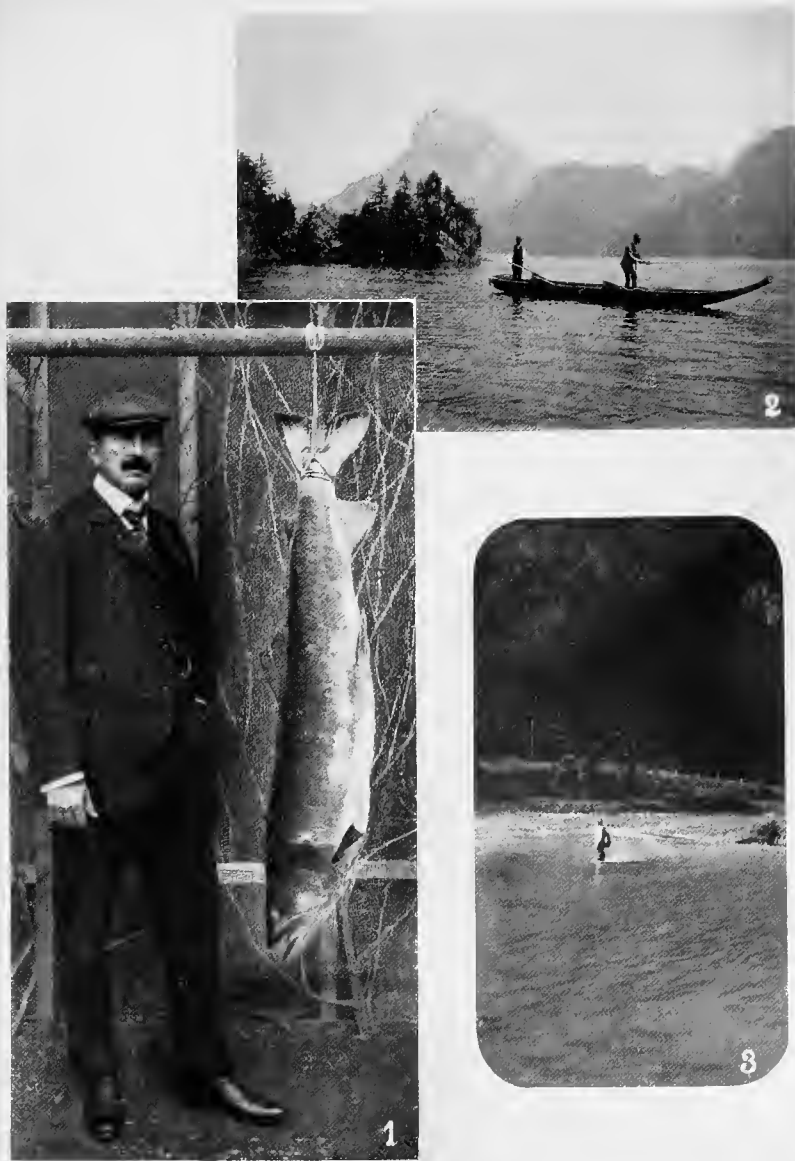


Fig. 34.

1. Huchen, 46 lbs., taken in the Inn River, Bavaria, by Ludwig Deiglmaier. 2. Baron Walter Von Rummel, Pike Fishing, in Austria. 3. Baron Von Rummel, Trout Fishing in the Traun, Austria. p. 192.

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Hoplinger, who is the lessee of the fishing from the Government, and who provides gillies, guides, boatmen and everything, even to flies made on the Traun for the delectation of these fine trout.

At the end of Traun Lake is the famous Ebensee angling ground of about eight miles, with delightful little villages here and there. The Red Spinner, March Brown and May fly are said to be very killing here. There is also a fine stretch at Aurach near Gmunden. The river is about twenty-five feet wide, and abounds in such grand scenery that the angler may be pardoned if he forgets all about such non-essentials as trout and grayling. Traun is a splendid Alpine Lake covering six thousand one hundred and fifty-eight acres, and Hallstätt is a noble piece of water, sure to beguile the angler, and fascinating not only for its fishing, but from the fact that it abounds in ancient Celtic and Roman remains. A radiant little river, the Hallstätt-Traun, flows into Hallstätt Lake near Obertraun. It abounds in half-pound trout, and two and three pounders are sometimes taken. A two and a half-ounce split cane or bamboo rod is used. While fishing here one is surrounded by eternal snows, and the water is pure, clear and icy—all conditions favourable to making hard-fighting, good-conditioned fish.

Toplitz Lake is among the natural gems of the region. Here one is not obliged to take a gillie, but all trout and pike taken belong to the Administration. Fine fishing grounds are found near Aussee, Mitterndorf, and the sport in the Kainisch-Traun is sure to be the best in Europe for big trout, *S. fario*. No net is allowed to profane these radiant waters. The fly alone lures the trout, twenty to forty in an afternoon, two pounders not being unusual, so I am told on excellent authority. The Salza, near Mitterndorf, affords fine sport, there being at least fifteen miles of good water, seven of it being nearly thirty feet wide.

I can but mention the main aspects of this beautiful angling region, which one should approach with angling reason, taking things as they are, not finding fault because the rules and regulations are not like those of England or America.

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Other lakes which are beautiful and well stocked are St. Wolfgang, Mond Lake and the Atter, also the Teichl River, Upper Austria, Gleinker Lake and many more. Salzburg, with its central hill and charming surroundings, is one of the most attractive cities in Europe from almost any standpoint. It is the capital of the province, and may be made a charming headquarters from which to go a-fishing to almost all points of the compass. It is the heart of Austria and Austria's angling. In St. Wolfgang there is a variety of game, lake trout, chub, trout, pike, charr, perch, barbel, bleak, coregonus. The fishing here is controlled by Mr. Johann Hoplinger, from whom privileges can be obtained.

This mention of the names of private parties controlling the fisheries may appear strange, particularly to American anglers, who claim as tax payers the right to fish anywhere in state or government lands.

In California a movement is on foot to enable the public to fish in every stream, public or private, that has been *stocked at the expense* of the State, which means the whole people. I agreed with this myself, with the proviso that the only lure permitted should be flies. The *average* fisherman is after pounds and numbers, and cares little for the esthetics of the sport, or the fact that he should leave something for a friend on the morrow; hence fly fishing has few charms for him. The rights to certain waters are purchased or rented from the Government, principally by hotel-keepers, who in turn care for them in the interests of their patrons, all of which in the end is to the advantage of the angler.

Zeller Lake should be visited by the angler for its mountains, which are capped with snow and ten thousand feet high, so that in casting your Royal Coachman, it is lost in the reflection of a snow-bank of the Kitzsteinborn. The Tyrol has in round numbers thirty-seven hundred miles of trout and grayling streams, and its lakes and ponds cover an area equivalent to twelve thousand five hundred acres, about which are some of the most beautiful and picturesque resorts in Europe. In contemplating

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fishing this region the angler would do well to write to the Landesverband für Fremdenverkehr in Innsbruck for a little book which is issued gratis—*The Tyrol Fishing Book*. This contains all the minute details which lack of space prevents in a volume of this kind. Ausserfern is the name of a district which extends to the frontier of Bavaria, and abounds in fine angling lakes and rivers. About half a mile above the sea, we find Lake Achensee, the largest lake in the Tyrol; and to fish here, the angler must apply to the monastery of Fiecht, near Schwaz, that owns the lake fisheries. There would seem to be a double chance here: the angler could get his licence and confess his sins of exaggeration to the good monks. Good waters near here are Schwarzsee, and in St. Johann, Kössen, St. Ulrich. The Thiersee near the beautiful town of Kufstein has excellent trout fishing; and in the lower Inn River you may take that greatest of trout, the Huchen, that is known as salmon and by many names. A fine photograph of one, which weighed forty-six pounds, is here shown, taken by L. Deiglmayer, for which I am indebted to Baron Walter von Rummel, with whom I had the pleasure of fishing at Santa Catalina. The hucho, huchen or rothfisch is a great trout-like fish that has been seen weighing nearly one hundred pounds. It is common in many streams, particularly the Danube. It differs from the true *Salmo* in the vomer being without teeth, and in general appearance it differs materially from the brook trout *Salvelinus*. It attains a length of three or four feet, is slender, and looks, in the smaller specimens not unlike a wall-eyed pike, again like a grayling without the big dorsal. It has a depressed, pike-like snout, and teeth that are devastators to delicate gut. In colour it is often a brilliant silver, with small black spots dotted particularly over its upper surface. It is a good food fish, and in its best condition a hard and splendid fighter, and well called the 'German salmon,' as it certainly in a way takes the place of this great fish. America and England could introduce this noble fish to advantage and its ally in Japan.

The huchen has been more than once compared to salmon,

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especially the one taken in the Danube and its Alpine tributaries. The season for the Red-fish, as it is also called, is in autumn and winter far into December ; when the waters are low and clear, the summer months are equally good, and of course, most delightful. The spoon is the bait *par excellence*, and of a size for a possible fifty pounder. When it strikes, the huchen goes into the air with a splendid leap of often three feet, and at once begins a battle royal with the angler who, if he has to play the fish against the stream, will soon realize that he has met his match. There is a Fishers Union in Vienna (K. K. Österreichische Fischereigesellschaft) 1., Schauflergasse, which issues licences and permits for huchen angling in its private preserves in Langenlebar and Muckendorf, but fifteen minutes by rail from Vienna, from which all information regarding the huchen and its haunts and the angling chances may be obtained.

In this vicinity is the Paznaun Valley with the wild river Trisanna, the Pitz Valley and the glacier-fed Pitztaler Ache, and the Oetztal running through the Valley of Oetztal, abounding not only in chub and perch, but in hard-fighting Rainbow trout from America. Magnificent scenery characterizes this region. The Grossglockner, the radiant glacial lake, Monte Cristallo in the Dolomites, the Ortler, and who does not know Meran, nestled in the heart of the Tyrolean mountains with its streams abounding in grayling, char, pike and trout weighing from six to seven pounds ?

So one might spend the summer angling and loitering and doing nothing, which means looking at the scenery ; angling down the Adige from Bozen, coming to the Italian-speaking part of the Tyrol, and finding the lakes of Toblino, Malveno and Lago di Garda, the finest and largest of the Upper Italian Lakes. It is here that you cast a fly in Austria and reel your trout into sunny Italy, as Garda is on the line. This beautiful lake, a type of all, contains char, trout, tench, perch, eels, carpion, in all nearly thirty kinds of fish. Then there are lakes like dreams, Caldonazzo, famed for its pike, Levico, Lago di Serraza, and

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many more, for descriptions of which and the fish, I can only refer the reader to the little booklet already referred to and obtainable at Innsbruck. I have always been fascinated by Turner's 'Palace of the Caesars,' a dreamy, nebulous picture of a splendid palace, and when you see Gastein over the foamy fall and against the deep green hills, you will know what I mean.

There is a charm in searching for new and unexpected angling regions; and in this part of the world, the man with a fly-rod will find an extended field. There is Dalmatia, Carniola, Montenegro and Ragusa on the Austrian Riviera. One of the fine rivers of Austria is blue Isonzo, which has distractions in the shape of grayling, and a forty-pound trout with a 'marbled skin,' the average being from six to twelve pounds. The record for 1910 was a fourteen pounder. May Fly and Red Palmer are given by local anglers as the most killing flies for May and June, and Black Palmer for September. Near Karfreit on the Isonzo, there is a delightful stretch of water, and a bridge, the ladra, well worth the time to cross and admire.

In Styria there are many fine Alpine streams and lakes worthy the angler's attention, as Lake Putterer, and the river Enns, near the Benedictine Abbey, dating back to 1074. Then there are the lakes of St. Georgner, Mareiner, the River Olsa, where the owner of the fisheries is the Parish Church.

The patrons of the Austrian Tyrol or the Italian Lakes cannot control the climate, and rains may come and discourage the angler as they do in all places; but if the angling is not up to its best level, there is always the scenery of this wonderful land of Europe.

The streams of Germany are stocked with various kinds of trout and small fry, often affording excellent sport.

The Oos where it flows through Baden abounds in trout, and the late Leonard Finletter amused himself by feeding them from his seat in a hotel restaurant; stone trout and brown trout being the varieties which took his bits of meat and bread. All of which suggested a trip to the Wutach River at Tiengen, about four

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hours by train from Baden where he had excellent sport, using a Montreal or silver Alexandria fly, and a Coachman later in the day. Mr. Finletter took large grayling and trout here, which he told us about later at the Tuna Club, and also about the delightful angling Inn, at which he found congenial spirits, the Golden Ochsen at Tiengen.

In writing of trout fishing in Germany, I am reminded of the celebrated case of the anglers of the Frankfort-on-the-Oder. From time immemorial they claimed the right to fish in the stretch in the Oder from Furstenberg to Garz. In 1510 when Joachim I. was Elector of Brandenburg, he was induced by the Bishop of Lebus, through fear of the Church, to give the Bishop's people a sole fishing right in the Oder from the Garz-Castrin boundary to the Frankfort-Lebus boundary. The Frankforters protested and in 1511 went to law with the Lebusers, and in one hundred and eighty-six years, or on June 24, 1697, obtained a decision, their children and their children's children inheriting the claim after the fashion of a Kentucky feud. The decision was fought down the centuries, until 1911 when the Supreme Court of Germany decided in favour of the anglers of the Lebus. This is the proverbial angler's patience.

If the angler finds himself in the Belgium and Luxemburg Ardennes, there are trout to be had. Salmon are taken at Remonchamps, and at Aywaille and Angleur, not far from Liège. In the Pyrenees, Mr. Charles A. Payton, a distinguished British angler and member of the British Sea Anglers Society, stated that the Pau district, the streams of Yeaux, Chaudes, and Gabas, the lac d'Aule, above Gabas, and Louvie abound in trout. Good fishing is to be had not far from Cologne at Kyllburg in the Eifel, trout, grayling and chub being the game to expect.

Some very large trout are taken in Chiem Lake, near Rosenheim, Bavaria. One particularly I recall, taken by J. A. Koosen, was three feet six inches long, and weighed over thirty pounds. This was the biggest trout *that did not get away*, so the veracity of anglers is sometimes preserved inviolate.

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In Austria the Rainbow has been successfully caught for a quarter of a century, and many streams are stocked with them, also with brook trout. The black bass is also doing well in Austria, according to Mr. Von Pirko, President of the Imperial and Royal Austrian Fishing Society.

The Rhine run of salmon is important, and as the river flows through several countries—Switzerland, Germany, Grand Duchy of Baden and Holland, they all obtain some benefit from it, but mostly professional fishermen; in a word, there is nothing to compare with the English salmon rod fishers in any of these countries.

There is good trout fishing in the waters of Belgium, though many are not free, or are private fisheries. If the river is free, a licence can be taken out at the nearest post-office. Some salmon are found in the Meuse, and trout in the Amblève and in the River Oarthe. The trout are confined to the rivers which drain the provinces of Liège, Namur and Luxemburg. The cool rivers of the Ardennes have been stocked with the Rainbow trout, which is also found in the ponds of La Hulpe, Court St. Etienne, Groenendael. The barbel occurs in the Meuse, and specimens have been taken weighing seventeen pounds. Bream and pike also occur, and in Holland the canal of Vernengen is known for its large pike. There are a number of other fishes, as the grayling, in the tributaries of the Meuse, the sauger or pike-perch. As for sea fishing, in Belgium little attention is paid to it, though anglers are seen on the piers at Blankenberghe, Ostend and Nieuporto.

The huchen, previously referred to, ascends the Danube in March and April to its headwaters to spawn in the Zeller or Tyrol, half a mile above the sea. There it is taken with a spoon or fly, but the largest numbers are speared by the natives in the shallow waters of the upper streams. One of the interesting lakes in Styria, Schwarzensee, has for four centuries been held by the monks of the monastery of Admont, who on feast days and during Lent use the preserve to seine the trout. The native Styrian boat used here is quaint and artistic. It resembles a

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long dug-out, low in the water with a rising bow ending in a point, the rail elevated in sections fore and aft, the keeper propelling it by a paddle.

The lakes and rivers of Switzerland abound in about fifty species of fish. The salmon can be taken in the Rhine below the Schaffhausen Falls and in the Oar. The Rainbow trout has been introduced with success, and the brown trout is taken in Lake Geneva, Neuchâtel, Zurich and Constance. Here we find the pike, also in Lake Morol, Lake of Joux and the Black Lake of Friborg. Char and grayling are also taken, and the gigantic eel-fish known as Wels is found in some of the large lakes, as Bienne and Lake Constance, where fishes eight or ten feet long have been taken, weighing from one hundred and fifty to two hundred pounds.

The Russians care little for angling as a sport, and practically the only clubs are composed of Englishmen. The lakes abound with fish, and in the Caucasus the streams afford fine trout fishing. The Laba and Zelentchonk rivers are particularly fine trout streams. Lake Goktcha in the Southern Caucasus has a game fish, *Salmo ferox*; while the Ural and Altai streams afford good grayling fishing, the fish being especially large, four or five pounders being taken. In Kamschatka the Pacific salmon abound, but they do not take the fly. The sauger or zauder, a pike-perch, is common in the south of Russia. Two species are known in the old world, and nearly everywhere it is valued in the market and as game.

CHAPTER XXI

SOME GAME FISHES OF THE SCANDINAVIAN PENINSULA

'A Birr! a whirr! a salmon's on,
A goodly fish! a thumper!
Bring up, bring up the ready gaff,
And if we land him we shall quaff
Another glorious bumper!
Hark! 'tis the music of the reel,
The strong, the quick, the steady;
The line darts from the active wheel,
Have all things right and ready.'

Stoddart.

THE limited salmon fishing in England and Scotland has practically forced many lovers of this particular sport to look to other fields; and when, in the last century, a wandering English angler discovered that the finest salmon rivers in the world, so to speak, were in Norway, there was a movement in that direction. In a remarkably short period, England had secured the cream of this field of sport and still holds it, to the general benefit of these fisheries.

Sir Henry Pottinger says: 'Out of about three-score of first- and second-rate salmon rivers situated between latitude fifty-eight degrees and seventy degrees from Christiansand on the south coast to Pasvig on the Varanger fjord, two-thirds are permanently held by Englishmen, and the remainder are chiefly in the hands of companies or private owners who let to Englishmen by the season. Very few are retained by Norwegians for their own fishing.' It will be seen that the natives care little for the sport, preferring the money in rentals. They cannot fish the best of their own streams

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if they wished, and the outsider who visits Norway for the salmon fishing, finds that the cream of it has been taken, and that all he can get is an inferior pseudo-salmon river of very uncertain tenure as to fish, or he can rent from a private owner, or one of the Salmon River Companies, which demand high rentals.

In a word, the English have it, and they deserve it by right of original discovery, for all they have done through centuries to make sport what it is and to educate the people to love out-of-door pastimes.

A few years ago the fishing in Norway was difficult to reach and there were few comforts ; but to-day good steamers cross the North Sea, and every convenience is to be had in the way of houses and food. Some idea of the angling here can be had by selecting the river Alten, which has about thirty miles of good fishing water, well adapted to casting a fly. The fish average about twenty pounds, and four rods can take in the season about ten thousand pounds of salmon. The river is controlled by one Englishman.

The river Namsen is divided into eight beats and affords its owners magnificent sport, occasional fishes making fifty pounds. The fishing here is done from a boat, which is worked in a zig-zag fashion across the stream, so that the fly or spoon reaches every part of it. In rivers of the second class, each rod is supposed to take from eight hundred to one thousand pounds of salmon. Nearly all the rivers here differ or have some peculiarity : thus the Aarö is famous for its large fish, sixty pounders having been taken. The river Leirdal is not a ' boat river ' and can be forded, or the angler may cast from the banks.

It is a singular fact that most of the Swedish rivers are worthless. For some reason the salmon entering them will not take a fly, and it is said to be due to the brackish condition of the water. A few rivers which flow into the Kattegat and the Baltic are good salmon streams, and are owned by Swedish anglers.

While the limitations of the present volume restrict me to the most essential details, I may refer to a few Norwegian rivers. The

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Gula, 'Child of the bright and stainless snow,' is an interesting stream, though not of the best. It rises near a wide snow-field, drawing from a vast area, and runs its tempestuous course of fifty miles before it is lost in one of the most attractive fjords of Western Norway. It is of peculiar interest, as mid-way it forms two great lakes, ten and fifteen miles in length.

In the lower reaches there are many falls and rapids; one fall is fifty feet high and the salmon pass around it by a ladder. If this was in America, the fall would have been blown up long ago, and converted into a rapid, so that many salmon could go up and the value of the river enhanced. As it is, the Gula affords to two rods in June and July about one hundred and fifty salmon and two hundred grilse. The largest salmon on record weighed thirty-two pounds, and the average was thirteen and one-half pounds, sport that should satisfy any one. This fine second-class stream is, we are told by Mr. Charles Thomas Stanford in his *A River in Norway*, a fly river; not only this, but you can cast and do not have to drag the fly across the stream, or troll for the fish. Trolling with a fly, it would appear, comes into the class of spoon or dead-bait fishing.

Fly fishing means to cast and drop a fly then recall it immediately. I should call 'harling' 'trolling,' and I note that Mr. Stanford makes the point. But 'harling' or towing the fly across the river is absolutely necessary in many Norwegian rivers, if salmon are desired. In this way I took my salmon in the Williamson in Oregon in 1912. A fly would never be taken, so I fell from grace and used a spoon.

The fishing in the Gula begins the first of June, where the temperature of the water is forty-eight degrees. The water below the fall is fished first, as the principal run up the ladder does not begin until July. A certain 'Leivik pool' is the best. The lower stream is very attractive: a low beach for casting on one side, and a precipitous wooded-precipice on the other, and far away high mountains with lines and patches of snow lingering into summer. By following up this river, one is led along beauti-

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ful reaches, and through regions that are a delight whether the salmon or grilse are biting or not.

As to flies—Jock Scott, Durham and Black Ranger, Black, Silver and Blue Doctor, Dusty Miller and a few more are sufficient. Other rivers of more or less charm are the Namsen, but to be fished by ‘harling’; the fine salmon-producing Laerdal that has given its owner one hundred and forty-seven salmon in thirty-three days, not to speak of grilse—seventeen hundred and seventy-seven pounds in all; the Orkla, the Rauma, Sundal, Alten, Reisen and Tana.

As to the angling rank of Norwegian rivers, I am indebted to Inspector Herr Landmark for the following: He estimates the value of the salmon and sea-trout in an average year as 1,462,000 kr. The Tana ranks first with an average of 59,945 kr., then the order is Laogen River, Gula, Orkla, Namsen, Mandel, Nisser, Topdal, Laerdal, Drammen, Voss, Vefsen, Stjordal, Figgen and Haa. The richness of this country in salmon streams can be realized when, eliminating the purely trout streams, there are one hundred and sixty salmon rivers.

The English angler pays about 300,000. kr. per annum to Norway in leases, and 74,000 kr., for other expenses. In all, they probably spend for their angling two million kronen a year; a sum greater than the total value of all the salmon and trout fisheries of the country. Yet the salmon killed by the angler is an infinitesimal fraction of the fish that enter the rivers.

The trout fishing in Norway is excellent, also in the Jemptland lakes of Sweden. The lakes of Norway afford good sport, especially the Veigvand, Landjevand, Tinhölen and Hardanger Vidden lakes. Nearly all the Scandinavian rivers are trout streams, and they are generally free, or the fishing can be had for a small sum. The Jemptland lakes are noted for their large trout, and in some is found a large char, *Coregonus arcticus*. The Scandinavian coast-line abounds in fine sea angling, if one cares for fish of the kind. In the lowland lakes are found pike, perch and a variety of small fry.

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Many anglers are now turning their attention to the streams of Iceland, and some large fishes have been taken from the streams in this home, but a few years ago, of the great auk.

In the Isle of Mull rivers, as the Forsa, Aros, and lochs Ba, Frisa, Assapol and Mishmish, there is excellent salmon and sea-trout angling. Mr. J. H. Clive, who knows the ground well, advises a single fly, No. 9 Limerick hook, Silver Doctor, Alexandria, or Jungle cock. This for the rivers; for loch fishing, Soldier, Palmer and Zulu.

If one is hunting for trout fishing in out of the way places, he will not be elbowed at the Lofodon Islands, which afford excellent sport, especially Ostvaago, one of the outer islands. The fishing in the Grundfort Fjord is said to be excellent, both with a minnow and March Brown fly, the fish ranging up to six and nine pounds; and there are salmon, grilse, sea-trout and 'bull trout' of eight or nine pounds. The best fishing on the mainland is to be had at the end of July, and on the islands the last of June. On the mainland excellent places are Senjen, Hindo, Lango and Ando, Ofoten and Salten fjords. The best flies for Nordland are said to be the Orange and Partridge, while Jock Scott and 'Stevenson' are often used.

A day's catch is given as follows: two salmon, twenty-five and eleven and one-half pounds; eighteen bull trout, grilse and sea-trout weighing eighty-eight pounds, the largest trout a nine and one-half pounder; good for Nordland or anywhere else. The sea-trout angling is especially good at Kirkwall, Orkney, where not long ago Mr. G. T. Arthur showed a creel of forty-one fish weighing forty-seven pounds, the largest fish weighed about five pounds.

It is not to be understood that because the Norwegian streams and rivers are controlled by the English that no fishing can be obtained by the public. There are hotels which have fishing for their guests, and there are many beats which can be had from responsible agents in London. The following will afford an idea of the expense of salmon fishing in Norway: Thus in the

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Mandal, near Christiansand, South Norway, one may rent the Nodding Beat of about four kilometres with a farm-house of ten bedrooms and good conveniences for 200 kr. per month. In 1912, in June, July, August and September, this beat afforded one hundred and fifteen salmon, three hundred and sixteen grilse, two hundred trout, amounting to two thousand three hundred and eleven pounds. One may rent the Hague Beat from August 1 to September 14, for \$1,000.00 or £200. The Oislebo Beat, six or seven kilometres in length, both banks, house with eight bedrooms, can be had for 160 kr. per month, or \$1,000.00 for June and July. The Fuglesvedt Beat of four kilometres on this river, with a six-bedroom house near the river, can be rented for £150 for June and July, or £80 for August and September. Other beats are the Lovdal from Kaaland to Kleveland Bridge, three to twelve kilometres, both banks; accommodations at Lovdal, June and July, \$1,000.00; August and September, \$500.00. The Kleveland's Beat is available August 1 to September 30, for \$1,375.00. The Bjaeland Beat of four kilometres, char fishing, trolling for salmon in Manflo Lake, may be had for £40, or \$200.00 per season. The beautiful Foss Beat on the Mandal can be rented by the season for £60. All these beats have comfortable and commodious houses, and while practically every inch of all good rivers is held for rent or lease, good angling is to be had, and the prices are not exorbitant.

Tuna or tarpon fishing either in Europe, Canada or America, is, I should say, more expensive. The famous beats on the Namosen range from four to eight kilometres, and as fifty-pounders are not uncommon, the rent is somewhat higher but never extravagant. Prices range greatly. One beat that gave eighty-three salmon in June and July, 1912, can be had in 1913 for £550, or a beat of three miles, large farm-house, can be had in June and July for £275. Such a beat could be taken by a party of friends, divided up, and the expense reduced to the minimum. This beat produced in 1911, from May 21 to August 7, one

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hundred and one salmon, thirty-eight grilse, in all amounting to one thousand nine hundred and thirty-three pounds.

Fine beats may be had on the Orkla, a boat-fishing river; some famous ones being the Aarlivold, Dragset, Lo, Dombu. On the Gula fine beats are, Gulfos, Vold, Rogstad, Langletet. On the river Stjoldal the best beats are the Hegre, Lerfold, Foro, Floren-Kringen. Other good streams on which beats may be had are the Etne, Aaro, or one may take a combination in the Sundal Valley of the Nyheim and Lindal where there is salmon, trout and lake river fishing and reindeer hunting. The Aargaard River in the Namsen Fjord, the Frafjord River, Famous, the Hyen, Tromsoe Amt, Nordland, Vefsen, Atran, Nordfjord, and many more, to reach which the angler takes the Wilson Line of steamers from Hull to Trondhjem, or Christiania, and by rail to the former. The angler can make all arrangements in London for the rent of beats, from some reliable agent, as Lumley & Dowell, Lumley House, St. James Street, and doubtless there are many others.

There is an abundance of free trout fishing in Norway, as at Sivertsen's Sande, Sondfjord, Red Hotel, Nordfjord, Liland's Hotel, Bolken.

The beautiful trout streams of Finland have been referred to. In North Finland, at Kajana, there is excellent fishing for trout, grayling, etc., the season beginning the twentieth to twenty-sixth of June. Fifty miles from here is Vaala on the Elea River, with salmon and sea-trout.

In Iceland the season begins June the first, and lasts until the first of September. There is fine salmon fishing within three miles of Reykjavik. Jock Scott, the Doctors, Silver Gray are favourite flies for Iceland, and the angler should remember that Iceland is not an ice land in summer. It is within nine hundred miles of Edinburgh and there is a regular line of steamers from Leith to Reykjavik. There are snow-capped mountains, glaciers; but for the angler in search of salmon, grilse, brown trout and char, there are flower-clad valleys, radiant green hills, air pure and scintillant and the nightless day.

CHAPTER XXII

THE SALT-WATER JACKS

'O Florida, thou poem of the States,
Thou coral garden where the warm sea sings,
'Tis sweet in dreams to drift beyond thy gates,
Like voyagers old who sought immortal spring,
'Neath golden skies impearled with ibis wings,
Afar from crystal season's lines of blue,
And cloudy conifers of ice and snow,
And with the double sense of beauty view
In things we feel the things we are to know,
And almost hear the palpitating strings
Of life harps lost in answering numbers play.
Would that my song could like thy bird songs flow
Like wingèd poets to the sun-land true!
Sweet would I sing, O Rivière du Mai!'

Hezekiah Butterworth.

AMONG the oceanic fishes there is a group which for convenience may be termed the Jacks. They are found in many seas, but, as a rule, in the warmer temperate zones, north and south. It was of Melanthus that the poet wrote :

'I quaffed full bowls in a capacious shell,
Ye Gods if earthy men thus live and drink
Give me the land, the sea's a worthless sink.'

Some of the jacks I have seen in Florida might have penned these lines, as I have watched them take to the land in their fierce rushes, dashing far out on to the beach, to slowly struggle back again. This was the jack or crevallé of Florida, of which Mr. Izaak McLellan wrote :

'Swift speed crevallé over that watery plain,
Swift over Indian River's broad expanse.

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Swift where the ripples boil with finny hosts,
Bright glittering they glance ;
And when the angler's spoon is over them cast,
How fierce, how vigorous the fight for life !
Now in the deeps they plunge, now leap in air,
Till ends the unequal strife.'

Their fierce nature was well illustrated by these rushes on certain keys of the Florida reef, where I have often joined in the *mélée*. The jacks, in spring and summer particularly, run in shoals of many thousands, and when seized with a blood or hunger lust, go mad, lose all timidity, and like an army of some oceanic Mahdi, rush on the shoals of sardines and drive them on to the beaches, presenting a scene of havoc and slaughter difficult to believe if one has not been in it.

At a certain key we always attended these 'beats' to watch the struggle and to aid the fishermen catch jacks. The warning was a deep but loud roar, and a crashing of fishes on the water—a sound that had a definite meaning to all who heard it, and which could be distinguished a mile or more on a hot still day. These were summer seas when the Gulf was a disk of steel, its normal condition, and while hot, there was a charm difficult to describe, as here were the gardens of the sea—the

'Gulfs enchanted where the siren sings and coral reefs lie bare.'

The reef was the top of a coral mountain, and vast legions of fishes climbed its heights from the abysmal regions where there was little or no life, like birds, to live and feed on the literal gardens along its slopes.

Following up one of the 'beats' one day, we presently saw it—a mass of foam on the clear surface, as though a volcano had suddenly burst forth, and the sea was seething and boiling. When we reached the spot the jacks had driven a large shoal (or 'school' as they call it in Florida) of sardines on to the beach of Long Key (Tortugas), where they formed a windrow of fishes several feet in width, a solid animated mass, with

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backs out of water, while for ten feet outside of that, the water was black with the sardines and rapidly becoming red, due to the carnage. We hauled the dinghy on the beach, and I waded into the mass to catch some of the jacks. The school was evidently made up of several thousand, and they would dash into the sardines with such force that they went completely through them, and high and dry on the sands where my man caught them by the tail and threw them up higher.

The sardines paid no attention to me ; fear of a deadly type had seized them, and they merely hugged the shore and went down, as the fierce living tempest charged into them, mowing them down, killing from a mere blood lust.

The market fishermen wanted jacks, so we entered into this battle, and as the big fish swarmed about my legs, striking me, I caught them by the tail and tossed them out onto the sands, that were soon a writhing mass, most of them having gone ashore of their own volition. For twenty minutes or half an hour this wonderful rush and pandemonium continued ; then the jacks drew off, like an army, and left a long line of blood along the sands, and dead and maimed sardines to tell the story, upon which gulls and brown pelicans and man-of-war birds began to feed.

Either with a hand-line or rod and reel, the jack or crevallé, *Caranx hippos*, will afford a remarkable illustration of strength, and it should be taken with the rod trolling, or by casting with live bait. The nine-ounce rod of the Tuna Club description is eminently adapted to the occasion ; and few, if any fishes of the sea make a better struggle for freedom. In six or seven years, winter and summer, on the outer Florida reef, where my father, an army officer, was stationed, years ago, I had many a bout with those splendid fishes, that gave no quarter, nor did they ask it, but fought to the finish.

The jacks of the crevallé type are extremely common in nearly all tropic and semi-tropic seas, though their place appears to be taken in California (so far as the angler is concerned) by

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the yellowtail, a cousin of the amber-jack, which has many of the characteristics of the typical jacks. It is common in Florida, and is found very generally in the West India Islands. It has been taken on the American coast north of Florida, but it is an exception; the grounds of its choice being the warm waters of the south, where small fry abound in unlimited quantities. In Florida it appears in greatest numbers in the summer months, ranging from five to twenty or even more pounds.

Another jack is known as the goggle-eyed jack of Bermuda, and very generally throughout the West Indies. Still another jack, *Carangus latus*, has a world-wide range from America to South America and the Indian Ocean. Its common name is jurel. Another species, the Cuban jurel, is common about that Island, and affords excellent sport. Here, too, is found that extraordinary jack, of thirty or forty pounds, known as *Hynnys cubensis*, and another species, *H. hopkinsi*, of the Pacific coast, near Mazatlan.

There are a number of smaller allied fishes which are game in every sense, if taken with appropriate tackle, as the Runner (*Caranx crysos*). Nearly all of these jacks 'beat,' the sound of the carnage in the semi-tropics arousing man and bird. Mr. W. H. Gregg in referring to it says: 'I have heard and seen all the above movements of schools of mullet in the Indian River; many times their rushes, when pursued by porpoise, sharks and crevallé, sounding like distant thunder or artillery.' The pompano of the Indian River country, eastern Florida, bears a close resemblance to the jacks, and is a cousin. It attains a weight of from five to eight pounds, though the average is much less; and if I am not mistaken, I have seen a thirty pounder taken in a seine at Tortugas. A drawing was made of this fish, and it corresponded to the typical pompano.

Almost every angler has had an experience with jumping fishes, and I have had many a pompano leap into my boat, not to speak of mullet, gars and many more; but the little pompano is an adept. Mr. Gregg tells of a pompano that sprang into the

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engine-room of a steamer. I know of a pound and a quarter flying fish that leaped aboard the ocean-going steamer *Hermosa* in the Santa Catalina Island Channel, and landed in the bar, to the destruction of glass ware.

If the angler can find a good locality in Florida where he can fish for the big jack from the shore, he should not miss the opportunity. Such a place fell to my good fortune at Long Key, not the famous tarpon and swordfish locality of the upper reef, but at the Tortugas group, sixty miles west of Key West. Here on the east side of the Key the jacks would beat almost every day in summer. At such time I would wade out a few feet on the south side and cast my sardine into the blue channel, that like an artery wound in and out among these gardens of the sea. It would not be long before I would have a strike, and what a strike! It was a condensed tuna, taken on the rush, with a bang, smash, and if you did not have affairs—line, reel, etc.—in shape, something would give, and then would begin a fight worth while, the rod bending to the breaking point, the jack making great characteristic side runs, and a splendid exhibition, as I gradually backed in and played him in the shallows within reach of the negro's grains in lieu of gaff.

To interpolate, there is a feature of the fishing in Florida that was particularly fascinating to me, and I observe that the late Mr. Arthur St. John Newbury in his charming book on Florida fishing, gives a picture illustrating it. This is bait catching. There are so many fishes to catch here, with so many varied appetites, that the tyro will often fail because he innocently attempts to force an impossible bait on a fish. Some fancy crabs; others fish. One will take sardines or hardheads; another takes conch, or crayfish or shrimp. The taking of this bait is a fascination, or was to me. Many an early morning at sunrise, I was on the shallow lagoon, grains (spear, with two short prongs) in hand, to take crayfish. Or later followed them and took them where their whips appeared, as they lived beneath every coral head or bunch. Or we drifted along, diving for

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conchs, the beautiful big pink-lipped shell, a famous bait for red snapper, grouper, grunt and many more, and a *bonne bouche* to many Bahamians who ate it in the olden days, and so were called Conchs. Conch *au naturel* will hardly appeal to one, but conch, well pounded, as with abalone, makes a chowder not to be despised.

The most esthetic bait catching is with the cast-net. An old negro servant, or boat caretaker, of my father's, in the army, made me a small cast-net suitable for a boy of twelve or thirteen. I became skilful with it in a short time, and spent many an hour stealing upon mullets and casting for them. There is something very graceful in this, especially to see some of the tall negroes step along with the cast-net between their teeth and held to the left, creeping upon a school of mullets, so intent in burrowing in the mud, so concealed by it, that they cannot see the impending danger. All at once the fisherman stops, moves his body to the left, to get a swing if the net is heavy, whirls it to the right, and then from the left, swings it so that it opens out six or eight or more feet, and drops like an umbrella upon the unsuspecting fish that are effectually caged.

At the Tarpon Club, Port Aransas, Texas, my young bait catcher had a duplicate of my small cast-net. It was not over four feet across, and the weights were light. When I proposed to go for Spanish mackerel or channel bass, he would run down to the beach, dash into the water and cast his net as he went, so catching the shrimp bait necessary for this game. In California the crayfish are too deep to grain, so are taken in traps, while the abalone is prised from the rocks by the aid of a glass box and a long-handled gouge. The Japanese go down in armour, walk along the bottom and filch them.

Among the jacks, though only a distant cousin to them, is the amber-jack of Florida, one of the finest of the Atlantic coast fishes. It resembles the California yellowtail, but is longer, thicker or more bulky, attaining a weight of over eighty pounds. The average fish weighs about twenty-five pounds. This is

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Seriola lalandi. It is taken in great numbers at Palm Beach and along the Florida coast. They are often caught trolling from a launch ; but for rod and reel fishing, unless the launch is small enough to move about quickly, a row-boat is advisable. A nine-ounce, seven- or eight-foot rod is long enough for this game, using a belt with a butt socket. A good multiplying reel is a necessity, a long, piano-wire leader, with several swivels (the winged swivels of Mr. Newbury are excellent), and a 10/° tarpon hook, or a smaller one if live bait is used. The amber-jack is not particular as to bait ; but a live mullet or bluefish makes still fishing very alluring, and when trolling from a sail-boat or launch, squid or dead bait is acceptable. To my mind, the most fascinating method is to 'still fish' with live bait, or, if possible, approach a school of small fry, beneath which the amber-jacks are lying. Mr. Gregg in his valuable book, *How to Catch Fish in Florida*, describes an instance. When on leaving the Royal Poinciana, his attention was attracted to a school of fish near the pier. It was a school of bluefish, and baiting their hooks with small pieces of mullet, they hooked a bluefish, which in turn was taken by the game they were after, the amber-jack beneath. Mr. Gregg hooked a number before he landed a fish, as they all came at the dock and cut the line, an experience I have often had with the yellowtail at Avalon.

An enthusiastic angler, burdened with the symptoms of an artistic temperament is liable to think that every fish is the best and fiercest fighter. So while I have had no extended experience with this fish, I have a most alluring impression and memory of those I have taken ; and if there is anything more soul-stirring (in fishes of this size) than the first rush of a forty-pound amber-jack, I do not know it. The imperious smashing departure, the high staccato of the reel—a real shriek—from the click, the sense of power and strength the fish gives you, are all elements which go to make up a great game fish. I refer now to a fish taken from a small, well-handled boat, where the oarsman can keep you facing the game, and you are playing it

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with a fairly light rod from the boat. There are situations where the sailboat must be employed ; but I have had such disastrous happenings, attempting to get a boat up into the wind before a bluefish or other big fish takes all the line, that I am opposed to it on strictly moral grounds. I once fished in this way with a friend, who was very desirous of becoming a writer, but always regretted that it was impossible, as he had a very limited vocabulary. After seeing him try to land a bluefish from a catboat in a fresh breeze, with a stupid skipper, I found myself in a position to assure him that if a limited vocabulary was all that stood in the way of his ambition, he need have no fears.

The amber-jacks have a wide range. Some of the species found over the world are, *S. zonata*, *dumerili*, *mazatlana*, *fasciata*, *rivoliana*, *falcata*, and I think there is a huge fellow at Hawaii that has escaped the eagle eye of the specialists.

In size the amber-jack ranges beyond one hundred pounds. I have seen such a fish or a picture of it from Hawaii. Arthur St. John Newbury has a record of a fifty-two and a half pounder, which was four feet three inches long. Palm Beach has some fine amber-jacks. Mr. Wm. L. Green has taken an eighty-one and a half pounder. Mr. J. T. Caldwell of New York exceeded this in 1905 with a ninety-two pound fish, taken with a twenty-one thread line. Mr. Green's catches are as follows : thirty-four pounds, forty-two and a half pounds, sixty-seven and a half pounds, sixty-seven pounds, and eighty-one and a half pounds.

These are the giants of the tribe, but there are many more, as the smaller allied forms, which are game fishes in every sense ; delight givers, which can sometimes be taken with a fly and a trout rod. The amber-fishes do not reach England, but some of the finest jack fishing is found beneath the British flag, in various parts of the world.

CHAPTER XXIII

THE SMALL GAME FISHES OF FLORIDA

'Yo-ho, yo-ho, and away we go,
Away o'er Biscayne Bay.
With a larboard side and a starboard side,
And off at the break of day!

We trimmed our craft both fore and aft,
And sped on the flowing tide;
With a jolly crew and mountain dew
We cast all cares aside,

Our boat did laugh at the briny chaff,
A gallant craft was she;
A school of porpoise passed by,
A-swimming lustily.

A leopard shark played tag with our bark,
A sea-cow chewed her hay;
On a limestone rock a crocodile crooked
"Three cheers for Biscayne Bay!"

A flying fish flew 'midst our merry crew,
A dog-fish barked with glee,
As we chewed the tail of a youthful whale,
And growled at a stingaree.'

Anon.

ALMOST any one would like to fish with the man who wrote these jingles, as it is evident the poet not only knows how to fish, but knows what to take to preserve the peace. No systematist stickling for mere truth and veracity, but an old-fashioned angler, of an ancient vintage. If the fish the lady catches is light in weight, and a cause of sorrow and tears, he sees that it is loaded with sinkers; he has seen the crocodile, even at sea. He went to school with the sea-serpent, and is a blood relation of a merman; and as for romance, he will tell you

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Fig. 35.

Game Fishes of Florida. (Photographed from life, by Hunt).
1. Red Grouper. 2. Jew-fish. 3. Sea-trout. 4. Margate Fish (Snapper). 5. Hog-fish.
6. Jack (Cavalle). p. 216.

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how the sirens enticed him on to a reef where all hands, including himself, were lost. In a word, he is a man of imagination, ready at a moment's notice to see anything, of any size, shape, or colour. He is a philosopher; he knows that if he did tell the truth no one would believe him, so why worry? Why not revel in the delights of the imagination?

Almost every angler knows such a man, who makes life longer and jollier for himself, and shorter for the fishes. I have fished with such an angler not far from Biscayne Bay, down the keys, and the reference to the dog-fish 'that really did growl at a stingaree' reminds me of days of delight we had in fishing for the small fishes of the Florida reef—the dog-fish that growled, grunts that grunted, porcupine fish that hissed and clicked, and stingaree that was growled at, the leopard-shark, and many more, all the familiars of the great reef, the advance guard of Florida, now bounded and cemented into a spinal cord by the new railroad by which the angler can go aboard in New York in a snowstorm, and awake, if he sleeps long enough and not longer than the average angler cares to sleep, and find himself in the Tropics, on the great fishing grounds of the Gulf of Mexico.

Such is the vogue of the big game fishes in California and Florida that one almost loses sight of the many small ones that afford the wandering angler such pleasurable sport. Florida in particular is the home of countless fishes ranging in weight up to six or eight pounds, or even ten, which are delight-givers in more ways than one. To some a fish must appeal to the shade of Lucullus; to others the game is played under the banner of St. Zeno alone; but for you and for me a happy combination is desirable, the fish must be a hard fighter and a generous pan-fish as well. Most of the fishes referred to in this chapter come under this head.

Florida and California, especially in the southern part of each State, are, in all probability, the most famous fishing grounds in the civilized world. It is not fish alone that makes good fishing. I have seen fish biting about certain keys in Florida in August,

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taking the bait, or anything, so readily, that it was murder; yet so far as sport was concerned, one might as well try to go a-fishing with Charon on the Styx; it was hot beyond expression, boiling, steaming, and I had to tumble overboard every little while to cool off. One has to be an enthusiast to find enjoyment under such conditions. In Southern California I have seen big game fishes pile into a little inlet at San Nicolas Island—a melancholy spot, ninety miles from Avalon—pile in such numbers that they took line, sinkers, anything. But it was eternally blowing here; the air was filled with sand and spume, and the very winds conspired to drive one out. In a word, fishing, angling, without some of the comforts, is a sad travesty. One ought to have good weather, smooth waters to play big game, and clear waters for smaller fry, that one may enter into the full enjoyment of the sport.

This is what has made the waters of Santa Catalina famous, not to speak of Bermuda. The conditions at the former are ideal; eighteen miles at sea, and twenty miles of practical lee. The same may be true of San Clemente, twenty miles still further out, in September, and at Monterey, from 6 until 11 a.m., when it begins to blow, and the scene changes.

The average angler does not see the best fishing of Florida, as it is on in the summer. He fishes for tarpon in the early spring, amber-jack and others; but it is in summer, when the sun is overhead, and long, hot days give a dead calm for weeks at a time that the sport is at its best, yet often seething, sizzling. I have fished the Florida keys every month in the year, and a number of summers, and they are far more comfortable than the mainland regions, the heat being tempered by the winds, the mosquitoes not so evident. In fact, the climate of Key West and the lower reef is of the best.

In California the sea-fishing is in summer, or from March until December, and the angler rarely finds a day too hot for comfort on the water. In midsummer in California the nights are often too cool to go out on the water with comfort, this

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attractive feature of the East is eliminated, but it means cool nights for sleep. On the Gulf coast of Texas, as at Aransas and other passes near Corpus Christi, the heat is in force in August when angling for tarpon, but there is little discomfort out on the water where there is a constant breeze coming in over the Gulf, a breeze that is piling up the sand dunes and blowing the mosquitoes into the bay.

The big fishes of the Florida Reef and the peninsula region that appeal to the angler are the barracuda, black grouper, the sword- or sailfish, amber-jack, tarpon, kingfish and its cousin, and several more—you can count them on the fingers of two hands ; but when it comes to the small fry, there are seemingly myriads ; the grunts, a motley, bespangled, throng, the familiars of every shoal, reef, or mangrove lagoon ; grunts (and they do grunt) in red and yellow, grunts in gold and silver, grunts in black and white, and their cousins *ad infinitum*. When everything else fails the grunts are there, you cannot miss them, and it can be said that fried grunt would have been commended by Lucullus himself. 'Grunts and grits' mean something in Florida. This feature of the grunt covers a multitude of sins of omission, as it is only by a fierce tug at the imagination that the interesting little 'nibbler' can be considered a game fish, though on a two- or three-ounce split bamboo rod he will make the welkin of the reef ring for a limited time.

One cannot live long in Florida without hearing of the snappers. He will see a red snapper fisherman who sends his catch to New York or Havana. These are taken in deep holes or at certain places in the Gulf, on hand-lines, and do not afford much sport except of the hand-line variety. But there is another group of snappers that, to me at least (and I know them well), are among the most beautiful of all sea fishes ; not for their gorgeous colours or flaming tints ; as the parrot-fishes, the coral or paradise-fishes, which live with them around the coral heads, are far more brilliant ; but the snappers are beautiful in the sense of artistic richness, dignity, purity, and simplicity of

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colours which are often, as in the gray snapper, of the plainest description. This radiant fish is the *Lutianus griseus* of the scientist, the *Pargo prieto* of the Cuban, and plain snapper of the Conch, the gray snapper of the angler merely because he looks gray when compared to his twenty or more generic cousins. In shallow water he is gray, adapting himself to the colour of the mud or sand, but when in greater depths he comes up, if he comes at all, brilliant in reddish-copper hues. The gray snapper looks gray, but he is really green above; the middle of each scale is black, the edge white with dashes of colour here and there, making it a fish that appeals to the artist.

It has a high dorsal, a large powerful tail telling of fighting spirit and the strength to back it up; a gem-like eye, and perfect proportions. At first glance one would say the gray snapper is a long, graceful, small-mouth black bass; but it is more graceful, more attractive, and with many times the strength and fighting quality. The fish, doubtless, is found all over the West Indies, and, where I have caught it on the Tortugas reefs, is one of the cleverest of all fishes and the most difficult to catch.

On the large, growing, atoll-like key where I fished, a stranger might have hunted for gray snappers a month, and never found them, as they rarely consorted with the brilliant host that was found in the open. I knew an old wreck near Garden Key; what it was, or where it came from, no one knew. I found it by accident at a very low tide, the entire skeleton of a big ship, blown in by a hurricane or wrecked by the old buccaneers. As I peered down through the placid waters I saw, not ingots from what might have been an old galleon, but scores of snappers, hanging, poising in mid-water like birds. And such snappers! ranging from five to ten and doubtless twenty pounds. Their dignity was their chief characteristic. Other fishes dashed at the conch or mullet bait, but the gray snappers never moved; they did not deign even to look at it, and one might have fished for them an eternity without success.

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¹ I had many experiences with these dainty fishes before I caught them, and they are worthy the best and lightest tackle—a six- or eight-ounce rod nine or ten feet long, with a six-thread line, a long fine copper-wire leader, and small 6/° hook, and the old-fashioned O'Shaughnessey, if you please. This baited with crayfish, sardine or small fishes, I found very alluring, and a ten- or fifteen-pound snapper on this tackle is a joy indeed. Their rushes are magnificent, there is no other word for it, and they are kept up, this way and that, in and out, now rising to the surface, to dash down, come in, and play all the tricks known to clever fishes. I believe a large gray snapper on fair tackle has a greater individuality than almost any fish I know. You may find him around docks, a little way off, or old wrecks, or about mangrove stumps that have been blown out into lagoons.

The young are ready biters and beautiful little creatures. It is a satisfaction to the angler to know that his catch is edible, and no better table fish swims along the radiant groves of the Florida Reef. Jordan gives the salt Indian River, and Jack Channel Key West, as good fishing grounds, and I fancy all the wrecks along the coast are the homes of this fish.

Very similar to the gray snapper is the dog snapper, *L. jocu*. Above, it is olive in colour, the sides are often red or old-rose, the cheeks red. I have caught this snapper weighing at least twenty pounds from a boat off the Garden Key Reef, using tackle not much heavier than a short eight-ounce black bass rod. But here the comparison ends, the silk enamelled line of the bass angler will not do.

Another radiant snapper is the schoolmaster, *L. apodus*, or *Pargo amarilla*; also the silk snapper, *L. vivanus*. A long powerful snapper is better known as the *Pargo criollo*, or mutton snapper, *L. analis*. I have seen specimens which must have

¹ It should be remembered I am describing the gray snapper of the Tortugas group, the extreme outer keys, sixty miles beyond Key West. The snapper of Key Biscayne and Long Key may be a very different fish on the line.

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weighed thirty pounds at Bush Key where the channel came in near shore and dead coral was piled up by the sea.

All these snappers came into the sandy lagoons to feed at night, when we often caught them in seines in localities that knew them not during the day. One night with mullet bait I hooked a fish here which towed my light dinghy about for nearly an hour before I could land it. I hooked it hardly three feet from the shore, where the fish was doubtless hunting for crabs; but its fine rush, and my flying leap into the boat to save my line, will long be remembered.

The vivid red-tailed Lane snapper, *L. synagris*, is an attractive fellow. The average fish of the markets weigh two or three pounds, but specimens weighing ten or twelve pounds are known to anglers. Any one who knew Key West in the seventies will recall 'Paublo,' who sold snappers, and his cry, 'Snappers an' Rabirubia, yallertail an' snappers!' To eat 'yallertail,' is one thing, to remember, and to catch it another. The Florida yellowtail is a beautiful little snapper-like fish with a big yellow tail, a yellow stripe, a blaze of silver and yellow; an alluring fish about ten or twelve inches long, often two feet, and ranging up to five or six pounds. It deserves very light tackle. I could always find it on the reef, just beyond the surf in a grove of brilliant gorgonias and corals, in company with angel-fishes of various kinds. It has none of the shyness or clever qualities of its cousins the snappers, but will take conch or fish bait, and can be caught at any time, being a very democratic and innocent little fish; hence it will not surprise one to learn that it is a fine table fish and one most in evidence. No fish of its size makes a better play on an eight-ounce split bamboo or cane. To see a yellowtail flash through a coral grove on one's line and bending rod is a revelation. Nearly all these fishes are taken in traps or on heavy hand-lines, hence their game qualities are never suspected except by the few well-equipped anglers who go down the Florida Reef.

For yellowtail we often rowed out from Garden Key, across

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the big lagoon, passing beds of branch coral which stretched away for miles, entered a little five-foot channel through the reef, if the sea was low, and anchored in about fifteen or twenty feet of water. Here was a wealth of game. We were fishing for yellowtails, but caught almost everything; now a flat high angel-fish, or a richly-coloured *Chaetodon*, ablaze with blues and yellows—a veritable butterfly of the sea. Then would come a yellowtail, next a porcupine fish covered with spines, which expanded like a balloon the moment it reached the surface and floated away upon it. Then a moray, spotted like a tiger, coiling like a snake. Most of these might be considered vermin, but some are true game fishes, particularly some of the so-called angel and parrot-fishes. Of the former I would give the palm to one called the black angel-fish, *Pomacanthus*; an extraordinary creature, one of a score of scaled angels. In shape it is high or elevated, its extraordinary fin or fleshy hump making it still higher. The general colour is gray, with black or dark spots; the mouth a vivid white.

The young are striped with white bars; but the older they grow the grayer they become. The large ones are two feet long and will average six or eight pounds. The very shape of the fish is suggestive of qualities of resistance, and the suggestion is not imaginary. The mouth of the angel-fish is so small that an extremely small but very strong hook is required; a number six-thread linen line, a short leader or trace of very fine copper wire, and no sinker. The rod should be a stout eight-ounce split bamboo cane, or greenheart, about seven or eight feet long. With this and crayfish bait you are equipped. You might fish for them a year with a yellowtail hook and never hook them because they cannot take it in, or with a delicate hook, as they bite it off with their ivory-like teeth.

In the home of the angel-fish there are countless other fishes quicker of motion, and the chances are that you will catch many grunts and yellowtails before the dignified, slow-moving black angel takes the lure. So you cast, and as the throng rises,

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jerk your bait away from the quick swimmers, or better, toss a handful of bait some feet away to attract them. The slow dignified angel-fish is left behind, and casting your lure in his direction he takes it in the deliberate fashion. The body, or about one-third of it, including the head, is a vivid yellow; the mouth is blue, the gill edges and part of the dorsal and ventral fins vermilion, while the central portion is velvet-black—a most striking arrangement of colours not to be mistaken. For hours I have drifted over the homes of these radiant creatures, watching them through the water glass, and it would be difficult to adequately describe the remarkable colours of these fishes, of these gardens of the sea, that seem to be parrots, so far as plumage goes.

If in drifting over these gardens of the reef you chance to have a two-ounce split bamboo and a fly hook you can try a lesser-sized band of angel-fishes, called coral-fishes, or *Chaetodonts*. They are the tourmalines of the sea, gems of many colours, scintillating and blazing like real gems in the clear waters of the reef, standing out in sharp relief against the red, yellow, lavender, and brown sea-plumes. These dainty fishes in yellows and blues, splashed and striped, are game, if the very lightest tackle is used.

Just as the parrots of the tropical forests seem designed to lend beauty and brilliant colour to the bizarre foliage of these regions, so the parrot-fishes of the tribe of *Scarus* are the birds of the tropic seas. Lacépède says: 'Le feu du diamant, du rubis, de la topaz, de l'émeraude, du saphir, de l'améthyste, du grenat, scintille sur leurs écailles polies, il brille sur leur surface en gouttes, croissans, en raies, en bandes, en anneaux, en ceintures, en zones, en ondes; il se mêle à l'éclat de l'or et de l'argent, qui y resplendit sur des grandes places, les teintes obscures, les aires pâles, et pour ainsi décolorées.'

Badham recognized their beauty and wrote:

'While blazing breast of humming-bird and Io's stiffen'd wing
Are bright as when they first came forth new-painted in the spring,

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While speckled snake and spotted pard their markings still display,
Though he who once embalm'd them both himself be turned to clay,
On fish a different fate attends, nor reach they long the shore
Ere fade their hues like rainbow tints, and soon their beauty's o'er.
The eye that late in ocean's flood was large and round and full,
Becomes on land a sunken orb, glaucomatous and dull ;
The gills, like mushrooms, soon begin to turn from pink to black,
The blood congeals in stasis thick, the scales upturn and crack ;
And those fair forms, a Veronese, in art's meridian power,
With every varied tint at hand, and in his happiest hour,
Could ne'er in equal beauty deck and bid the canvas live,
Are now so colourless and cold, a Rembrandt's touch might give.'

All the classical writers refer to them. Numa called them 'brains of Jove,' and Aristotle dwelt upon their beauties and believed they are the only fishes that sleep at night, as note his lines :

'Scarus alone their folded eyelids close
In grateful intervals of soft repose ;
In some sequestered cell, removed from sight,
They doze away the dangers of the night.'

It is not the beauty of the fish, but its qualities as a hard fighter that I would refer to, and doubtless few anglers have played them, as their mouths are small, their teeth, after the fashion of the bird parrot, more like bills, only of seeming ivory or china, and the ordinary small hook, that naturally would be selected for them, is easily nipped off, as a macaw will bite a wire. The hook must be very small but very stout, a number six linen line and a rod of six ounces, six or seven feet long, or better, an eight-ounce rod, ten feet long, stiff enough to lift a sulking fish.

With this equipment, and crayfish bait, we may approach the parrot fish, which is scorned by the marketman, who takes it because he cannot help it, in pots or traps set for something else. It is seen at times with the band previously described, but, like the angel-fish, is slow and dignified, and does not rush at the bait with the yellowtails and grunts, but lurks in the shadow of some resplendent yellow sea-fan, where it will bend its body, as does the kelp-fish of California, then suddenly moves away rapidly, using its pectoral fins and not its tail.

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One hot day I anchored my dinghy ¹ near a clump of coral heads, hollowed out like gigantic vases, and began to fish, casting out into water fifteen or twenty feet deep, but so clear that I could see the smallest fish. The climatic conditions were not enticing. It was August, and the heat was so intense that every now and then it was our custom to drop overboard, or sit on the rail with feet swinging in the water. The fishing ground was on the outer reef not seventy miles from Havana. I could see fishes of all kinds, and a dozen or more brilliant blue parrot-fishes, known as the sea turquoise, *Scarus caeruleus*, being of that colour. By tossing bait to the right and left I attracted the attention of the bait-eaters, and had for a moment the parrot fishes to myself. After repeated trials I hooked one of the largest. Knowing the parrot-like beaks of the fish, I handled it with care, but confess that its first rush amazed me. I saw it distinctly, and estimated its weight at fifteen or more pounds. I had hooked larger fish that bent my rod with less vigour. As soon as it felt the hook it came to the surface with a bound, turned, and dashed out of sight, my delicate line melting away as though by magic, the little reel singing a barcarole of its own composing.

The fish took two hundred feet of my line before I rounded it up, then, doubtless, it turned its broad side and fins against me, and bore away and sulked like a salmon; nor could I move it for a few moments, though I tapped on the rod and tried a variety of ^{the}time-honoured schemes, the line trembling, a peculiar thrill coming up, adding to my excitement. Suddenly by its own volition it started and dashed around in half a circle, not allowing me to gain an inch, and again it took a stand; then started again, and came scurrying in, I reeling at the top of my speed, only to see the living turquoise dart by the boat not ten feet distant, and when the line came taut the reel fairly screamed, as all the line gained, and more, went hissing after the fish.

¹ Any very small-keeled rowboat in Florida is a dinghy. If flat-bottomed it is a skiff.

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If a trout or a salmon had made such a play the angler would have been enthusiastic beyond measure ; but here was a despised parrot-fish, that no one would eat, a public and private nuisance, but certainly of value to the angler. How long I played the fish, or how long it played me, I do not remember, but it was certainly more than half an hour before I reeled it alongside my dinghy and watched it, lying prone on its side, rolling its eyes at me in an unfishlike manner. That was long ago, but the jaws of the fish, which I have as a trophy, are still as blue as turquoise.

There were in these waters a number of these sea-parrots. One, the *Loro verde*, a beautiful dark green fish, a splendid fighter, that could break an ordinary hook with ease, and fight and defy the angler with extraordinary displays of pugnacity, and suddenly at the net or gaff, turn over and roll its comical eyes, of a strange colour, at you, when of course you let him go. Some of these sea-fish attain a length of two or three feet, and a weight of nearly thirty pounds. I am confident that one I took with a hand-line, called the old wife, or *Vieja* fish, weighed all that, but I did not weigh it.

Their colour is a fascinating study. Thus if the fish is blue, its bony jaws are blue. If green, they are green ; the teeth seemingly have coalesced, forming a peculiar beak, so powerful that they can easily bite off a branch of coral or any equally hard substance. They, apparently, are found all over the world in tropical seas. Some are eaten, but in Florida the colours suggested copper to the natives and Conchs, and they are not used to any extent, and I do not recall that I experimented upon them myself, or upon myself with them.

The chub, or *Chopa blanca*, was one of this throng that, apparently, has never been discovered as a game fish, but a royal little fellow, and not so little after all, as specimens I took tipped the scales at ten pounds, and could be compared only to the parrot-fishes as hard and desperate fighters. Possibly it is because, when taken at all by tourists, they are caught with large hand-lines of the size used for red snappers, with a big sinker,

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when the little fish is entirely outclassed. The tourist to Florida or Bahama generally falls into the hands of a professional fisherman who scorns the rod, and does not carry the tackle of the angler. But chub-fishing with an eight-ounce bamboo or green-heart rod and a number six line is a diversion that would have warmed the heart of Walton, or even the solemn anglers of old, who despised the fishes of the sea, or the poet who wrote :

‘ I love not Angling (rude) on Seas—
Fresh Streams my Inclination please,
Whose sweet calm Course to Thought I call,
And seek in Life to copy all ;
In Bounds (like them) I fain would keep,
Like them, would (when I break them) weep.’

America has the conger up to eight feet from Cape Cod to Brazil, but it is not fished for. The lady-fish, *Elops*, and the ten-pounder are small silvery fishes, the former two or three feet in length and weighing in large specimens ten pounds. Both of these fishes are remarkably active leapers and eagerly sought by sea-anglers. In Western America, at Mazatlan, there is a fine Spanish mackerel, *Scomberomorus sierra*, which affords the natives an excellent food fish and the local Americans and English fine sport. The Petos is a fierce and active mackerel-like fish found rarely at Cuba and the Florida Keys. I recall but one. It is the *Aconthocybium solandri* of science. It attains a length of five or six feet and exceeds one hundred pounds in weight. It is taken trolling off the channel between Cuba and Key West and Tortugas, and on tuna tackle would make a great play.

Cubans have a fish known as the Escolar (*Ruvettus pretiosus*), also found in the Madeira, and I believe I saw one at the Azores. It is also not unknown in the Mediterranean. The Cubans consider it a great game fish, but they troll for it for the market, and call it ‘ a-scellaring.’ The fish ranges up to one hundred pounds, its season following that of the swordfish. The little pilot-fish of the shark (*Naucrates*), when about a foot long can be caught. I

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have kept a twelve-foot shark about my boat for half an hour by dropping overboard a sack containing several ancient groupers. It was an interesting sight to see this threatening monster come up out of the azure depths with his staff of three or four remoras and several pilot-fishes. As they hove in sight my boatman would toss over some 'chum'—ground conch or crayfish—and by casting I frequently would hook the pilot-fishes that fought like yellowtails—their distant cousins.

Off the North Atlantic occurs a large amber-jack-like fish, *Seriola zonata*, rarely caught with light tackle. The mackerel scad, *Quia Quia*, is a brave little fish in Florida, and the two-foot saurel (*Trachurus*) on the Pacific Coast. The Silver Jack (*Carangus guara*) is two feet long, and many of its tribe are active game fishes of the open sea off many shores. The Permit, or big pompano, is a giant caught rarely on the Florida reef up to nearly thirty pounds. The little pompano is one of the most beautiful leapers in the kingdom of the sea. I have watched them in the great lagoon of Texas when channel-bass fishing. They leave the water, then when in the air three or four feet they turn, offering their broad sides to the air, and slide away to an extraordinary distance. One day three or four landed in my boat; when a school is alarmed it is a beautiful sight.

A fine game fish is the robalo or snook (*Centropomus*); there are about fifteen species of them in salt and brackish water. It is fairly common in the sandy lagoons of the Florida reef where I have taken it. In Surinam specimens four feet in length have been caught. There is particularly good sport trolling for the robalo in the mouths of the rivers at San Juan, Porto Rico, and, according to Jordan, anglers take it in the rivers Rio de la Plata, Manati, and the Rio Grande de Arecibo.

Comparable in a way to the English bass, is the sea-bass (*Centropristes*) of the North Atlantic, the common fish of the anglers who go out on special angling steamboats to the banks from New York every day in summer. It ranges down to Florida, lives in deep water, and is taken up to four pounds on

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hand-lines, though I have taken it with a rod in Long Island Sound. There are several relatives of this fish—the rock sea basses that are good game on the line. They are also known as squirrel fishes.

The Triple tail (*Lobotes*) at twenty or thirty pounds is a hard fighter, due to its broad shape, that forces the angler to believe that he has a fish ten times its size. I have taken this fish in the Chesapeake Bay not far from the capes, and so far as I know, it is not a common catch anywhere. Along the Atlantic Coast the fish known as porgies afford no little pleasure to a score of admirers. They belong to the tribe of *Calamus*, and there are twelve or more species from Florida and the West Indies. You cannot fish in Cuba without hearing of the Pez de pluma, and in Key West the Conchs 'conjure' with him. The jolt-head porgy grows larger than the others. I once hooked one that was at least three feet long and must have weighed thirty or more pounds. He was so large that two remoras doubtless thought he was a shark as they were riding with him, hard and fast, their black shapes in strong contrast to his striped gray sides. He took my crayfish bait, also my line, but I had a good look at him. A somewhat similar fish is the sheepshead (*Archosargus*) that ranges up and down the Atlantic Coast, and I have taken it in the St. John's River and in the St. Mary's when fishing for sea-trout.

The sheepshead weighs three or four pounds, but leviathans have been taken up to ten or fifteen pounds. This is the great fish of the people and in the markets of the South and Gulf of Mexico; a good food fish. Few fishes fight harder than this high-domed little fish. He fights and protests until he is in the boat, and often makes a desperate resistance at the surface, splashing the water over the angler. The sheepshead has a dignified stately manner of swimming that is very impressive. These fishes live on crustaceans and mollusks, and the ease with which they will bite off a poor or slender hook is ludicrous. No better illustration of what a little fish can do on light tackle can be given than

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in the beautiful broad-shad (*Xystaema*) of the Florida reef, referred to in the chapter on barracuda fish.

The big drum (*Pogonias*) is a hard-fighting fish. I have taken it on the New Jersey Coast, and on the Florida reef, though rarely. The fish is a striking creature, with large stripes, reminding one of the sheepshead, a high dorsal fin and very small lower jaw. It is high and heavy, and presents a formidable fight on light tackle. One weighing one hundred and forty-six pounds was taken at St. Augustine, Florida, some years ago, and thirty and forty pounders are not uncommon, though the average fish seen in the market is far below this. This fish makes an extraordinary noise, I have heard it at a distance of one hundred feet. During a hunting trip in Florida I took a large drum, and told my man, a Cracker, to clean it. To my amazement, he nailed its tail to a yellow-pine log and scaled the fish with a hoe. The scales of this fish are used in decorations and in the manufacture of baskets of a more or less melancholy character and design.

There is scarcely any limit to the game fishes of the American coast, below latitude thirty-three degrees, and scores of small fishes of from two to five or more pounds are never heard of by the average angler. The tautog (*Tautoga ornitis*) is always in evidence as a good game fish on the New England coast. Off New York it is called the black-fish. I have had excellent sport with it at Fisher's Island, Long Island Sound, with rod and reel. From some rocky vantage ground the angler can cast his lure of lobster or clam into deep-blue water and enjoy sport of a rare kind. The fish has been taken three feet in length. The wrasses, to which this fish belongs, are legion, and many of them, including the New England 'cunner,' particularly the Nahant variety, are fine little game fishes. On the Pacific Coast the coal-fish [*Anoplopomidae*] is taken at times by anglers, especially about the Straits of Fuca. It resembles the pollack in general appearance.

In Canada and Alaska in the North Pacific a number of game fishes occur, which afford satisfactory angling from the sporting point of view. Among them are the greenlings.

CHAPTER XXIV

THE BARRACUDA

'One (like a Pirat) onely lives of prizes,
That in the Deep he desperately surprises ;
Another haunts the shore, to feed on foam,
Another round about the Rocks doth roam.'

De Bartas.

THE name recalls a radiant picture of dead calm water merging into the horizon, soft winds, glassy seas, coral keys, topped with bay-cedar, with clouds of gulls hanging in the air. I see visions of the brown pelican lumbering along, followed by the laughing gull which alights on its head and snatches its prey. I see the fierce man-of-war bird, plunging down out of the sky. The dorsal fin of a man-eater cuts the deep blue of the channel ; a big loggerhead thrusts his head up and breaks the perfect glass-like surface, and I hear the distant murmur of the sea where the blue river of the Gulf Stream laves the dead coral rocks of the outer reef. All these, are features of the home of the wolf-like barracuda, as I once knew it on the extreme outer Florida reef.

There is a great difference in fishes in different places, both in habit and other directions. I have never seen a tuna leap after it was hooked ; but I have seen a kingfish leap with a hook in his jaw, though not often ; which, I fancy, no one else has observed, as it is not the habit of the fish. I once placed myself on record as saying that the brown snapper is the cleverest fish in the sea ; but I have seen a statement that an angler on the coast of Florida took snappers with any bait. All the barracudas I ever caught, and I have taken many at Tortugas, gave me the impression of great cleverness, as nearly all were taken where I could see them in the

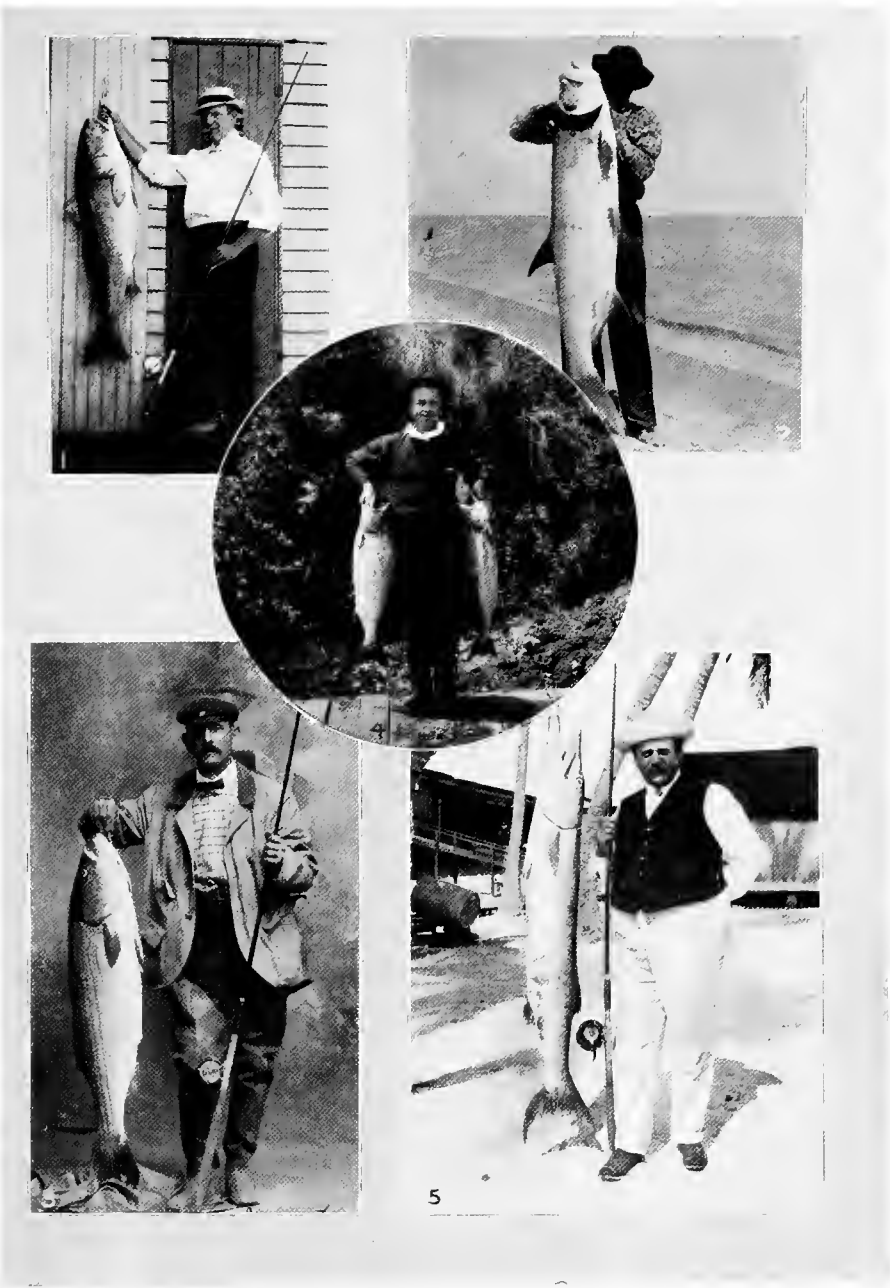


Fig. 36. Rod Catches of Big Fish.

1. 63-Pound Channel Bass, Corsons Inlet, N.J., U.S.
2. The Author's Texas Tarpon.
3. 41-Pound Striped Bass, by Mr. J. M. Gentle, N.Y.
4. Chinook Salmon, Monterey Bay, California (Pacific Salmon).
5. 54-Pound Barracuda, Long Key, Florida.

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water, three, four or five feet deep ; and the sport, to me, being in the amount of skill required to lure the fish into taking my bait. On the other hand, my old guides, a Seminole Indian and a Conch, who had lived all their lives on the reef, took the largest barracudas in a manner so simple as to be laughable ; yet it became a delight to me. The men considered it a waste of time to troll or fish for the big barracuda, because he was so curious that they could easily ' grain ' him. The small fish, up to six or eight pounds, were found in the shallows, where I took them by wading out to them, and casting either with a live bait or a dead one, chiefly the former, using a little shiny, silvery fish known locally as a broad shad (*Xystaema cinereum*), but having no particular relationship to the shad of *bon vivants*.

This little bait fish had, at least to me, a strong individuality. It was found in shallow waters, two, three or four feet deep, and on white sandy bottoms where it literally dissolved into its environment. It had a very peculiar habit of swimming in a straight line a foot or two, then stopping and poising, perfectly still for a few moments, then moving ahead again, staring with its big eyes, a very curious and comical little fish and a victim to the cruel and rapacious wolf-like barracuda of five to eight pounds, which lived in the same fish city on the sandy floor of the reef.

I could always take the shad with a pin hook and crayfish bait, as it has a very small mouth, and when used as live bait was a perfect lure to the barracudas. In angling, I would wade along until I saw a fish twenty or thirty feet away, which was always crouching close to the bottom and perfectly quiet like a pickerel ; then cast my bait ten feet ahead and in front of it ; gradually drawing the bait nearer and nearer until the barracuda saw it. It then became a fascinating study to see this clever mimic of the white sand take its prey. It was deliberation typified, to the limit of patience and exasperation, moving slowly forward, pushing the struggling bait with its pointed torpedo-like muzzle. Then it would back, to move forward again, seemingly scrutiniz-

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ing the bait, but always in the most prosaic and dignified fashion. This would occur many times, until finally, in ten or fifteen minutes, the barracuda seemed to have satisfied its curiosity, or to have played with the terrified lure to its satisfaction, when it would suddenly grip it with its wolf-like teeth by the end of the tail, and slowly rise from the bottom. During this performance there were no sudden or violent motions. The barracuda appeared and acted like an automaton, moving slowly off. Then it shifted the fish about, head down, as a snake will a frog, and gradually it would disappear, the barracuda moving perhaps eight or ten feet during this time.

I was always a spectator of this tragedy, gradually creeping up, reeling in, so that by the time the tail of the shad disappeared down the mouth of this muscallunge of the sea, I had a taut line and struck. Straight, like an arrow from the bow, the fish would dash away to the shrill *barcarole* of the reel, then when the resilient rod held it, circling round me, bearing off in a gallant fashion to continue the fight until I had backed into the shore of Pearl Key which I often used as a base. I never saw a thirty or forty pounder in the shallows, but through the reef a mysterious blue artery-like channel cut its way, and here, or on the edges, the big barracuda poised, and was lured by trolling, or by the method I have suggested, which was a brazen appeal to the curiosity of the fish.

The Seminole would go out in his light dinghy, armed with his grains, a small two-pronged, barbed spear, which fitted with a socket into a long slender, bending yellow pine pole at least ten or twelve feet in length. To the grains was attached a strong cod-line of one hundred feet which led up and was held in the hand. I took my seat in the bow, facing the stern, 'a looker on in Venice,' while he tossed over the line, about four feet long, to which was fastened a white rag. With the grains in his right hand, the barracuda hunter then began to scull the boat silently along, there being a row-lock astern for that purpose.

The barracuda is doubtless possessed of courage and curiosity,

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as it pays little attention to a boat, and is at once attracted to the rag, and swims after it. I had seen nothing but the picturesque figure of the fisherman sculling with a peculiar rhythmic motion, holding the long grains balanced in his right hand, his gaze fixed on the indigo-blue of the channel just astern. Suddenly he motioned to me with his head. I crept towards him and looking over his shoulder into the water, I presently made out a barracuda of large size, at least five or six feet in length, its large, black, saucer-like eyes presenting an extraordinary spectacle. The fish paid no attention to the dinghy or to the figure of the man.

It would come up to within four feet of the oar, then turn and sheer off, showing its silvery side, then going about on the opposite tack, disappearing a moment, to come up suddenly so near the oar as to almost touch it. It was a most fascinating spectacle; next to seeing a fourteen-foot hammer-head shark come up near my swinging legs as I sat, on one occasion, on a yacht's rail. As I looked, the fisherman silently dropped the oar, took the pole in both hands, and as the barracuda turned to the left, he threw the grains into it with such perfect effect that the handle bounded back, and I caught it as the great fish rushed away with all the force of a shark, making the line hiss through his calloused hands. This fish towed the dinghy about and around, and made a most gallant fight.

It was a long time before I could make even a presentable imitation of this game, and I spent many an hour stabbing the water fruitlessly before I succeeded in hitting a barracuda, then was nearly jerked overboard in my excitement. This man did not always use the rag in gaining the barracuda, but could entice a fish within reach of his grains by the clever use of the sculling oar, which was an imitation of the movements of a propeller.

The very large barracudas were not common here, but they could be found when hunted for. At Long Key Camp up the reef, they are a common catch with rod and reel to-day, and few fishes make a better fight for liberty either on a number twenty-one line or spear. In appearance the barracuda looks the part of

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a sea pike. He has large knife-like teeth that suggest a shark; and if the tales one hears are true, the barracuda is a dangerous fish. Jordan says:—‘It is as fierce as a shark, and is sometimes very dangerous to bathers.’ I know of but one instance of an attack that I can credit. A Conch was nick-named ‘Barracuda,’ as he had been badly wounded by one of these fishes. For several years, I and others, often three or four times a day, swam in a deep channel that was known to be infested with barracudas and sharks; but we were never attacked. No one who has landed a barracuda and seen its pugnacious jaw, its large tusks and enormous mouth, but would hold it in respect. Among the upper Florida keys, the fish is generally taken trolling from a launch or row-boat, and is often found in shallow water or along the passes or the edge of a channel, where from a row-boat it can be angled for with a live bait, mullet or some attractive silvery fish.

There are several species of these fishes. That of California is very different in habit, running in schools often so thickly packed that in looking down upon them only black eyes and pointed noses are seen. The schools are of such vast size, that a few years ago the great bay of Santa Monica was apparently filled with them. At certain times the schools break up, and the fish are found near the rocks at Santa Catalina, singularly enough within a line cast of a large herd of sea-lions. Here the barracuda is trolled for from launches with a nine-ounce rod and a number-nine line and sardine bait, or with a spoon. They rarely exceed five feet in length and fifteen pounds in weight, while the Bahamian barracuda is six feet long and tips the scales at fifty or more pounds.

It is said that to be a perfect game fish, both fighting and edible qualities are necessary. The barracudas meet both requisites, and if the angler will eat his five or six-pound barracuda, which he has taken at Long Key Camp with an eight-ounce fly rod, broiled at once, he will find it among the best edible fishes in Florida. The same is true of the Californian fish. Few lovers

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of sea-food know what good fish is. On an ocean liner somewhere in mid-ocean, I was attracted by the word bluefish on the menu. It was, of course, cold storage fish and had lost its flavour entirely. On my last bluefish expedition, not a thousand miles from Fisher's Island, Long Island Sound, I was awakened in the morning by the jumping of bluefish in the box as the cook received them alive from a fisherman who had caught them but a few moments before. They were broiled at once; not an hour had passed since the bluefish was alive and swimming, and it was a dish for the gods. Another fine game fish, the pollack, becomes so soft in a few hours, often minutes, that it is unfit for food, according to the ethics of the epicure. In Key West, and especially Cuba, one often hears that the barracuda is poisonous, but this is a tradition. One of my old fishing companions, a professional, insisted that all Cuban fish were poisonous on account of the copper in the water.

The big barracuda is *Sphyræna barracuda*. It ranges from Brazil to the Bermudas. There are several species: one (*S. ensis*), in the Gulf of California, and off Panama; another, about two feet in length, *S. guachanche*, is found with the big barracuda; a small species is found about Cuba, the picadilla; another still, *S. borealis*, ranges from Cape Fear to Cape Cod. The European species resemble the Californian form very closely.

CHAPTER XXV

THE CHANNEL-BASS, BLUEFISH AND STRIPED BASS

‘And, as he darts, the waters blue
Are streaked with gleams of many a hue,
Green, orange, purple and gold.’

SOME fishes suggest calm and gentle waters, caves of the deep ever undisturbed, where the kelp lazily sways to and fro in tideless seas, and the shades of carrageen scintillate in iridescent glories; others again tell of fierce seas, of deep-blue waters, of rushing foam and spoodrift, of excitement and the quick high pulse. Here we find the bluefish, a dashing cavalier of the sea, to be found a mile or two off the surf in New England, while the striped-bass are browsing alongshore and rushing into the back water to seize luckless prey—crab, lobster, octopus, or anything else. The bluefish, channel-bass and striped-bass are the swaggering muskateers of the sea, and the bluefish is the piscatorial D’Artagnan, a born fighter, who fights and destroys for the very love of it. The late Professor Spencer F. Baird, said: ‘There is no parallel in point of destructiveness to the bluefish among the marine species of our coast.’ When the bluefish sweeps north out of the unknown and mysterious winter-land of many fishes, it is a marauding army.

I once was trying to find a school of tuna off the Atlantic coast of America, near Boon Island Light, on the coast of Maine. My boatman fished for cod and halibut, and I with a rod for tuna, which never came. At times he would take cod and haddock as fast as he could haul them in; but one day, in the very vortex of a fishing frenzy, when he bid fair to fill the boat,

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the fish stopped biting, and the hooks were taken. 'Dog-fish,' soliloquized the fisherman, and putting on new hooks with a wire leader or snood, he began to catch dog-fish or sharks, about two or three feet long, and in a short time nearly loaded the dory. They filled the water, and were starving. They had just arrived, and anything and everything was game. I saw them bite at oars, tear the canvas of a sail, try to eat jellyfish, and if a man had fallen overboard, and not been rescued at once, he would have been torn to pieces in a few moments by this ravenous band of sea-wolves.

Just as vicious, but not so powerful and cannibalistic, are the bluefishes. They leave a train of murder and sudden death in their trail, and in the words of Professor Goode, can be compared only to animated chopping machines. He estimates there were a few years ago a thousand million of them alongshore; and if each bluefish ate ten small fish, a low estimate, the total consumption in a season would be ten thousand million a day. A fish with such an appetite could not fail to be a foeman well deserving the attention of the angler; and possibly no fish of its size, on the Atlantic coast, has given so many people so much sport. The bluefish attains a weight of ten or fifteen pounds, and is a cousin of the mackerels. As its name intimates, it has a rich cerulean tint above and silver below—a dazzling combination. It is generally taken from a fast sailing cat-boat by trolling with a heavy hand-line, a strong hook and almost anything for bait, a bone jig being effective.

The bluefish swings along like a meteor and strikes the bait side on, nearly jerking the tyro out of the boat. At the signal the skipper pushes the helm hard-a-lee, and as the little craft comes up into the wind the angler has an opportunity to play the game, that always and invariably makes the fight of its life, and never knows that it is defeated until too late. Bluefish parties, a cat-boat filled with men, women and children, have been the vogue south of Cape Cod near Block Island, Martha's Vineyard, Wood's Hole, Nantucket and other localities from time im-

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memorial. The fun or sport becomes fast and furious in a stiff wind, with the white caps flowing.

Some years ago, I endeavoured to introduce rod fishing for bluefish at the entrance of Long Island Sound ; the experiment, while successful, was very fatal to tips and lines. The skipper in the majority of instances could not get the boat up into the wind quick enough to save the line. Rod fishing for bluefish has, however, been followed at Newport and other localities ; and I have fished for them along the Jersey shore in the surf after the fashion of channel-bass fishing. This method is also followed at Montauk, Newport, Barnegat, Monomoy, and other localities.

The bluefish is a game fish in appearance, long, well-proportioned, with a powerful tail, a solid powerful head, eyes striking, alert ; you could tell at a glance that here is game of the very best quality. To science the bluefish is *Pomatomus saltatrix*, a name given by Linnaeus. The Yankee of the old time was fond of boasting, and in the West there is still among other offenders, the word 'booster.' Every booster is supposed to claim that his town is the best, offensive to some, laughable to others. If a booster was to describe the American bluefish he would do it in this way : 'The bluefish can jump higher, come down quicker, dive deeper, and stay under longer, eat more in less time than any fish on the globe.' Along the Jersey coast the bluefish weighs five or six pounds ; in Florida waters from three to six, and sometimes fifteen pounds. His cousins are found in many seas, and he is a wide roamer. You may, if you are lucky, take the bluefish in the Mediterranean Sea, the Malay country, in Australian waters under another name, at Natal, the Cape of Good Hope, and off Madagascar. Strange to say, so far as I know, it has never had the curiosity to follow up the Gulf Stream to Ballycotton, and afford the gallant anglers of the British Sea Anglers a taste of its metal. In a word, it is not known in the European Atlantic, nor does it visit Bermuda. If there is a caprice the bluefish is not guilty of, fishermen have not discovered it. It can never be depended upon to follow any very

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definite rôle ; but it is to-day the best sea fish on the American coast of North America, and when broiled half an hour from the sea, a gift from the gods.

The striped-bass (*Roccus lineatus*) ranges from Labrador to the delta of the Mississippi, and on the Pacific coast from the Oregon line indefinitely north and south, though rarely to Santa Catalina, a number of specimens having been taken in Alamitos Bay, Los Angeles County. It ascends the rivers to spawn, and is found in the Potomac as far as Little Falls, where I have fished for it ; is taken up the Hudson beyond Albany and very common at Fishkill, where I have seen fishes of the largest size taken through the ice in February. In the Connecticut, it reaches Hartford, and anglers on the St. Lawrence have taken specimens as far up as Quebec ; doubtless, it goes far beyond. Strange to say, it is not a migratory fish, being found at any time, winter or summer, in the regions of its choice. This, and the fact that it bites readily, and is easily taken in nets through the ice and in other ways, and at any time, explains its disappearance in many regions, where it was once a prominent figure and a dominant note.

Like many fishes of wide range, the striped-bass passes under many pseudonyms. Striped-bass is the name north of the Delaware, but south of that point it is known as the rock-fish. Under any name, it is equally a gallant and hard fighter, and a most beautiful fish never to be mistaken or confused with anything else. The general tone is olivaceous ; the back may have a bluish tint, the sides newly minted silver grading into the purest colonial, or flake white, on the slightly pendulous belly. Along the sides from head to tail, are six or eight rows of closely connected spots which form stripes, and lower down three smaller ones, so that the effect on the eye is of a splendid, indeed, dazzling silver fish with pronounced stripes. Its head is large, even ponderous ; its mouth capacious, that of an omnivorous feeder ; the eye large and well-proportioned.

This bass spawns in the spring—May, or sometimes in April—

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depositing its million or more eggs in fresh or partly fresh water ; evidently being able to adapt itself to salt or fresh water, going up large rivers in vast schools, apparently following the shad, smelt or other fishes. All summer it may be found in the ocean, and here it attains its most splendid development, five feet or more in length, and a weight of one hundred or more pounds. On the appearance of winter, it approaches the bayous, back waters and tidal rivers ; and as I have said, can be taken through the ice at Fishkill and higher up, the water of the Hudson being salt or very brackish here.

A peculiarity of the striped-bass is that it is caught under so many conditions. You may fish for it in the heaviest surf, or in quiet bays, in the mouth of rivers, off rocky points where the sea comes in with a sullen roar and leaps high in air, in brackish, seemingly impossible waters ; on mud flats, as at the mouth of the Sacramento, and again near sod-banks—a habit of certain rainbow trout when they can find them. All this requires different tackle at different times, and the bait the bass will take is legion. The largest fish are taken in salt water ; but the habitu  of the inland water rarely runs over ten or twelve pounds and can be taken on an eight-ounce rod and a nine-line.

In 1868 I found occasionally good striped-bass fishing at Old Point Comfort, and especially off the Rip Raps, the fish entering the Chesapeake, the Potomac and other rivers, finding abundant food in the swarm of crabs which in the spring and summer covered the bottom and became ‘shedders’ on the flats of Hampton and Newport News. One of the delightful features of the striped-bass is the fact that it will, when young and found far up the fresh water streams, take a fly : a Royal Coachman, Ibis, St. Patrick, and Alexandra. On a black-bass rod the fish will be a revelation to the angler.

The striped-bass was formerly taken in great numbers on the coast of Massachusetts south of Cape Cod, where on Pasque Island, not far from New Bedford, one of the notable fishing clubs of America has its grounds ; but there has been a great

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falling off in numbers, so far as the angler is concerned. Fortunately it was introduced into the mouth of the Sacramento some years ago, and has increased in numbers until it has become one of the game and food fishes of the Californian coast. The striped-bass is found in fair numbers south of New York, and is a favourite fish with the members of the Asbury Park Fishing Club, who in 1912 took seventy-nine striped-bass, ranging from thirty-eight pounds down. Many were taken at night.

The striped-bass attains a weight of from fifty to seventy pounds. I have seen fishes of the largest size taken through the ice of the Hudson in mid-winter. In the Atlantic, it is found on rocky shores, and at the clubs of New England, piers were built out over the water from the rocks which were *drawn for* by the club members. Seated here, with the gaffer on the rocks below, the angler cast out beyond the breaking waves, using rod and reel and half of a lobster's tail as bait. When the strike came the battle was on, and amid the flying spume, in deep blue water, it was a gallant game played between angler and fish.

To-day, the best striped-bass angling on the Pacific slope of America is found on the flats at the mouth of the Sacramento River, above San Francisco. It is interesting to note that the striped-bass has migrated five hundred miles down the coast, specimens having been taken as far south as Santa Catalina Island. The bass requires a river of size, as it is a denizen of both fresh and salt water; and whether it will use the small rivers of Southern California is a problem unsolved.

In nearly all countries prototypes of fishes can be found, and in America the striped-bass well represents the 'bass' about which the great English authorities on angling, Mr. Aflalo and Mr. Clark, are so enthusiastic. The following are some of the striped-bass records of the Asbury Park Club compiled by Mr. Streeter. The fishes were taken with rod and reel in the surf at Asbury Park and vicinity by casting from the beach or from piers and stands built out into the surf:

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Year.	Largest Bass.	Number Caught.	Average Weight.	May.	June.	July.	Aug.	Sept.	Oct.
	lb. oz.		lb. oz.						
1900	47 9	193	8 12	—	180	8	2	3	—
1901	46 4	193	10 11	11	81	59	11	13	19
1902	27 8	33	11 8	1	6	14	4	8	—
1903	31 4	22	14 0	1	8	2	9	2	—
1904	34 0	103	10 12	—	72	23	8	—	—
1905	41 12	78	9 0	1	55	11	11	—	—
1906	41 4	73	7 7	1	12	38	17	5	—
1907	29 8	24	6 8	1	7	6	10	—	—

Highly appreciated as a game fish is the channel-bass, found up and down the Atlantic coast for long distances. I have had fine sport with this fish in the mouth of the St. John's River, Florida, in the St. Mary's between the States of Georgia and Florida, and in the pools or holes of the great lagoon within Aransas Pass, near Port Aransas, Texas. Here I fished with a light rod with shrimp bait, and it was often taken in such shallow water as to seem impossible. The channel-bass has a clever and alluring set of names, as the red drum, spot, red-fish, pescado, Colorado, bull red-fish, sea-trout. I have fished for it from New York to Mexico, and it changes its name as you go south. There is but one species, the eyed-bass (*Sciaenops ocellatus*), a very attractive fish with a black oval spot, a domino spot at the base of the upper lobe of its tail, by which you may always know it. It combines all the qualifications of a game fish; is a hard desperate fighter on the rod, and a most abundant and excellent table fish when young. It is an attractive fish, like the striped-bass, which is white with vivid black longitudinal stripes, and has a grayish silver tint with a wash of rich coppery-red. It is taken in various ways, one of the most interesting of which is to cast into and beyond the surf, using clam or fish bait on the bottom. But I have had excellent sport in exactly the reverse; fishing with mullet bait at low tide in the mouth of the St. John's River,

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where the current was so swift that it kept my bait at the surface. I spent two months once fishing at this point, where the sharks are fed with shad, and a variety of game dispels the monotony of sand dunes that, if left alone, soon efface the works of man.

While the channel-bass is taken all along the shore, the best ground for it is in the region along the New Jersey seaboard affected by the members of the Asbury Park Fishing Club. At certain seasons, the members can count on the arrival of the fishes almost to a day. Some idea of the size of the rod and reel catches of New Jersey can be had from the following tables :

CHANNEL-BASS RECORD, SEPTEMBER, 1912.

Barnegat City and Vicinity.

	lb.	oz.		lb.	oz.
12. H. W. Gilbert . . .	27	8	18. R. Wiechert . . .	33	0
13. Hoffman Allen . . .	29	0	18. F. H. Skidmore . . .	22	0
13. H. C. Rydell . . .	20	0	21. Edw. Cramer . . .	48	0
14. H. C. Rydell . . .	30	0	22. Robt. A. Tuch . . .	29	6
14. C. W. Feigenspan . . .	32	0	24. W. Conklin . . .	32	8
14. C. W. Feigenspan . . .	22	0	24. A. V. Freeman . . .	28	0
16. W. N. Applegate . . .	24	0	24. Fred Miller . . .	22	0
17. Hoffman Allen . . .	20	0	24. Albert Alches . . .	32	0
17. G. W. Fenimore . . .	24	0	24. Albert Alches . . .	37	8
17. T. K. Skidmore . . .	28	0	24. G. Hatfield . . .	40	0
17. A. F. Edgecomb . . .	28	12	25. G. Hatfield . . .	31	0
17. M. F. Stealton . . .	30	8	25. J. M. Gentle . . .	21	0
18. F. Kimbacker . . .	24	0	25. W. Hencken . . .	38	0
18. A. V. Freeman . . .	34	0	25. P. L. Evans . . .	46	0
18. M. F. Stealton . . .	29	12			

Seaside Park.

13. J. J. Yates . . .	25	0	19. Mrs. Stewart . . .	23	8
13. J. J. Yates . . .	24	0	20. Jack Clayton . . .	26	8
19. W. N. Applegate . . .	22	14	20. Jos. G. Skirm . . .	28	8
19. A. Allen, Jr. . . .	24	13	20. J. J. Yates . . .	25	0
19. L. J. Brown . . .	22	12	21. J. J. Skirm . . .	23	0
19. L. J. Brown . . .	29	15	27. V. de Wysocki . . .	30	0

When hooked in the surf this bass affords a splendid fight,

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often taking the angler a half mile up the beach, and in and out before it can be mastered. I once worked nearly an hour with a fish on the St. John's and had it within thirty feet of where I was standing, waist-deep in water, when one of the largest sharks I have ever seen bit the bass in two, leaving me the head which told the story of a forty pounder ; at least there was no one to dispute it, and I did not lose any time in getting ashore. The beach or surf angler often sees the game he is playing out-lined on the face of a comber—a splendid spectacle.

The tackle in vogue is a good sixteen—or over—ounce rod, nine hundred or one thousand feet of No. 21 line, and a 7/° hook, a two- or three-foot leader. A four-ounce sinker is generally used ; and if you wish to appeal to the channel-bass, use 'shedder crabs,' though 'moss bunker' is an excellent substitute. The angler should use the rod belt described. One of, if not the largest channel-bass was taken by Mr. J. Cowthorn at Corson's Inlet, New Jersey, the fish weighing sixty-three pounds.

The famous fishing points are Corson's Inlet and the water from Barnegat City to Seaside Park. After November the bass are on their way to Florida, where the sport may be taken up on the Indian River or in the Gulf.

The record fish of the Field and Stream Tournament for 1912 were : 1st prize, by Robert R. Bridges, Williamston, N. C., U. S. A., weight forty-four pounds, length forty-five and one-half inches, taken at Topsail Inlet, North Carolina, mullet bait. The second-prize fish weighed forty-two pounds, and the third, thirty-nine pounds.

Some idea of the size of the channel-bass taken along the Atlantic Coast can be had from the following tables of records of the Asbury Park, New Jersey, Fishing Club. The fishes were taken in the surf with rod and reel at Barnegat City (Barnegat Inlet) and Harvey Cedars, in the months of June and September. I am indebted to R. H. Norris, Secretary of the Club, and to Mr. L. P. Streeter of Chicago and the Tuna Club, for the interesting and valuable data.

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Year.	Number Caught.	Largest.	Total Weight.	Average Weight.	Rods Fishing.
		lb.	lb.	lb.	
1897 . .	8	40	226	28.2	5
1898 . .	30	30	666	22.2	8
1899 . .	37	46	993	26.8	7
1900 . .	30	30	698	23.2	3
1901 . .	45	49	1,103	24.7	7
1902 . .	55	50	1,249	27.7	13
1903 . .	118	47	1,398	29.7	14
1904 . .	111	45	3,245	18.9	22
1905 . .	67	49	3,001	27.0	23
1906 . .	65	46	1,859	27.7	11
1907 . .	—	44	1,673	25.7	28
1908 . .	—	46½	—	—	—

CHAPTER XXVI

THE SILVER KING

'Toward the sea turning my troubled eye
I saw the fish (if fish I may it cleepe),
That makes the sea before his face to flye,
And with his flaggie fins doth seeme to sweepe
The foamic waves out of the dreadful deep.'

Edmund Spenser, *The Visions of the World*, 1591.

AMONG the angling experiences which have made the greatest impression upon me is my attempt to photograph a tarpon. It appeared to be a very simple operation when studying the beautiful photographs taken by Dimock and others, but possibly these are taken when the tarpon is held on a short hand-line not far from the boat, and given no chance, while the photographer sits in another boat directly opposite, and snaps the agile silver king as he goes, mad and terrified, into the air. I have a photograph, taken, I fancy, in this manner, in which the tarpon's mouth and gills are open so wide that I can see the country through them.

I tried none of this; expert photography is too much for me, the subjects in all my pictures are without feet or heads, or have a dazed appearance, so I generally employ a professional. But this time I attempted to photograph my own tarpon.

It was at Tarpon, Port Aransas, Texas, before the days of the Tarpon Club, which made me an honorary member, I think, for my skill in photographing clouds. I fished this pass in August, the best season, when the water was alive at times with tarpon rolling over and puffing at the surface. My boatman was Mateo Brugen, an Austrian, a character who had decided ideas

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about taking a one hundred and fifty-pound tarpon into a one hundred and twenty-five-pound skiff, which he exhibited in strong language. On this occasion I explained to Mateo that I had two objects in fishing at Tarpon and crossing the hottest part of the United States for three thousand miles. One was to demonstrate that I could take a tarpon with a ten- or twelve-foot rod, which I had had made for the purpose, and which weighed without the butt about ten ounces. Another was to photograph my tarpon in the air.

To accomplish the latter I had several private rehearsals with Mateo. I explained that I would hold my kodak between my knees as I fished, facing the stern, and when the tarpon had climbed into the empyrean to a sufficient altitude, I would thrust the butt of my rod backward to him under my left arm (as he was sitting directly behind me), then seize the camera and snap the fish. This appeared on the surface to be a very simple proceeding, and everything in order, we pulled down the narrow pass along the stone jetty.

The tarpon angling in Texas or the west side of the Gulf of Mexico, is all done in the passes. The coast is low and has, extending alongshore for many miles, an inland sea or lake or river, formed by an offshore narrow island of sand, from one to twenty feet in height. In some instances these islands are very large, and many miles in length; again they are very low, and are flooded in gales. The inland sea or river is from three to five miles wide, and to reach Tarpon and the Tarpon Club one sails down this river from the little town of Rockport ten or fifteen miles. This inland sea finds its way to the Gulf at ebb tide through certain narrow openings, and the one I was fishing is known as Aransas Pass, the little town of Tarpon or Port Aransas being directly on it. The prevailing wind in summer appears to be from the southeast or directly into the pass, and when the tide is running out, it works up a heavy roll, but is not dangerous; in fact it adds to the exhilaration when one is playing a tarpon in the air.

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We had rowed possibly a half mile when I had a strike, a sudden steady pull. I slacked away, remembering the hard jaw of the fish, then struck home. Up into the air, not fifteen feet from me, went a great silvery mass, scintillating and glistening in the sunlight like molten silver. Mateo, taking no chances, had pulled the skiff around with a jerk at the oar, so that I first saw the fish directly in front of me hitting the air like a steel spring; then I certainly saw it over my right shoulder six feet up, and then it came down to go up again and deluge us with spray.

‘He look pleasant all right,’ whispered Mateo, wiping the spray from his face and handing me my sombrero. ‘Why didn’t you tak eem?’

I had forgotten all about the camera, and my fish was making a series of leaps across the pass, while the camera had rolled into the bottom of the boat where it went off in disgust, taking a picture of Mateo’s bare legs under the seat. I soon had the ‘Yucatan bounder,’ as Mateo christened the fish, stopped, though it took two hundred feet of line, and up into the air it went, slamming that awful tail at its open mouth just as you have seen a crocodile or alligator attempt to toss its game between its jaws. Several men have been killed with this terrible tail of the tarpon, and I can well imagine how it can be done, as the scales are as hard as steel. Mateo backed after the fish, which was now headed for the heavy surf near the wreck of an old steamer, where later my friend Streeter was carried and capsized but landed his fish after a gallant struggle.

There were big sharks here, for which Mateo and I had a hearty respect, so I stopped the run and held hard with my thumb on the pad while Mateo pulled. This checked the fish, which turned and swung around in the great arc of a circle, leaping in splendid fashion, flashing in the sunlight, a most exhilarating spectacle. It soon had us in the surf on the opposite side of the jetty, and it took another half hour with my long rod to bring it back into the channel. Here it sulked, broke away, went into the air, dashed under the boat and forced my boatman to whirl about

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on a pivot; then, about three quarters of an hour after the strike, I brought the silver king to the side of the boat. I called for the gaff. Mateo looked aghast at the big rollers which threatened to stand us on end. Mateo was game, but he hesitated, and the gaffer who hesitates is generally lost.

‘Gaff him, quick!’ I shouted, holding the six-foot fighting-mad mass of animation with great difficulty, as it displayed an evident desire to come aboard.

Mateo hesitated a second. I fancy he was putting up a prayer, as I learned later that here no one took their fish into boats; they beached them—the proper thing to do. But I was taking no chances in a mile-pull, as I did later when I broke my long rod. So Mateo gaffed the tarpon and slid it into the boat. I have heard of ‘ground and lofty tumbling’ at the circus, and am sure that the dozen or more tarpon anglers about us enjoyed this short improvised act. Mateo gripped my tarpon, as he evidently was obliged to do or be killed, and the two fell down into the bottom of the boat, while I dodged the flying tail and sweeping muzzle, oars and other articles which appeared to go up into the air like a fountain of solids to the tune of spartan oaths. That we did not go overboard in the mêlée was a miracle; but Mateo managed to put his knife into the gills of the game while sitting on it, and rose, covered with gore, but triumphant.

I should explain that I was anxious to secure this tarpon as it was just the right size for my study, and I have it hung at about the height I think I saw it jump. I can always laugh when I look at it, recalling how it threw us into the air with oars, gaffs, bailers, mullet box, tackle, lunch, camera, everything. I can also remember Mateo as a good boatman, with an extraordinary vocabulary; at least we got the game. Every day we fished, but I held the fish and Mateo towed us to the beach. In one of these expeditions the fish made a sudden rush and broke my special rod.

Tarpon angling in America is, at least in Florida, practised in early spring, as the weather is uncomfortably warm after May or

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June. But at Aransas Pass I fished in August and found the fishing grounds in the pass very comfortable and Tarpon Inn, the only one, a hospitable place frequented by anglers from all over the world. I had very good luck at Aransas, which is not far from Galveston, a fine locality for angling. The tarpon, or silver king, makes its winter home on the Mexican coast at Tampico, where, in the Panuco river, the finest sport can be had with this big fish in January, February and March. In the spring the fish migrates, moves north in great schools, following, as a rule, the coast line, entering all the passes, doubtless, up to New Orleans. Another migration, much smaller, goes directly across the gulf to Cuba, and so on to the Florida Keys and up the coast. But the islands, as Garden Key, sixty miles west of Key West, where I fished many years, do not get many tarpons; in fact they are, or at least in my day were, rare. By March or April the fish have reached the mainland coast of Florida and afford sport to anglers from all over the world at Palma Sola, Long Key Camp, Miami, Boca Grande, Indian River Inlet, Charlott Harbour Fort Meyers, up the Caloosa River, Captiva and other places. The tarpon travels far. I have seen specimens taken in a net off Coney Island, N. Y., in July. It enters the St. John's river, but I never landed one there. A large tarpon leaped aboard a steamer in 1875.

At Aransas all the fish are taken trolling with mullet bait which is caught by the men with a cast-net. The rods used were six or seven feet in length, sixteen or more ounces, of noibwood, greenheart or split bamboo, the typical tuna rod of to-day. The line was anything from a number twenty-one up, with a breaking strength of forty-two or more pounds; that is, a twenty-one line would lift a dead weight of forty-two pounds.

When I returned to California and related my adventures at the Tuna Club several of the members decided to make the trip, among them Mr. L. P. Streeter of the Illinois Central R.R. Mr. Streeter is a veteran angler, having caught everything that can be caught in America, and he proposed to go to Aransas and take

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a tarpon with the Tuna Club nine-ounce rod and nine-thread line, the latter having a breaking strength of eighteen pounds. This was believed impossible by many, though not by me.

Mr. Streeter's appearance at Aransas Pass was heralded with some good-natured joking at his having come from the Tuna Club of California to tell old tarpon fighters how to fish. But Mr. Streeter wore the coveted blue button of the club which told that he was one of about sixty men up to that time who had taken a one hundred-pound tuna with rod and reel, and the tuna was, unquestionably, the hardest fish in the world to catch. I am indebted to Mr. F. L. Harding of Philadelphia for a copy of a letter from Mr. Streeter in which his experience is briefly told. The letter originally appeared in the *Forest and Stream* of New York, and is most interesting angling history, as it marks a revolution in tarpon fishing :

' I now have for you news of real interest. Yesterday, June 25, the sea calmed down somewhat and I determined to try the experiment of landing a tarpon on nine-ounce rod and nine-thread line. I lost the first fish on the jump. The second I hooked better ; he carried our skiff across the Pass (Aransas), then out over the South Shoals. Our craft almost filled with water and it was found necessary to beach her. Then I fought the fish at a distance of over eight-hundred feet away out on the outer breakers. My line parted. The time of the strike to losing the fish was fifty minutes.

' After resting a half an hour, we returned to the jetty, put out in another boat and ere long were hooked up to another tarpon. I managed to keep this fish away from the South Shoals. He made jump after jump in rapid succession, but by careful work I managed to work him over to the beach. But here a new difficulty awaited us : he refused to enter shoal water. We had no gaff, but I whipped a large shark hook (or rather instructed the boatman to do it) upon a spare tip, thus improvising a light gaff. Forty-five minutes after hooking I had a magnificent fish five feet nine inches in length glistening in the sunlight at the boatside. The rod was an ironwood of standard nine-ounce weight and nine-strand line.

' I attach great credit to my guide, Samuel T. Bromley, few if any, would have stood by me under such strenuous conditions.

' Last evening a few of the gentlemen present organized the Aransas Pass Tarpon Club. To qualify, members must catch unaided a tarpon not less than four feet six inches in length on nine-ounce rod and nine-

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thread line. The following officers were elected : President, L. P. Streeter ; first Vice-President, W. B. Leach, of Palestine, Texas ; second Vice-President, A. W. Hooper, Boston, Mass. ; Hon. Secretary, J. E. Cotter, Tarpon ; Corresponding Secretary, J. E. Pfeuger, Akron, Ohio. These gentlemen with L. G. Murphy, of Converse, Ind., and S. C. Smith, of Long Beach, Cal., form the Board of Directors. The others have yet to qualify, and I have no doubt will at an early date. Dr. Charles F. Holder was made honorary member. Says Mr. Harding : ' This is making history. No one familiar with sea fishing can fail to assent that nothing in recent years has been so revolutionary. The sixty-five pound tuna caught at Avalon on light tackle is not to be compared with it. Mr. Streeter will have national congratulations upon so astounding a feat.'

This was in 1907, and the Tarpon Club, organized by Mr. Streeter on the heels of his catch (as the Tuna Club was organized by the author the day following his catch of a one hundred and eighty-three pound tuna) entirely revolutionized tarpon fishing. The club accepted the standard of the Tuna Club, and used light tackle for which, and to encourage a high standard of sport and fair play to the fish, prizes of value were offered. The donors were L. P. Streeter, A. W. Hooper, Will H. Dileg, W. E. Jones, L. G. Murphy, J. E. Cotter, F. C. Boschen, and others.

The increase in light tackle catches is well shown in the following, for which I am indebted to Mr. J. E. Cotter, Hon. Secretary of the Tarpon Club at Port Aransas :

COMPARISON OF SEASON'S CATCHES ON NINE-OUNCE RODS, NINE LINE.

1907.—16 Tarpon, comprising 1.2% of total catch on rod and reel.
 1908.—35 Tarpon, comprising 5.0% of total catch on rod and reel.
 1909.—297 Tarpon, comprising 41.1% of total catch on rod and reel.
 1910.—397 Tarpon, comprising 49.4% of total catch on rod and reel.
 1911.—473 Tarpon, comprising 65.8% of total catch on rod and reel.

HOLDERS OF SEASON'S RECORDS.

	Length of Fish.	
	Ft.	in.
1907.—L. P. Streeter, Pasadena, Cal.	5	9
1908.—A. W. Hooper, Boston, Mass.	6	0½
1909.—L. G. Murphy, Converse, Ind.	6	6
1910.—A. W. Hooper, Boston, Mass.	6	7
1911.—Mark Sarazan	6	4½

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All anglers, whether lake, river or sea, will see the point in this estimate. It means that the catch and waste or injury of fish is reduced to the minimum and that the sport is enhanced and elevated to a science.

As a spectacular catch with rod and reel, the tarpon ranks next to the Santa Catalina swordfish, which outjumps it ten to one; but the big tarpon and the biggest swordfishes are poor jumpers. The record for number of tarpon in a day is held by Mr. L. G. Murphy, of the Tuna Club, who has taken twenty-five. The world-record fish for weight in Florida was taken by Mr. George, two hundred and thirteen pounds. The sensation of the angler when the tarpon of best condition goes into the air can hardly be described. Few men can view it or experience it without a sense of exhilaration, and I have seen a strong man utterly undone and panic-stricken by the action of a fish seemingly over his head.

The tarpon angler now has three distinct places to fish: Florida in the early spring; Tampico in the winter; Aransas Pass in summer; and Florida is by no means impossible in summer. Being nearer, Florida has been a favourite for British sea-anglers, and many have made fine catches here, notably Lord Desborough, Mr. and Mrs. Turner, and Mr. F. G. Aflalo, the founder of the British Sea Anglers Society and author of many classics on angling all over the world. Mr. Aflalo made his headquarters at Useppa Island. The season during his visit began here April 21, and ended May 19, during which six anglers took one hundred and twelve tarpon, thirty-three of which were over one hundred pounds. In 1903 the catch was three hundred and thirty. Mr. Aflalo's catch was:

April 30	85 pounds.	May 4	47 pounds.
May 3	108 "	" 5	40 "
" 4	108 "	" 7	18 "
" 4	86 "	" 9	38 "
" 4	86 "	" 15	110 "
" 4	68 "	" 15	117 "

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May 15	70 pounds.	May 15	80 pounds.
” ”	60 ”	” ”	80 ”
” ”	140 ”	” ”	67 ”

This is eighteen tarpon in about two weeks. If there is any difference between the tarpon of Texas and those of Florida I imagine the Texan fishes average larger. The season in Texas is a long one, including spring, summer and autumn, and one can find tarpon fishing at some locality in Florida all summer; especially at Long Key, on the new railway, the fishing is excellent.

The fish and the sport are interesting for various reasons. It is a giant herring and looks the part, its extraordinary jaw giving it a cynical appearance, while its eyes are so near the end of the muzzle and the top of the head that one doubts its intelligence. Its wonderful investment of big silver scales are a most attractive feature. They are three inches across in the six and seven-foot tarpon, so like molten silver dollars that when I landed a big fellow, I had some of the scales pressed flat and dried, wrote the weight and length of the fish on them, added a stamp and sent them to friends all over the country as post-cards.

The rules of tarpon fishing are extremely pliable, and you may fish for it in various ways. I used a Vom Hofe reel (costing fifty dollars) and capable of holding six hundred feet of line (valued at three dollars). This reel had a single brake to prevent over-running, and a leather pad to press on the line with the thumb; so I caught the fish with my thumb. I took all my tuna years ago in this manner, and it was painless, as at the end of three or four hours the thumb had no feeling. At that time we believed in fighting the fish and pulling against it. Now the Vom Hofe reel is a masterpiece with several patent brakes, and has reduced tarpon fishing to a gentle art for game of all kinds, as one can adjust the reel to any tension, and the game once hooked is sure to wear out first.

In the discussions the angler will hear much about this and that hook and a variety of opinions. I used a 10/°. O'Shaughnessy, with a piano-wire leader, longer than the fish, and when I

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did not, I doubled the line for six feet as it is liable to chafe off. The leader, to my mind, should have several swivels, and a short chain at the hook is a clever idea, as when the tarpon is in the air, thrashing from side to side, endeavouring to throw the hook at you, the wire is apt to kink, which is in the nature of a tragedy. Before going tarpon fishing the angler should consult some first-class dealer, as Edwin Vom Hofe, Abbey & Imbrie, or Mills & Co., New York, who rank with Hardy, Farland, Milward, and others in England. One can fish by day or by night, but the latter is a dangerous pastime, as the fish of the man ahead is liable to land in your skiff and throw you out, which has occurred in the day-time. I have seen tarpon jump on the Florida reef at night, turning the sea into a maelstrom of blazing light, due to phosphorescence. I have caught them with live mullet, with very ancient mullet, and on one occasion was tempted to seize one in my hands as I crept up within two feet of where it was lying perfectly quiet on the surface.

The tarpon has been taken with a spoon, and on the bottom with bait, but trolling would appear to be the method best adapted to so large a fish, when it is necessary to have the boat free on the instant.

There is much mystery about the young of the tarpon. For years no one had seen a small one ; finally one was reported from Porto Rico. But the life history of the tarpon is yet to be written. This is true of many fishes. The young seemingly disappear at once, only the adults being known.

Tarpon fishing in Florida and Texas lacks, in a sense, the charm of really beautiful surroundings, though to me there is a certain fascination about both localities. In Texas I often wandered about at night and skirted the great sand-dunes with the coastguard. The wind was always blowing from the same direction, and as far as the eye could reach down the coast toward Mexico there was a mass of silvery light, a weird, uncanny phosphorescence. The roar of the waves was a deep and solemn requiem, adding to the weirdness. In the moonlight I could

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see countless spirit-crabs scurrying along, and everywhere the sand was moving noiselessly up into the lair of the dunes which took on strange shapes and forms. Along the shore where the moonbeams played was a dark undulating line of algae, richly coloured sea-fans, gorgonias, shells of many sorts, and the filmy satin-like shapes of the fairy Physalia or Portuguese man-of-war. Mingled with all these were countless bits of sponge-like pumice thrown up by Mont Pélée at the destruction of Martinique.

Offshore, countless tarpon lay, and prowling about the schools were big sharks, the only living creatures that will eat tarpon or can capture one.

In Florida the conditions differ. The tarpon is still found in passes, but there are islands covered with thick luxuriant verdure, the mangrove and palm. There are countless strange and beautiful birds, and an abundance of animal life. But, after all, the angler who is really after tarpon has no time to indulge in rapsodies on scenery; the fine fish will keep him sufficiently occupied.

The following lists compiled for me by Mr. L. P. Streeter will give some idea of the tarpon angling at Useppa Island:

USEPPA ISLAND (FLA.) TARPON RECORD.

Condensed Statistics from Official List of Rod and Reel Catches by guests of USEPPA INN.

Season of 1902. From March 30 to May 30 inclusive.

Number caught	. . . . .	183	
Number rods to above catch	. . . . .	24	
Total weight	do.	12,138.5	pounds
Average "	"	66.3	"
Largest	. . . . .	178	"
Smallest	. . . . .	30	"

Season of 1903. From March 5 to May 31 inclusive.

Number caught	. . . . .	338	
Number rods to above catch	43	
Total weight	do.	31,263.5	pounds
Average "	"	92.5	"
Largest	177	"
Smallest	9	"

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Season 1904. From March 16 to April 21 inclusive.

Number caught	48
Number rods to above catch	22
Total weight do.	3,874 pounds
Average " "	80.7 "
Largest	152 "
Smallest	40 "

Season of 1905.

No record as hotel was not in operation.

Season of 1906. From April 21 to May 20 inclusive.

Number caught	113
Number rods to above catch	11
Total weight do.	10,068 pounds
Average " "	89.1 "
Largest	165 "
Smallest	18 "

Season of 1907. From March 17 to May 8 inclusive.

Number caught	86
Number rods to above catch	16
Total weight do.	7,861.5 pounds
Average " "	91.4 "
Largest	173 "
Smallest	40 "

I am indebted to Mr. J. E. Cotter, Honorary Secretary of the Tarpon Club, Port Aransas, Texas, formerly Tarpon, for this data relating to their annual catches :

Sea- son.	Largest Tarpon.	Number caught.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.
	ft. in.										
1903	7 7½	987	—	—	—	—	—	—	—	—	—
1904	7 10	659	—	—	—	—	—	—	—	—	—
1905	7 1	1,534	39	21	164	424	273	375	119	43	76
1906	7 3½	1,573	52	73	238	503	261	212	86	80	68
1907	—	1,305	49	61	196	403	211	204	71	83	37
1912	185 up	to July	21.								

Mr. A. W. Hooper of Boston at this date had taken thirty-five tarpon ; Mr. L. G. Murphy sixteen.

Mr. Alfred Beebe, a valued member of the Tuna Club, has

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The following list will afford some idea of the tarpon angling at Tampico. The fishes are taken with rod and reel in the Panuco River. The best season at Tampico is that comprising the months of January, February and March. The torrential rains of summer make the water muddy, but by October it begins to clear and the tarpon come in from the Gulf, and according to Mr. A. M. Poindexter, a veteran tarpon angler of Tampico, by November they will be found at the entrance of every small affluent of the Panuco. The fishing continues until the middle or the last of June. The record tarpon at Tampico, according to Mr. Poindexter, is seven feet two inches, weight two hundred and two pounds. It was landed by Mr. H. W. Wilson, the British Consul General at Tampico. The following are some of the yearly catches at this point, or the winter fishing :

SEASON	1905-06.	December 1 to May 1	.	.	1,287	Tarpon.
"	1906-07.	" "	.	.	1,518	"
"	1907-08.	" "	.	.	1,585	"
"	1908-09.	" "	.	.	1,382	"
"	1909-10.	" "	.	.	1,417	"

CHAPTER XXVII

THE PACIFIC COAST SALMON

'Nec te puniceo rutilantem viscere, Salmo
Transierim, latae cujus vaga verbera caudae
Gurgite de medio summas referuntur in undas,
Occultus placido cum proditur aequore pulsus.
Tu loricato squamosus pectore, frontem
Lubricus et dubiae facturus fercula coenae,
Tempora longarum fers incorrupta morarum,
Praesignis maculis capitis, cui prodiga nutat
Alvus, opimatoque fluens abdomine venter.'¹

Ausonius : *The Moselle*, 97-105.

ALL anglers know that, as a rule, the Pacific Coast salmon will not take a fly ; also that their habits are totally dissimilar to those of the Atlantic Coast or Europe. But one day hearing that the Link River at Klamath Falls, Oregon, was alive with salmon, on their way up the river, I determined to give them the benefit of the doubt and make the attempt to take one with a fly. I was towed to a little river by Captain John Griffith's launch ; then Tom Littlefield, my boatman and guide, started to row me into the little river, so charming that I hope many of my readers may some time see it, and that Dr. Henry Van Dyke may some fair day add it to his famous collection of 'Little Rivers.'

I fancy you would never find it if not told exactly where it is,

¹ 'Nor will I pass thee, O Salmon, blushing with thy red flesh, the roving strokes of whose broad tail are borne from the middle of the stream to the top of the water, at such time as the hidden lash betrays itself on the calm surface. Now, clothed in scaly armour, slippery as to thy fore part, and able to constitute a remove for a most excellent dinner, dost bear keeping fresh for a long time ; thou art conspicuous with thy spotted head ; thy full paunch trembles, and thy belly overflows with abdominal fat.'

Literal translation by Houghton.

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as its mouth is scarcely one hundred feet across, and the stream turns so quickly and so many times, and its shores are so lined with willows, aspens, and various fragrant shrubs and grasses, that I did not see it until we were fairly within the gates, and hailed by the Modoc Indians, at camp in a little nest where the trees had been cut down by the beavers.

The Williamson empties into Klamath Lake about three or four miles northeast of Eagle Ridge, Upper Klamath, and winds about in a marvellous fashion, sixteen miles or more, through the Klamath and Modoc Indian Reservation; then reaching the highlands, it continues on and ends upon the slope of Mt. Mazuma not far from Crater Lake, in the interim receiving several branches, chief of which is the Sprague. The latter is a little river, and almost anywhere a good angler could cast from one side to the other; and it is so well wooded along its borders with tule, willow, cottonwoods, wild corn and various bushes, that the fishing, in the main, must be done from a row-boat.

We began fishing at the mouth, where the water changed from an old-gold hue to a deep mahogany, which reflected the splendid colours of the autumnal tints. The Indians had several big salmon and trout hanging beneath the trees, and grunted a laconic welcome, as the river is theirs, or runs through their reservation. I first used a big St. Patrick fly; then a March Brown, then a Royal Coachman, casting faithfully up the reaches of the stream, so radiant in colours, so insistent in turning and providing new effects and vistas, from the faint nebulous rim of Crater Lake to the snowcap of Mount Pitt, that I should have been satisfied had I not taken a fish.

I cast beneath the bushes into the golden-red shadows along the white tips of willow that the beavers had cut; out into the middle of the stream, and as we approached the turns where the little river widens out into pools, we stood off, and I did my best casting, as to length or distance, frequently not even disturbing the divers and mud hens, or a flock of mallards. I placed a fly on almost every foot of the stream to faithfully prove that

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some Pacific salmon *will* take a fly ; but the only rises I had were of snipe, which went whistling over us, or beautiful magpies which were continually flying laboriously across the little river as though to display their abundant plumage, and as I was looking at the water I saw them upside down. After several hours of this I surrendered and replaced the fly, I was then trying, with a Wilson spoon—a concession to the inevitable—and began to troll, that is I paid out one hundred feet of line and my boatman rowed slowly along, the lure being six inches below the surface.

‘The generous gushing of the springs,
When the angler goes a-trolling,
The stir of song and summer wings,
The line which shines, and life which sings
Make earth replete with happy things,
When the angler goes a-trolling.’

Stoddart.

I was using a Divine-made eight-ounce split bamboo or cane rod about ten feet long, a tapered oiled-silk line I had purchased of Hardy in London in 1910, and one of his trout reels ; so it was not salmon tackle in any sense. We made the change near the mouth and rowed slowly upstream. I was sitting facing the stern on a board placed across the rails—a Santa Catalina fashion—my boatman regaling me with the wonderful catches of trout he had seen made here, when without warning I had a strike which almost took the rod out of my hands, as at that particular second I was following a magpie upside down across the little river.

The fish hooked himself, so violent was the rush, and in a second of time I was torn from a Waltonian contemplation of nature to the vigorous play of a salmon fresh from the sea. I hooked the fish in a large pool ; his first rush took fifty feet of line, to the blare of the English click, then I checked him hoping to see him leap. But he was a king of the sulkers and never showed



Fig. 37.

1. The Author's Salmon, on Trout Tackle. 2. The Salmon Pool, Williamson River, Oregon, U.S.A., Altitude 4,500 Feet. The Mountain, 9,000 Feet. p. 264.

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himself, making a series of rushes up and down, in and out ; then taking a position in a deep eddy, defied me.

I had caught a seventeen-pound yellowtail with the eight-ounce rod, though I had the reel above the grip, and now the reel was at the end, and when I tried to reel I merely reeled the tip and first joint into the black river ; the only way I could offset this was by giving line. I reeled and gave line several times, but the salmon was laughing at me, and so, I fancy, was Tom, my guide. Things in some way were reversed, and it gradually dawned on me that I was being played by the salmon. So I told Tom to row off, and when we reached a spot one hundred feet distant I began to reel.

The reel rallied nobly and lifted the fish, which dashed around in a great curve, then came at me with such rapidity that I could not take in the line on my single action reel and was sure he was off. I stripped the line in with my left hand, coil after coil, as the river bank here abounded in branches cut and dropped in by beavers, and the salmon displayed a too-evident desire to run along this *chevaux de frize*, when the lightest touch on my green tapered line would have severed it. The fish came racing up to the boat, saw me, and turned, dashing away, and taking thirty feet of line through my thumb and forefinger until he was exhausted. Then I called on the eight-ounce rod, which displayed its resiliency by taking to the water.

We went through this performance several times, and as it was a very warm day, and I had been playing the fish forty minutes, I began to suspect that my rod, and even myself, were outclassed by this doughty fish. I recalled an argument I had with my friend Annan on the Tweed ; I taking the ground that the English salmon rod was unnecessarily long and stiff. How I wished for that very rod, or something that would move this colossus of the pool ! How pitiable my trout rod appeared trying to hide its head, and its entire length, for that matter. How Annan would have enjoyed my confusion ! I tried every expedient from rowing off, to rowing over the fish ; but he was,

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apparently, as fresh as ever, and I was reluctantly compelled to acknowledge that my theory of a medium-weight trout rod was not adapted for this fish ; at least, with the reel at the end of the butt.

But I did not give in at once. I temporized with the enemy, in the language of the ring, playing for wind literally ; and I confess that I needed it, as the effort to hold the impossible rod was work of the hardest kind. At last, after nearly three-quarters of an hour, playing and being played, I told Tom to row inshore. I landed in a little beaver clearing where I stood a moment, then began a new attack. Sometimes the rod had a gallant bend, again it would point directly at the game, but in fifteen minutes I had the sulker coming, and as he shot along the bank I held him and called for the net. The moment the salmon saw it, he dashed off twenty or thirty feet, and tried to sulk again. Time and again I brought him to the bank, and as many times missed him. We had no gaff and the net was a small affair for trout of a few pounds. But eventually I held him and Tom lifted him in, a blue-back, spotted grilse of twelve pounds fresh from the sea. Not a large salmon ; not half the size of the one an Indian in a dugout held up to us, which must have weighed twenty-five pounds. But I confess that a small fish never before had so much sport with me, and all due to my faith in trout rods for salmon. Even now I contend that with the reel above the grip I might have made a fair showing, though my long slender tip was outclassed. When I fish again for salmon on the Williamson I shall have a rod that will at least lift a fish from the bottom of the pool.

On another day my wife hooked a salmon of unknown size in the old Indian pool twenty miles upstream at the first rapid. After a battle of twenty or thirty minutes, when bringing it to the gaff, it made a rush around the stern and broke the line, a melancholy ending of a gallant contest. This salmon had entered the Klamath River above San Francisco and, doubtless, was a member of the big school that lies in Monterey Bay in July and

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August, feeding on the vast schools of anchovies, where I have angled for them.

At Monterey there is a salmon cannery devoted to the extermination of the salmon. July, August and September finds many anglers at Del Monte for the salmon sea-fishing. The angler may go out in a row-boat or in a launch, the tackle being a rod similar to that described for yellowtail, a stiff nine-ounce rod being all that is sufficient. The bait is a sardine or smelt, and as the fish generally lie thirty or more feet below the surface a detachable sinker is used, which comes off at the strike and permits the angler to fish at ease. At first the boatman will hunt for the salmon, using a large hand-line and a heavy sinker, and once the school is located by a catch, the angler may begin fishing with his rod, which consists of trolling with the lure twenty or more feet down, though at times the salmon are at or near the surface.

The country in the vicinity of the bay of Monterey is of great interest. On the north are the redwood forests and some of the largest of the *Sempervirens*, this being the southern limit. Here are the towns of Santa Cruz, Capitola, with their little rivers, the American, Soquel, and San Andreas, charming trout streams where I have angled for rainbow trout five miles from the mouth, fished for steelheads in the laguna and for salmon offshore; all in one day or an afternoon and the following morning. On the south side of the bay is the old capital of California, Monterey, and the town of Del Monte, and its hotel, which stands in a park of several hundred acres and includes a game preserve, and the upper Rio Carmel—a delightful little river which empties into Carmel Bay near the ancient mission. The mornings are smooth here, despite the fact that the bay is practically an open roadstead. The salmon fleet, augmented by ten or twenty anglers is on the ground by seven o'clock, or earlier, and the sport is on in a short time.

The salmon is the chinook, and in its best condition, full of fight and ranging up to fifty pounds, affords excellent sport.

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I have never seen a salmon leap here, but am told that they do. Several which I took rose to the surface and the water boiled about them. The sport can be compared only to yellowtail fishing, the play of the salmon much resembling that of the yellowtail. But it has several hundred feet of water beneath it; hence will go down and sulk if allowed. In September, or late in August, the salmon move north and enter the Sacramento, Klamath and other rivers which lead them hundreds of miles from the ocean never to return, as all Pacific Coast salmon die after spawning. I have referred particularly to the chinook salmon as I believe it is the best game fish; but it is but one in a number of commercially valuable salmon of the coast. The average rod catch was twenty-five or thirty pounders, and the morning catch of the anglers often equalled thirty or forty fish running up to fifty pounds. The fishing lasts until eleven or twelve o'clock when the strong inshore wind begins and ends the sport of the rod fisherman, so far as comfort is concerned.

There are five distinct species of salmon on this coast: the king salmon or quinnat (*Oncorhynchus tshawytscha*), already referred to, which I have taken in the Williamson River of Oregon and in the Pacific Ocean at Monterey; the blueback salmon or red fish, or sock eye (*O. nerka*), which attains a weight of five or eight pounds; the silver salmon, or coho (*O. milktschitsch*), with a maximum weight of five or eight pounds; the dog salmon, calico salmon, chum or sakè (*O. keta*), which reaches a weight of ten pounds; the humpback salmon, or pink salmon (*O. gorbuscha*); a little salmon of five pounds, and the Masu (*O. masou*). Nearly all these salmon, in the localities in which they are found, doubtless will afford some sport to the angler with a spoon or bait. But there is nothing to compare with the fly fishing of the Atlantic salmon, though I question if an angler could have better or more spirited game than I did on the Williamson, and had the fish been played with a heavier rod it certainly would have afforded sport comparable with that afforded by an English salmon.

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No more extraordinary subject in the history of fish and angling is presented than the life history of the above-mentioned salmon. Dr. David Starr Jordan has made it a careful study and has shown some startling and extraordinary facts. But it may be said that the king salmon is the game fish *par excellence*, and it will be found all along the Pacific coast, particularly at Vancouver, where very large specimens are taken with the spoon and bait. The angler will always hear of fly fishing, and I recall a very courteous invitation once received from an Englishman in Vancouver, the lure being that I should be shown some salmon fly fishing. I also recall, if I am not mistaken, that Mr. Kipling enjoyed the fly fishing for salmon on the Klackamas, an Oregon river.

The king salmon and the blueback have a spring run up the rivers, while all the rest, according to Jordan, 'run' or go up to spawn in the fall. Ordinarily the salmon live in the ocean, probably off the mouths of the rivers or near at hand, and they appear to move up the streams—the Sacramento, Klamath, Columbia, Fraser, Nass, Skeena, Stickeen, Taku and other streams in a more or less regular order. The chinook first; then the blueback, silver, humpback and dog salmon. It is believed that the first to enter the rivers are those which make the longest journeys. Thus the quinnat or king salmon, which we have seen at Monterey and Klamath Lake, travels up the Yukon to Lake Bennet—a distance of two thousand two hundred and fifty miles from the mouth of the river, while the red salmon is known to swim to 'Forty Mile,' over one thousand eight hundred miles from the Pacific.

There is a remarkable difference in habit. Thus the fine king salmon, which may weigh from twelve to one hundred pounds, enters the large rivers which rise in melted snows, while the red salmon, Dr. Jordan tells us, will enter only rivers which pass through lakes. The great chinook spawns at the head of rivers; the red salmon in small streams that flow into lakes. The other species mentioned do not swim long distances, but

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enter small rivers and spawn in them. Fishes of many sizes are seen in the streams at the same time, and in the Fraser River in the fall, Dr. Jordan found fully developed salmon as small as eight inches, but not showing the sexual hooked jaws found in older fishes. The salmon average larger in the northern rivers. Thus the average weight in the Columbia River of the quinnat is twenty-two pounds, and fishes of sixty, eighty and one hundred pounds are taken. In the Sacramento, which reaches the ocean at San Francisco, the average salmon is sixteen pounds. It is believed that the very large salmon are those individuals which for some reason have failed to spawn and have in some way avoided the fate of all spawning fish here, which is believed to be death.

The fish perform feats of remarkable valour in jumping falls in all rivers, and their persistency is often pathetic.

‘ Here, when the labouring fish at the foot arrive,
And knows that by his strength but vainly doth he strive,
His tail takes in his teeth ; and bending like a bow
That’s to the compass drawn, aloft himself doth throw ;
Then springing with his tail, as doth a little wand
That bended, end to end, and flirted from the hand,
Far off itself doth cast ; so doth the Salmon vault.
And if at first he fail, his second somersaut
He instantly assays, and from his nimble ring
Still yesting, never leaves until himself he fling
Above the streamful top of the surrounding heap.’

In early days in Alaska they frequently filled the rivers in places in an almost solid mass, and at certain falls the bears congregated to catch the salmon that missed the jump and fell out upon the rocks. On entering the rivers it is supposed the fish do not feed, but I have seen a salmon chasing small fry in the Feather at Big Meadows—a long distance from the sea. The stomach contracts, and theoretically, and in the greater number positively,¹ the salmon does not feed, and the explanation of their

¹ In certain rare instances food has been found in the stomach of a spawning salmon.

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taking a spoon, is, that it is in obedience to the eating habit, or that they are annoyed.

When the quinnats reach the spawning grounds at the head of the river they are badly injured, cut and worn. They pair and the male forms a smooth place or nest in a gravelly spot where the eggs are deposited. This accomplished, the tragedy ends by both fishes, weak and emaciated, drifting slowly downstream, tail first, and sooner or later dying. The eggs hatch in about sixty days, and the young remain in the vicinity until the spring freshets when they, doubtless, go down to the sea, remaining there until the fourth year when they re-enter the nearest river as adults, where, if small, they are known as grilse.

The range of salmon up and down the coast is interesting. The king salmon, or chinook, ranges south to the San Buenaventura River on the borders of Los Angeles county, or in latitude thirty-two degrees. Dr. Jordan has observed all the species in the Columbia and Fraser Rivers, 'all but the blueback in the Sacramento and all the waters tributary to Puget Sound.'

There is a great difference in the appearance of the salmon at times. In the early spring all are silvery, and the big chinook, or king salmon, I have taken at Monterey were beautiful objects resembling molten silver. As the spawning season approaches they lose the silvery hue, and the flesh, a salmon-red, becomes paler. But, like rainbow trout, some may be red, and some white, without apparent reason, although anglers and *habitants* have many ingenious explanations—food, temperature, and others. As the season advances the male changes; the tip of the lower jaw is prolonged, both jaws become strangely hooked, and there are often extraordinary changes. The blueback turns red; the head green. The dog salmon assumes a dark-red tint, with black bars, while the quinnat takes on a dark or black hue. In the spring when they enter the streams they are silvery, in the late fall they appear distorted and weird caricatures of their former selves.

The value of the salmon fisheries per annum in Alaska

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amounts to nearly two million pounds. Dr. Jordan does not believe the salmon have any special instinct which induces them to return to the river from which they originally came. He believes that the young descend and remain about the river, or not more than thirty or forty miles distant, and that their return to that particular river is due to the fact that it is the nearest and most convenient. Once in the stream, they seem to play about for some time, then enter the channel and swim steadily upward. It is estimated that the salmon in the Sacramento make two miles in a day; in the Columbia three. But the spring run of salmon in the Columbia make four miles, as an average, and, of course, ten miles and more to enable them to reach the extreme points given.

The angler with the rod in visiting the Pacific coast of North America should not fail to include the splendid chinook, king, or quinnat, call it what you will, in his itinerary, either off Vancouver, Canada, in the many rivers, or at Monterey, where in the bay of Monterey or that of Carmelo, it may be taken under most interesting and agreeable circumstances. If the angler finds his way to Upper Klamath Lake just over the line in Oregon, he should try the little Williamson with a Wilson spoon and a rod of something over eight ounces and

‘ I shall stay him no longer than to wish . . . that if he be an honest angler, the east wind may never blow when he goes a-fishing.’

Isaak Walton.



Fig. 38. American Trout Streams.

1. Sprague River—Home of Big Rainbow Trout. 2. Roaring River, Branch of Kern River. 3. Rainbows from Pelican Bay, Klamath Lake. 4. Lake Trout, Lake Tahoe, California. (Photo by Tebbetts)

CHAPTER XXVIII

THE RAINBOW TROUT AND ITS COUSINS

'I would . . . fish in the sky whose bottom is pebbly with stars.'

Thoreau.

THERE is something, some peculiar charm about angling which arrested the attention of great men, thinkers and philosophers ages ago. Perhaps they were attracted by the fact that Glaucus was changed into a sea deity that he might be near the fishes.

Long before Christ, Theocritus was writing poems on things piscatorial. Homer knew of the delights of angling, and the astonishing philosophical discussions of Athenaeus refer to the art. Many of the Greek and Latin classics have reference to fishing and contribute to the fisher eclogues.

Sannazaro in 1503 wrote pastorals in the vein of Virgil, but pastorals of the sea and fisher folk.

In the *Odyssey* we read :

'As when an angler on a jutting rock,
Sits with his taper rod and casts his bait
To snare the smaller fish.'

Fishes appeared in the ancient drama, as those of Epicharmus (490 B.C.). The 'Clown and the Fisherman' Sophron took from Epicharmus, but he originated 'The Tunny Catcher.'

Many of the Sicilian poets sang of fish and angling. The romances of the ancient Greeks include frequent references to anglers and angling, and if we were to attempt to write the history of the poesy of angling, the idylls of anglers, or what may be called the pastorals of the fishermen, we would, doubtless,

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be amazed at the material accumulated before Walton, who endeared himself to the anglers of the world by presenting his more than delightful philosophy of angling, teaching men that it was the gentlest of arts, a pastime for gentlemen and gentlewomen.

If I were to wish a trout lover good luck I could not do better than to wish he were with me as these lines are written. From a commodious log hunting lodge at Eagle Ridge I look down on the crimson surface of Klamath Lake just over the California line in Oregon, America. Silver trout are leaping everywhere. I cannot raise my eyes that I do not see one, or the swirl of circles as he comes down, and the crash and smash on the water is constant. The lake is wide and shallow, nearly thirty miles long, with extensive snipe, curlew and duck marshes through which run beautiful little rivers which rise in springs of great size and coldness. The little spring-fed streams, as Odessa, Crystal and Spring Creek, are radiant in beauty of foliage; beside these there are several rivers, as the Williamson, Wood and Sprague, which flow into the lake and abound in charms which unfailingly appeal to the lover of nature.

Away on the northern horizon is that wonder of the world, the hanging lake of Mazama, a liquid sapphire over a mile in air, the home of rainbow trout, really a vast crater filled with water; a crater as perfect to-day as when made in the past. All this region is famous for its big rainbow trout.

We pushed off one morning, the launch towing the small boat, dropping me and my boatman about ten miles up the Williamson, a winding river famous for its fly casting and scenery. Never was a Royal Coachman or Klamath fly cast into such glories of colour, tint and shade as here. On the third cast there came a response; a stiffening of the line, a quick bending of the resilient rod, and the game was on. I was using an eight-ounce split bamboo rod and tapered oiled-silk line, and was filched of one hundred feet in the first rush of this unknown, which went into the air, hurling the spray, to come down with a crash that awoke the dormant echoes, and brought out a half cheer from an

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old Modoc squaw who sat on the bank watching this fish *play me*. We were directly below the rapids, and the splendid trout would course around the pool, go into the air, then plunge to the bottom, giving me the battle of my life, with trout. Slowly it came in, and time and again it dashed away at the sight of the net. It was only taken at last by a sort of angling miracle, the hook holding by a mere sliver. Tom Littlefield, my boatman, weighed it, and pronounced it an eight-pounder.

Anywhere else this would have been an extraordinary event, but an eight-pounder was no rarity here, and Colonel Gay of San Diego, who is smoking on the lodge veranda, has a record of a nineteen and one-half pound rainbow. My best rainbow was a ten-pound fish, and a nine-pounder hangs in the Tuna Club to prove another story.

The following day I took fourteen rainbows in this river. The largest weighed seven pounds and none below three or four pounds. A day later when rowing alone in a little blind river in the snipe country near Pelican Bay, I hooked a fish in a big pool, which fought me an hour. I think he was an eleven- or twelve-pounder, but he weighed but ten an hour later. On another occasion my companion, Mr. Joseph Reed of Pasadena, landed four-, five-, six-, seven-, eight- and ten-pound rainbows after remarkable contests, and Mrs. Reed an eleven-pounder.

The record fish of this locality was taken by Mr. J. B. Lippincott of Los Angeles. It weighed twenty-two pounds, and scores have been caught ranging upward from five to fifteen and twenty pounds.

In this region there were, to the eye, two distinct rainbows; he of the deep river pools, dark, heavy and brilliantly coloured with flesh-pink or white. This was the typical, finely proportioned *Salmo irideus*, called the rainbow by Dr. David Starr Jordan years ago. Whenever I look at a rainbow I recall the fish, and when I land the fish I think of a rainbow, as he is one, if you can imagine delicate filmy old-rose lace drawn over the living rainbow. The rainbow is, all in all, the game fish of the

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clan of trout. I have taken numbers that were too big to fight, or out of trim and disappointing ; but the average rainbow at its best is a hard fighter, and a living challenge to the best tackle.

This trout is indigenous to the permanent streams and many lakes of the Pacific coast of North America from the Columbia and farther north, doubtless, down to Lower California, where, in the little streams which flow down from the great mountain, San Pedro Martyn, there is a pigmy rainbow (*Salmo nelsoni*).

There is no mistaking the rainbow of the pools and dark streams as he is big-headed, his tail wide, while his colour ranges from reddish to old port. You may count from one hundred and twenty-five to one hundred and thirty scales in a line along his body, and they are larger than in other trout. He talks with a high and demonstrative dorsal fin, very expressive, denoting rage and a lot of other things. You may also count from seven to ten rows of dark leopard-like black spots. If you wish to push your investigations further, there are no teeth along the middle line of the tongue, while the head, as stated, is large, being nearly a fourth the length of the fish. The male is large and ponderous, attaining a weight of twenty-four or twenty-five pounds, and displays a salmon-like suggestion of curving jaws in the spawning season. In small streams the rainbow matures at six inches, and in Klamath it is found bearing eggs every month in the year.

In California, Oregon and Washington, it is the ' native son,' the fish of the people, found in lakes and streams, from the sea to five miles above it, and has been sent all over the world with the compliments of California.

The sea-going rainbow, the steelhead, has been referred to elsewhere, but the rainbows I took up to ten pounds in the open lake at Klamath were an entirely different fish *in appearance*. They were silver and mauve, but slightly spotted, and we called them silver trout. They were possibly the rainbows of the open shallow muddy waters.



Fig. 39.

The 10-Pound Silver (Rainbow) Trout, 8-Ounce Rod. Upper Klamath Lake, Oregon, U.S.A.

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New trout are constantly being discovered or produced. I am almost convinced that I found a new silver trout in Klamath Lake, as Professor Snyder did in Tahoe. Just how a new species is discovered may be of interest to the angler reader. I wrote to Dr. Snyder, of Stanford University, regarding my alleged silver trout, and in his reply occurs the following :

‘ It is barely possible that the fish which you caught is a relative of the silver trout which I have just named, and my reasons for suspecting that, are not altogether without foundation. I do not know any good reason for supposing that it is not a steelhead except that I can see no trace of spots on the fins or body. Nor does it look like my new species, as that has small pointed fins that are comparatively weak, not looking like the fins of a fish that is accustomed to stem the current of a river. However, when the description of that fish reaches you, you will no doubt be able to decide as to whether it comes anywhere near fitting the trout which you caught. I should like nothing better than to spend some time on Klamath Lake and the rivers near by studying the fishes. I made a trip to the lakes of Oregon that lie east of the Klamath basin once and found them of great interest. Perhaps you have read my report on their fishes.

‘ I have read a great many of your fish stories and so I shall have to tell you how I came across the new trout which I have mentioned. The Fisheries Bureau commissioned me to make as thorough a study of the fishes of the streams and lakes connected with the ancient Lake Lahonton as possible. I was somewhat familiar with the species of the region in so far as one might so become with the aid of books and a few specimens, and so set out with a good assistant to catch what we might from the streams and lakes. On such quests I have found it a good plan to listen to all the stories and general information about fishes that I can draw from the anglers and fishermen that I meet. They all have their ideas about the number and kind of species in the waters that they fish, and I find it especially profitable to make mental comparisons of what they say and what the books have led me to look for. Now up there I constantly ran across references to a beautiful silver trout, and the various descriptions that I got, all boiled down and carefully filtered, made a decoction, the properties of which lead me to feel certain that a species of trout of which we knew very little might be found in the region. So we made a camp on Lake Tahoe and remained three weeks fishing and watching the catches of better fishermen than ourselves but with no better results than a still firmer conviction that something would yet turn up. I had

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intended to return to Tahoe last summer and continue the search, but funds were not available as Congress failed to pass the appropriations for so long a time. But we had a student, Mr. Pomeroy, who was attending the boats at a resort there, and who became interested in the trout. Mr. Pomeroy is a bright student and a careful observer, and it was not long before he found a gentleman who not only knew the fish for which we were looking but who also had a very fitting name for it, the royal silver trout. This was Mr. Ralph Lowe. It was not long before he caught a royal silver trout and sent it to me fresh, by express. That settled it. Two more specimens were soon caught, one by Mr. W. P. Lyon and one by Mr. Pomeroy. It will be known now as *Salmo regalis*, the Royal Silver Trout. It is one of the most beautiful fishes that I have seen, not like other trout with which we are familiar, but having a beauty all its own, to be contrasted rather than compared with other trout that I know. It is reported to be a deep-water fish, never being caught near the surface, yet one of these specimens furnished evidences of long continued surface feeding. It seems to be entirely unknown to members of the State Fish and Game Commission, but I hope that they will try to find out something about it before it disappears, and it seems to be on the road to extinction, if the information that I have concerning it is at all reliable.

‘As you no doubt know, there are some relationships between the fauna of the Lahontan basin and that of the Klamath. In both are found species of the remarkable sucker-like fishes *Chasmistes*, and I should not think it very strange if both contained a similar deep water trout, a trout much like the one which I have described. *Chasmistes*, and some other fishes appear to belong to an old fauna, which once had a more wide distribution than at present, and I believe that the new trout is a member of that same old order, now passing. A representative of this same trout is to be looked for in Klamath Lake, unless my guessing is wide of the mark.’

Mr. Alfred Beebe, who has fished the Pelican Bay region, Klamath Lake, Oregon, U.S.A., very kindly sends me a little table, including the years between 1899 and 1908, showing some of his fly-fishing catches of rainbow trout :

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PELICAN BAY AND TRIBUTARY CREEKS—SPRING CREEK (2 VISITS)—
WILLIAMSON RIVER (1 VISIT)—ODESSA CREEK.

Rainbow Trout.

Fly Fishing only.

Weight.	1899.	1902.	1904.	1905.	1906.	1907.	1908.	Total.
Under 1	3	27	49	16	12	11	6	124
1-2	24	25	41	26	27	15	22	180
2-3	17	18	31	17	13	16	10	122
3-4	10	15	12	11	11	3	10	72
4-5	1	3	8	6	4	1	3	26
5-6	2	2	4	5	2	—	1	16
6-7	—	5	—	1	—	—	—	6
7-8	—	—	2	—	—	—	2	4
8-9	—	1	—	1	—	—	2	4
9-10	—	—	1	—	—	—	1	2
Over 10	—	—	—	1	—	—	—	1
Total	57	96	148	84	69	46	57	557
Time.	Early Sept.	Aug., Sept., Oct.	Aug., Sept., Oct.	Sept., Oct.	Apr., Sept., Oct.	Sept., Oct.	Apr., Sept., Oct.	
No. of Trips	8	27	40	24	32	14	24	
Av. per trip	7	3.6	3.7	3.5	2.1	3.3	2	
Largest Fish.	5½ lb.(2)	8 lb.	9 lb.	10¾ lb.	5½ lb.(2)	4¾ lb.	9½ lb.	
Fly	March Brown	March Brown #2	Silver Fairy #1	March Brown #1	—	—	Kamloops #1	
Remarks							Taken in April	

Trout are seen here literally in droves, and Pelican Bay, Odessa, Rocky Point, Crystal and Spring creeks and the Williamson constitute the most remarkable region in the world for large rainbows.

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In the San Geronimo mountains of California is found another little rainbow. This is *Salmo evermanni* (Grinnell). It is confined to the regions above seventy-five hundred feet and shut off from the lower trout by waterfalls. Still another species of rainbow is *Salmo masoni* of the Cathlamet river, and *Salmo gilberti*, with a white tip to the dorsal fin and a suggestion of orange on the lower jaw. This is found in the lakes of California, as Kern, and has been taken up to ten pounds. It is a fine fighter.

So pronounced are the variations in the rainbows that they are recognized as the Klamath rainbow, *Salmo irideus*, *stonei*, the Shasta rainbow and Gilbert's rainbow of Kern and Kings rivers. At the head waters of the Kern river, California, in Volcano and Whitney creeks, and in several other localities, is found a radiant little rainbow called the Golden trout of Mt. Whitney, as over it is an investment of golden sheen. Dr. Evermann has made these golden trout a study at the request of Ex-president Roosevelt and the suggestion of Stewart Edward White. As a result, they are protected. Three species are known: *Salmo aqua-bonita*, Jordan; *Salmo roosevelti*, Evermann, from Volcano creek; and *Salmo whitei*, from Soda Creek; and I think there is another in one of the lakes of Washington. These beautiful golden rainbows attain a length of six or eight inches, and when hooked and leaping into the strong sunlight of these glorious solitudes consecrated to the gracious waters, one can almost believe that the gold of California has been turned into a living fish by the hand of some upland Midas.

The rainbow and its species is supreme in the streams of California and Southern Oregon, and in the coastwise streams, from Humboldt bay north in California, Oregon and Washington; also in the clear streams of both sides of the Rocky Mountains we shall find another species, the cut-throat trout (*Salmo clarkii*), known in British Columbia, Puget-Sound, and other places as the Black-spotted trout, Columbia River trout, and by various other names. As the name indicates, it has an orange-red slash under the throat. The scales are small, about one hundred

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and sixty to one hundred and seventy in line, and there is a band of small teeth on the hyoid bone at the base of the tongue, not found in the *S. irideus*, in which the teeth are only on the rim of the tongue. The cut-throat splash is the sign manual of the Sioux Indians. When angling in Wyoming, Montana, Utah, Idaho, British Columbia, Puget Sound, one is liable to find that he has landed a cut-throat of five or six pounds, and if very lucky at Lake Tahoe, where the fish has been introduced, the same may tip the scales at thirty pounds.

Lake Tahoe in California, on the summit of the Sierra Nevada, a short ride from San Francisco, has been stocked with several varieties of trout and is the natural home of others. Here is taken the giant Tahoe trout (*Salmo henshawi*) with its delicious flavour of salmon. Tahoe is deep, cold and beautiful, and the trout are large, well-fed, and noble specimens. It is easily recognized by the spots scattered over its entire surface. Another variety from the depths of this wonderful lake is *Salmo henshawi tahoensis*; a monster, which breeds in the depths of the lake and is taken with steel lines and huge reels. I have already referred to the royal silver trout of this lake, discovered to science by Professor Snyder.

Tahoe, next to Crater Lake, is the most remarkable home of trout in America. It is a gem in the heart of the Sierras, a mile above the sea, surrounded by lakes and streams which in the summer months afford fine angling for many varieties of trout which have been introduced, several hatcheries being maintained by the State and private parties. Not far away is the Yosemite and the giant trees, the tallest in the world, according to John Muir, the patron saint of the forests of California.

In Utah a fine trout is found, *Salmo clarkii virginitis*, which attains a large size. Another at the head waters of the Platte and Arkansas rivers, the St. Vrain, and in the streams of Estes Park. This is *Salmo clarkii stomias*; while the variety, *Macdonaldi*, a fine yellow-finned trout, occurs, to the joy of the high anglers, in Leadville, Colorado. Other hard-fighting trout are Jordan's,

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of Lake Southland, near Lake Crescent, and the spotted trout.

There appears to be no end to the varieties of *Salmo*. A large spotted fellow, *Salmo clarkii spilarus*, occurs in the Rio Grande, while *pleuriticus* is found in the Colorado Basin. These are the most important trout of Western America, though the angler may find many more, which have been introduced, as Lock Leven. While fishing in the Big Meadows of the Feather River in California for rainbows, which, apparently averaged from five to seven pounds, I took eastern Brook trout, of course introduced. This wonderful angling region is now being flooded and will become a lake and one of the great angling resorts of America, abounding in trout and salmon.

It will be seen we have in Western North America three distinct series: the rainbow series, the cut-throat series, and the steelhead series, described elsewhere. Nearly all of these trout will take a fly, except, of course, the Tahoe trout, which is taken with a big spoon trolling deep. The tackle should be a battery of eight- and ten-ounce rods of split bamboo, or greenheart, and silk lines for casting. The Royal Coachman, Klamath, March Brown and Kamloops are good average flies, but in every locality there are certain flies suggested. On the Feather River a grasshopper fly was killing in September. At Klamath, March Brown was the favourite, and large salmon flies were used. At Pelican Bay I fished deep; that is, allowed the fly in casting to sink a few seconds, then moved it quickly and repeatedly, and generally with results. In 1912, after a return from England, interested in dry fly fishing, I tried it along the beautiful shore at the head of the bay, with notable success. It was dry fly casting adapted to the conditions. I cast only at rises, and took the fly from the water before it sank. In this way I hooked some very large rainbows. In the Klamath Falls region the angler needs at least an eight-ounce rod; my own being outclassed practically by the seven-, eight- and ten-pounders.

Reference to the Pacific Coast trouts would not be complete

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without mention of the char-like giant of the Yukon and its tributaries ; in Alaska, the great lake trout, *Cristivomer namaycush*, which attains a weight of eighty pounds, truly the king of the trouts. For such game the nine-ounce rod and nine-thread line of the Tuna Club could be commended. This fish is the common lake trout of New York, New England, Wisconsin, and Montana. In a Vermont lake near the Canada line it is called 'lunge'—a misnomer.

The angler who is following the Pacific Coast streams will do well to begin at the San Gabriel in Southern California, in April or May, to see the fish and cañons of the Sierra Madre, visiting Rincon and Follows ; then the streams in the county of San Buenaventura, the Santa Ynez for steelheads ; then cross the great San Joaquin Valley to the Kern River, and enter the wonderland of the High Sierras, and see the Golden trout ; then to the Yosemite to fish the sylvan glades of the Merced, which comes tumbling down into the valley. From here one can move to Tahoe ; then down the Truckee to Monterey for salmon in the sea. Next, to the little rivers near Santa Cruz, not forgetting the American River and the Russian further north and the Klamath. Now go up the Sacramento to the McCleod for cut-throats, Feather River for its rainbows, and so on to Shasta and Klamath Lake and the innumerable rivers and lakes of the north, not omitting lakes Chelan and Crescent in Washington and the Yellowstone.

This Park is where trout can be hooked in cold water, played and led into hot water and boiled without taking it from the hook. This is the stock fish story of Yellowstone Park, and very easy of demonstration in streams where a trout has been seen to rise to a fly, dashing up from deep cold water into a surface layer of scalding fluid from one of the many springs.

Some of the most remarkable trout streams in America are found in Colorado, where the wild and rugged scenery adds to the charm. The gamefish are grayling, rainbow trout, land-locked salmon from Maine, and eastern brook trout which have been introduced and are propagated by many hatcheries. I shall

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never forget the wonders of the streams reached by the Rio Grande road—the Gunnison, the Black Cañon, the little stream near Manitou, and others seen from the summit of the Rocky Mountains, where in August I tramped in the snow, thirteen thousand feet in the air; again from the Sierra Sangre de Christo Mountains.

Of the native trout of Colorado the yellow-finned McDonald trout reaches eleven pounds in Twin Lakes, while the 'red fin' attains a large size. No state in America has finer trout fishing than Colorado. Travel which way you will over the Rocky Mountains, nearly every stream abounds in trout, and has an environment that is enchanting to the lover of nature. The famous fly streams are: the headwaters of Bear River on the west slope, the Platte, Rio Grande, Arkansas, Middle and South Boulder, North Eagle, White, Laramie, Michigan, Grand, Aimas, St. Vrain, Big and Little Thompson, Gunnison, Roaring Fork, Frying Pan, Coudre, Genevre Creek, Nederland reservoir, Jim Creek, Lake Stopps, Tumblesons, Touch Lake, Lake Clear, Lake Ivanhoe, Cottonwood Lake, Sweetwater Lake, Glenwood Springs, Falls, Grizzly Creek, Tonichi and Taylor rivers, and many more.

The angling season in general is from the first of June until the first of November. On my first fishing trip to Colorado I found the river perfectly dry; there was not a suggestion of water where the wide stream made its way into the open near Pike's Peak. I was riding over the plain when suddenly I heard a roar, as of scores of engines letting off steam. I turned my horse in that direction and presently came to the bank, where was a river a quarter of a mile wide, a fierce and swirling torrent which might have been there centuries. I was a tenderfoot in Colorado and wondered proportionately until I learned there had been a terrific rain, a cloudburst forty miles away at the 'divide,' and the river was the result. The moral was, do not camp in a dry river bed in Colorado.

The State appreciates its trout fishing, and with the Federal

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government stocks all the streams repeatedly. In 1911 eleven million trout fry were released, and in 1912 fourteen million were placed in the streams for the pleasure of fly fishermen.

Trout are now so easily transported that the Rainbow in particular has been carried to many lands from its home in California. It is at home in the Rio San Gabriel, near Pasadena, California, and in all the mountain streams running up to an altitude of two thousand or more feet, this in latitude thirty-two degrees, being about that of Cairo, Africa. Here it rarely sees ice or snow, though the winter water is to some extent from the miniature glaciers and snowbanks of Mount San Antonio, and in the spring the water is directly from the snow, though by the time it reaches an altitude of two thousand feet it is more or less warm. In Klamath the best fishing for rainbows that I had in September, 1912, was in the lakes and rivers at four thousand seven hundred feet, and up the Williamson, where the altitude was five thousand feet; I mention this to show that the rainbow is ubiquitous. He enjoys life at the sea level or a mile above it, in a hot or a cold climate, as at Klamath the lake and rivers are all frozen over in winter, while the Rio San Gabriel in Los Angeles county is in a semi-tropic country.

This suggests that the rainbow should thrive in England. In his *All Around Angler*, 'John Bickerdyke,' the distinguished author and authority on British angling, states that the American rainbow has 'become exceedingly popular' in England. He expresses a doubt as to whether it will remain in English rivers. In America the fish is at its best in sluggish rivers which flow into lakes, as the little rivers which flow into Klamath Lake. I am inclined to believe that it prefers rivers to lakes. Doubtless certain numbers will go down to the sea, but here there is the compensation, that the rainbow will become a silvery sea-trout, the steelhead, a splendid game that will be taken, and doubtless is caught now, at the mouths of European rivers. Our author has taken the rainbow in the preserves of Sir Thomas Wardle on the borders of Staffordshire and at Blagdon in a Surrey lake.

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I have had so many delightful hours with the rainbow on the Pacific Coast in various streams, lakes and preserves, that it is particularly gratifying to know that British anglers will have an opportunity to enjoy this sport. As 'John Bickerdyke' says in the volume mentioned, if I may be pardoned for copying from him to such an extent, 'So far as sport-giving qualities are concerned, *Salmo irideus* is, I am inclined to say, superior to our river brown trout when in good condition, fighting as gamely as *our* sea trout.' Then follows a warm encomium of other qualities of the native American trout which, unquestionably, will thrive, if given favourable conditions, in cool slow-flowing rivers, with an abundance of food and, as a suggestion, minnows. Some idea of the size of the American rainbow trout can be gained from the catches of recent years, particularly that of Mr. J. B. Lippincott, of Los Angeles, California, who has a record in the shape of a twenty-one-pounder, a description of which he kindly sends me for this volume:

'This trout,' writes Mr. Lippincott, 'was caught on the morning of June 20, 1906, from a boat on the clear water of Pelican Bay, which is an arm of Klamath Lake. It measured thirty-four and three-quarter inches in length, twenty-two inches in girth, and weighed twenty-one pounds. I used a seven-ounce rod with an eight-foot single-gut leader, and an abalone shell spoon. The spoon was about four inches long. It required thirty minutes to bring the fish to gaff. Mr. Kendall, who owns the Lodge, pronounced it a Silver Lake trout. Mr. Flynn of Sacramento, who holds the Gold Medal issued by the Midwinter Fair for long-distance fly casting, was with me in the boat when the fish was caught, and it would have been impossible for me to have landed it had it not been for his skilful handling of the boat and gaff. The fish jumped free from the water at least half a dozen times, and took us twice across the arm of Pelican Bay where we were fishing during the time we were fighting him. We cooked the fish and found the flesh most excellent and finely flavoured, and it was sufficient for eighteen people at a dinner given in its honour. An interesting thing about this trout was, that when he was cleaned, a fish nearly ten inches long was found in his stomach.

'On the preceding morning the two of us caught twenty-eight pounds of trout weighing six pounds and less each. I consider the fishing around the Upper Klamath Lake the finest that I have ever found in the United States.'

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As the angler goes south in California and crosses the line into Lower California the rainfall becomes perceptibly less, and while there are a number of streams, but one, the Rio San Ramon, flows continuously to the sea. This trout stream runs in La Grulla Meadows on the west side of the San Pedro Martyr range, at an altitude of seven thousand feet, and about one hundred and fifty miles south of San Diego, U.S.A. It runs through a rocky cañon, and there are rainbows in it at various points. Trout are also found in the stream of the Sierra Madre in Chihuahua, near the border of Durango and Sinaloa, at an altitude of eight thousand feet. There are also trout in the Rio Yaqui, which flows down from the mountains through the richest land in Mexico—the delta of the Rio Yaqui near Esperanza.

The Lower California trout is a rainbow, *Salmo nelsoni*, and in the Rio Ramon is very game. Dr. Joseph Grinnell of the University of California, found, in 1907, a new trout in the upper reaches of the Rio Santa Ana, about seventy miles from Los Angeles. It is also of the rainbow series, and is named *Salmo evermanni*, in honour of Dr. Evermann, the distinguished authority on fishes.

The Kootenay Lake in British Columbia, a tributary of the Columbia river, has produced some extremely large trout closely related to the steelhead or rainbow. One of twenty-two pounds was examined by Dr. Jordan and pronounced *Salmo kamloops*, a fine trout of elegant proportions, an ideal game fish.

CHAPTER XXIX

THE RAINBOW AT SEA (THE STEELHEAD)

‘The blessing of St. Peter’s, master, be upon all that hate contentions, and love quietnesse, and virtue, and go a-angling.’

Izaak Walton.

THE magic of the deep-blue ocean finds no better example of the wonders of its touch than in the rainbow trout of the Pacific Coast, that when robed in vestments of striking and singular beauty, they go down to the sea and return so changed in colour and form that for years anglers have fought the battle of their identity. Columns have been written in attempts to prove that an Atlantic sea-trout is what the fortunate angler would wish it to be. What the sea-trout is to the Atlantic the steelhead is to the Pacific coast of North America: a big lusty spendidly proportioned fish full of life and vigour and fight.

He is longer than the rest of the trout tribe with finer lines, and he is a Silver King, either silver or steely, and when you see him go up into the air three, four, or even five feet in the centre of some little laguna behind the sand dunes, the real joy of living is yours, particularly if he does not get away.

I fancy that you may call him sea-trout, or even salmon-trout if you wish, but if you speak by the card you must call him a sea-going rainbow, as your steelhead goes down to the sea, not in ships, but with them. He starts high up in the Sierras or Cascades as a rainbow with all its pristine glory of colour, but, when he comes back his dearest and best friend would not know him, as he is long, slender, lithe and tigerish; a silver knight, painted in the depths of the sea, dipped in molten silver by Neptune. He returns masquerading in a totally new



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Fig. 40. American Trout from Lake Chelan, Washington, U.S.A.
1. Land-Locked Steel-Head Trout. 2. Dolly Varden Trout. 3. Land-Locked Cut-Throat Trout. 4. Cranford Trout, cross between Land-Locked Steel-Head and Lake Chelan Cut-Throat. (Photo by Cranford). p. 288.

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guise, but he is still a rainbow, and if you could 'corral' him upstream and make a land-locked fish of him he would soon assume, in all probability, the colours, tints and heavier shape of the typical rainbow.

Our steelhead has long been misunderstood owing to this remarkable difference of appearance ; but it is one and the same fish, the rainbow of the mountains, the rainbow of the sea, merely adopting a different garb, but so unlike, that for *angling* purposes we may regard the steelhead as a separate and distinct fish.

On the Pacific Coast the steelhead is the joy of the winter angler, the only trout that can be taken at that season as he comes within the tide-water regulations and can be fished for in California any month of the year. The steelhead can be found in nearly all the streams of the Pacific Coast, from British Columbia down to Los Angeles and even Lower California. He enters the San Gabriel, and this may be called the southern limit, so far as numbers are concerned. He increases in size and numbers as we go north, and at the lagunas of such streams as the Santa Ynez he comes in from ten to twenty pounds, a sea trout in all the term implies as he has been living in the Pacific, probably off the mouth of rivers, and like a salmon, is impelled by instinct to go upstream to spawn.

These journeys take the steelhead incredible distances from the Pacific, far up the coast rivers beyond the Coast Range, in the Snake River of Idaho and other localities. In every river on the Pacific coast of North America where the rainbow lives in the upper waters, and can reach the ocean, the steelhead will be found. In certain lakes in Washington he is land-locked. Such a fish is shown in Figure 40-1. In Klamath Lake, Oregon, the rainbow has established itself in the deep pools of the beautiful little rivers, and is radiant in typical colouring ; but if you angle in the lake proper, where the water is shallow and the colour gray or light, the fish taken bear a strong resemblance to the steelhead and is called a silver trout ; but it is a rainbow adapted to its

THE GAME FISHES OF THE WORLD

environment.¹ If a typical rainbow, a steelhead and several other trout are placed side by side a wonderful contrast is seen. The steelhead is long, slender and silvery with fewer spots; his head is pointed; the eye seemingly near the end of the snout; the head in the females insignificant in proportion to the body. The scales of the steelhead are larger than in the rainbow, smaller than in the cut-throat. The tail in the young fish is forked, and in the adult more forked than in the rainbow. But it is a powerful organ, as I know full well, having on several occasions received an extraordinary amount of water full in the face, as I attempted to net the fish.

In salmon fishing in the beautiful bay of Monterey I have seen the big steelheads lying beneath the floating kelp four or five miles offshore, evidently with the salmon feeding on the schools of anchovies prior to making the long trip up the Sacramento, Russian, Rogue, Klamath, or American rivers.

Unquestionably, the steelhead is the king of the Pacific Coast trouts. The life in the ocean gives him vigour and fighting strength, and when fought fairly, and by this I mean with a rod whose weight is proportioned to his size, he will give the angler a battle royal. It is here that many a trout is condemned without reason. A half-pound steelhead is murdered on an eight- or ten-ounce rod, and the angling novice will condemn its fighting qualities; but if the same fish is taken with a two- or three-ounce rod it is a different matter.

I have taken the steelhead in many streams of North America, and the Soquel and San Lorenzo, on the north side of the bay of Monterey, appeal to me for their beauty of situation, as mere angling without attractive environment becomes 'fishing.' Your real angler goes not after fish alone; he leaves this feature to the professional fisherman. To enjoy true sport one must have a picturesque river, beautiful scenery; and this remarkable bit of country south of San Francisco, where the redwoods end, is, to my mind, made for the angler.

¹ It is possible that this is a different fish.

THE RAINBOW AT SEA (STEELHEAD) .

One of the best steelhead streams in Southern California is the Rio San Buenaventura while the Santa Ynez leads the angler through some joyous and radiant country from the little laguna at its mouth up into the high Sierras of the Coast Range.

The Rogue River in Oregon is a famous steelhead stream, twenty-pounders being not unusual. This river, as its name suggests, is treacherous at points where it flows rapidly through narrow rocky walls. I had my best sport above Grant's Pass where the river in places is sufficiently shallow for wading. It is a charming little stream ; now running along through fields of grain, again hedged in by rows and clumps of willows, or again bounding out into the open and down over some gravelly salmon-infested bed.

In such a spot I took my first steelhead in the Rogue. I had laid in a large stock of flies upon the advice of an expert on the region, but when I arrived at the river I found that some miner had been sluicing up the country and the Rogue, which should have been liquid crystal, was a river of golden mud. The fish could not see a fly, but my guide was equal to the occasion, and as a forty-pound salmon ran into the shallows hard by us, he gaffed it, took its spawn, and proceeded to bait my hook in a barbarous fashion when we remember that the river is supposed to be consecrated to St. Zeno, the patron saint of the fly fishers. He tied a handful of the eggs in a piece of mosquito net and lashed it to the hook on the oiled-silk line attached to my eight-ounce split bamboo.

The Rogue at this particular point was contracted between almost submerged gravel banks about which big salmon were floundering, and the current in a narrow channel ran like a millrace.

' Now, "Colonel,"' said my guide, ' the scheme is this : I pull you upstream and turn the boat about, and you sit in the bow and cast. Then I jump in and steer her down, and when you get a strike I'll run in and you can play him from the bank.'

It turned out just this way. He pushed the heavy boat

THE GAME FISHES OF THE WORLD

upstream some three hundred feet, wading, then held her until I was ready. As I cast, thirty feet down, he sprang into the boat, grasped the oar and kept her in the centre of the rushing torrent. The working hypothesis was that the current would carry the heavy bait along as fast as the boat, and that so many steelheads were collected in the centre that the bait would strike one of the fish blindly in the head and he would take it.

This was precisely what happened. Away we went, rushing down the chute at twenty miles an hour. Then the line tautened, I struck, and clear of the murky old-gold river sprang a vibrant beam of silver. With a violent wrench of the oar my man sent the boat inshore. As she touched the gravel I leaped out and backed into the shallows, and played my fish. In the first five minutes he left the water four or five times, whirling himself into the air, tossing the spray, and coming down with a crash to make long rushes and take out forty or fifty feet of line, dashing upstream and away across; then when turned, he was swept down by the treacherous torrent that more than once convinced me of the correctness of its naming.

At last the fish reached the open water below and demonstrated its strength and the resiliency of my eight-ounce rod which had a record of a seventeen-pound yellowtail. If the strength of the steelhead increased with its years it would be a difficult fish to take with any tackle at twenty pounds.

I played my fish with caution and in twenty minutes had him within reach and in the net: a seven-pounder, silvery, beautiful, and a good table fish, as I had him served that night. The boat was now pushed up against the stream and held while I leaped and again we rushed away to repeat the operation. I do not know whether 'shooting the chutes' and such 'thrillers' have reached England, I trust not, but if they have and the unfortunate reader has attempted it, if he will but imagine himself endeavouring to fish during the operation, some idea of this particular angling may be realized.

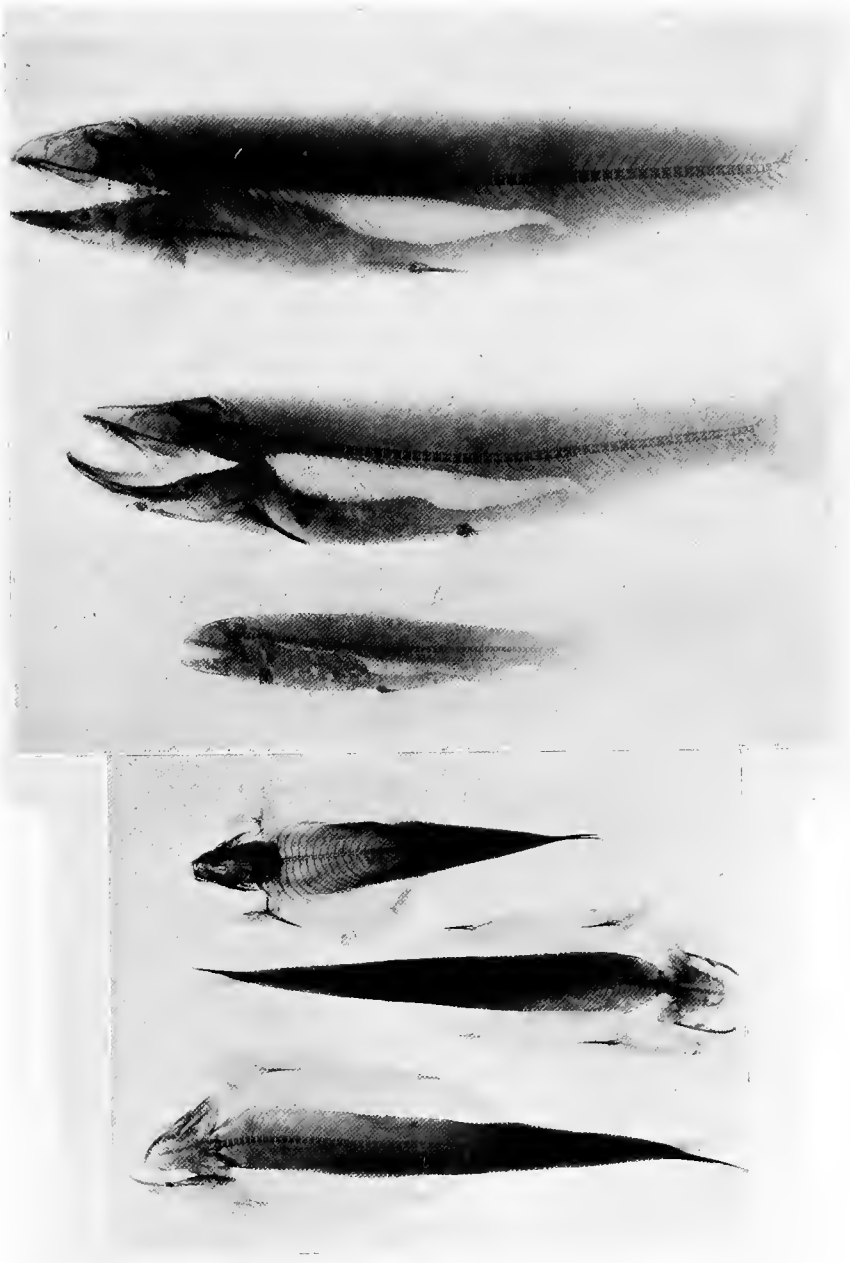


Fig. 41.

X-Ray Pictures of Steel Head Trout, Etc., Prepared in San Francisco, by Dr. B. F. Alden, of the Tuna Club, and Radiographed by Jean B. Sabalot, of San Francisco. p. 292.

THE RAINBOW AT SEA (STEELHEAD)

Much of the steelhead fishing in this locality is from the banks, some from boats ; but the best fish are taken by wading in arm-high rubber waders—a dangerous practice here, I think, on account of the current and the deep pools. My guide told me the story of a clergyman who hooked a large fish above a certain pool and was gradually towed out and down the stream, not being able to stop the fish. Appreciating the situation, and that the river swept through a narrow rocky gorge not far below, the angler shed his waders, in some way not explained by my man, and then, as the fish dashed downstream, plunged into the channel and with the game was swept half a mile, landing on a sandbar where he played the fish to a finish.

Mr. Alfred Beebe gives me the data on the next page relating to his personal experience on the Rogue River, Oregon.

I can commend the Santa Ynez near Santa Barbara to the angler in April, May or June, when the steelheads are in the laguna at the mouth of the little river which winds away through wonderful golden fields of mustard. Here you wade and cast a fly, spoon or bait, according to your conscience. The man with the spoon wins in point of numbers. The angler with a fly may not take anything, but I believe he has more joy in his soul. Yet there are times when flies will not be taken under any circumstances and the angler is justified in using the spoon or live bait—the real lure for the steelhead trout.

If the reader should by chance fish the Rogue he should follow it up, or go back into the range, *via* Medford or Ashland, where motor cars can be had, and visit the wonder of the world—the hanging lake of Mazama, or Crater Lake, as it is called. Perhaps he will pass up Ana Cañon to reach it, and possibly it will occur to him that this cañon, one of the most beautiful trout streams in America, was cut out ages ago by the breaking of the walls of the crater, releasing this lake twenty-five miles around and of unknown depth, producing a flood which might have established a tradition of a Noachian flood in all North America.

THE GAME FISHES OF THE WORLD

ROGUE RIVER, JACKSON CO., OREGON.
 Mainly *Steelhead* (Salmon) *Trout*: a few
 Cut-throats, small Salmon, and one large
 salmon.

Fly Fishing only.

Weight.	1906.	1907.	1908.	Total.
Under 1 lb.	7	6	4	17
1-2 lb. .	3	6	2	11
2-3 ,, .	2	10	5	17
3-4 ,, .	—	2	5	7
4-5 ,, .	1	1	1	3
5-6 ,, .	—	3	—	3
Over 6 .	—	1	2	3
Total . .	13	29	19	61
Time . .	Late August	Middle Sept.	Early Sept.	
No. of trips	6	8	5	
No. per trip	2-1	3-6	3-8	
Largest fish	4½ lb.	20 lb. salmon 5⅞ lb. steelhead	6½ lb. 6 lb.	
Flies .	Jungle Cock Professor, Jungle Cock Coachman, Kamloops. Mainly # 4 hooks.			

SOUTH FORK NEHALEM RIVER, TILLAMOOK CO., OREGON.

'Sea' (Salmon) *Trout*; a few Cut-throats.

Fished about 15 miles above Nehalem City. No accommodation, save possibly at a farmhouse. *Excellent* sea-trout fishing; fish average about 1 lb., from ½ lb. to 1½ lb.

27

Late Aug., 1907

23

9

About 1½ lb.

6 Jungle Cock Professor, and Jungle Cock Coachman.

Remarks.—The steelhead in the Rogue are undoubtedly the strongest fighting trout to be taken with the fly on the Pacific coast. Fished near Table Rock, Jackson Co., mainly above Bybu's Bridge, about 11 miles from Medford Orc. River easily reached by Auto. No accommodation. At *Trail*, 30 miles above Medford, good accommodation at Mrs. Middlebush's; reached by branch R.R. from Medford to Eagle Point, and stage thence, three times weekly.

But this is not my reason for urging the reader to follow the cañon. It is to fish in this marvel of the ages, as the government

THE RAINBOW AT SEA (STEELHEAD)

has set aside this sapphire in the eternal peaks as a national park and stocked it with trout, steelheads in their rainbow guise.

The tackle for the steelhead should be an eight-ounce rod where the fish can be counted on from seven pounds upwards ; if smaller the rod should be graded down. I am assuming that the trout angler carries two or three rods ; three-, four-, and eight-ounce. I prefer the split bamboo, greenheart, or noibwood a South American greenheart I think is excellent. Any good resilient rod will do the work so long as it has the lifting power. The line should be an oiled-silk of any size proportionate to the fish. The leader, or trace, of gut. The fly depends upon the conditions : March Brown for light days ; Royal Coachman for darker ones. In California light days are the rule. If trolling or casting with a spoon the cast or leader should be of very fine wire with several swivels.

In angling for steelheads I have found a small rod of my own designing very convenient. It is long—eleven feet of greenheart ; the reel, a small Hardy with a big guide seated above the grip. This, with a rubber pad on the end of the butt, makes the play of a ten- or fifteen-pound fish an agreeable diversion. If all the fish are large, a small American Vom Hofe trout multiplier is a comfort, more or less, to the angler who does not wish the conflict to be too prolonged.

The conscientious angler who visits these streams and fishes entirely with a fly will be disappointed, and the spoon should be tried or the lure advised by the real angler of the locality. It is no longer possible to describe any trout as indigenous to a locality as, thanks to the skill of the fish culturists and the interest of English, American and German authorities, the best trout are rapidly being distributed all over the civilized world, where, it is to be hoped, they will be conserved and enjoyed by the people at large.

Among the trout which soon adapt themselves to almost any locality or condition is the rainbow ; hence Europe and Australia doubtless have a new sea-trout—the sea-going rainbow.

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One of the most successful flies in my experience is the Kamloops, named after the steelhead of that name by Dr. Jordan. This trout is a fine game fish, slender, built on fine lines, and affords good sport in the lakes of Kamloops, Okanogan, Kootenai and the lakes and rivers tributary to the Fraser in the upper Columbia River country. It is doubtless a steelhead changed but slightly by its environment. It is a beautiful fish; a dark rich olive above, with a silvery band reaching a little below the lateral line, where it ends suddenly, or merges into a band of a light roseate hue.

On the back are spots, not larger than pin heads, scattered about, and more abundant near the tail. Like the Beardsley trout, and many others, it is a 'spoon' trout; that is, it is large and powerful and its natural food is not a fly, but fish, mice, or any game it can take. It has been taken with a fly, but mostly in trolling.

The record American steelhead of the *Field and Stream* competition of 1912 weighed fourteen pounds, was three feet long lacking two inches, and had girth of a foot and one-third. It was taken by C. E. Duffield of Medford, who landed it about twelve miles up the Rogue River near Williams ranch, using a Rogue River gray hackle fly. The second record fish was taken by J. M. Hutcheson of Eureka, California, on the Eel River, about twenty-five miles from the city. It weighed fourteen pounds and was the same length as the above fish. It was taken with a Royal Coachman fly. While Mr. Hutcheson was playing the fourteen-pounder his companion hooked and landed an eleven-pounder. The two anglers landed that afternoon on the Eel ten steelheads ranging from three and one-half pounds to fourteen; and thirty-five from one-half pound to one pound.

Some of these fish leaped five feet, making dashes of fifty or sixty feet as they struck the water on the return. The tackle used was six and seven-eighths ounce Leonard split bamboo rods, Hardy reels and light gut leaders nine feet in length. The Eel River is in Humboldt county, California, and in the month

THE RAINBOW AT SEA (STEELHEAD)

of October is the Mecca for many anglers. The river is about three hundred feet wide, and the angling is done from boats, the anglers stepping ashore when a fish is hooked, playing it from the bank. The third prize fish, a four and one-half pounder, was taken by Mr. H. O. Phillips of Pasadena, California, on the Rio San Buenaventura, the lure a spoon. If the rainbow has been successfully introduced into England the steelhead should soon be in evidence, giving to Great Britain a new and exceptionally fine game fish, one to rank very near the salmon.

The steelhead is particularly well adapted for a land-locked condition. It retains its fighting qualities, but loses weight, averaging about five or six pounds.

Mr. Alfred Beebe sends me the table on page 298 giving his own experience on the Trask River, Oregon, which he has fished for many years for cut-throats and steelheads.

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TILLAMOOK CO., OREGON.

Cut-throat and 'Sea' (Salmon) Trout; mainly the former.

Fly Fishing only.

TRASK RIVER.

WILSON RIVER.

Weight.	1905.	1906.	1907.	1905.	1906.	1907.	Total.
Under $\frac{1}{2}$ lb.	All small except 5 of fair size.	63	Under $\frac{1}{4}$ lb.—28. Over $\frac{1}{4}$ lb.—22.	100	13	24	200
$\frac{1}{2}$ -1 lb. .		32		19	9	6	66
1-1 $\frac{1}{2}$ „ .		8		23	5	3	39
1 $\frac{1}{2}$ -2 „ .		4		14	3	3	24
2-2 $\frac{1}{2}$ „ .		1		4	—	—	5
2 $\frac{1}{2}$ -3 „ .		1		—	—	—	1
Total . .	(30)	109	(50)	160	30	36	335
Time . .	July	July	June	July- Aug.	July	Aug.	
No. of trips	3	17	6	26	7	8	
Av. per trip	10	6.4	8.3	6.2	4.3	4.5	
Largest Fish	about 1 lb.	2 $\frac{3}{4}$ lb.	—	2 $\frac{1}{2}$ lb.	1 $\frac{1}{2}$ lb.	1 $\frac{7}{8}$ lb. (2)	
Flies . .	Mainly Jungle Cock Professor and Jungle Cock Coachman, on No. 4 and No. 6 hooks. Also Parmacheene Belle, and Black Gnat.						
Remarks.—	River too high in 1907, and several days stormy. This stream is heavily fished each year. Good accommodations at the <i>Trask House</i> , 16 miles up the river on stage road from N. Yamhill to Tillamook.			A very beautiful stream, but now to be lumbered its entire length. <i>No accommoda- tions</i> , except too high up the river for good fishing. Stage route from Forest Grove to Tillamook runs entire length of river.			

CHAPTER XXX

THE BLACK BASS

'Do but fish this stream like an artist and peradventure a good fish may fall to your share.'

Izaak Walton.

WHILE these lines were being written, I received from Prince Pierre d'Arenberg, President of the Casting Club of France, several photographs of himself, kindly taken for this volume, showing, as he tells me, the first black bass taken with a fly in France. This in 1912, yet in 1802 the great authority on fish, Lacepède, described this fish for the first time, and had the honour of naming it, *Micropterus dolomieu*, the first term meaning small fin, as that of the fish received was worn away, as can be seen in the type specimen still in the Museum of Natural History of Paris. The specific name was given in honour of M. Dolomieu, the celebrated French *savant*.

Doubtless, the original home of the bass was in the Great Lake region of America. From here it has migrated and been transported to most parts of America, England, France, Australia. I have seen it in Southern California in reservoirs, one in particular, that in the beautiful place of Judge Silent in the San Gabriel Valley, where the fish are so large, plump and tame, and rush to the surface with such vivacity for the pieces of meat with which they are fed, that it gives the angler an itching palm.

Most of my black bass days have been spent on the St. Lawrence, between Clayton and Alexandria Bay, not so good a locality as many; that is, there were not so many fish to be had. The locality is one of the most delightful in America, the maze of beautiful islands of all sizes and shapes, filling the wide river,

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always a compensation whether the fish are biting or not. My favourite day's fishing was down the river from Westminster Park, where the Inn stood in a field of white daisies, to Grenadier Island, completely around it. By noon we would have six or eight fish, then went ashore, by appointment meeting some friend or friends, where our several boatmen would broil bass and yellow perch, and serve us a luncheon so fit for the gods that I doubt not the envious shade of Lucullus was flitting about among the trees. Sometimes we cast into Canada, then we were back in American waters in a few moments. Often we hugged the Canadian shore, or wandered on among the islands ; or again kept to the channel where the water was swift, and where big, wolf-like muscallunge, or wall-eyed pike, were supposed to lie. Not only was the angling delightful here, but the sweet, balmy air was like velvet, and possessed a quality peculiarly life and vigour-giving.

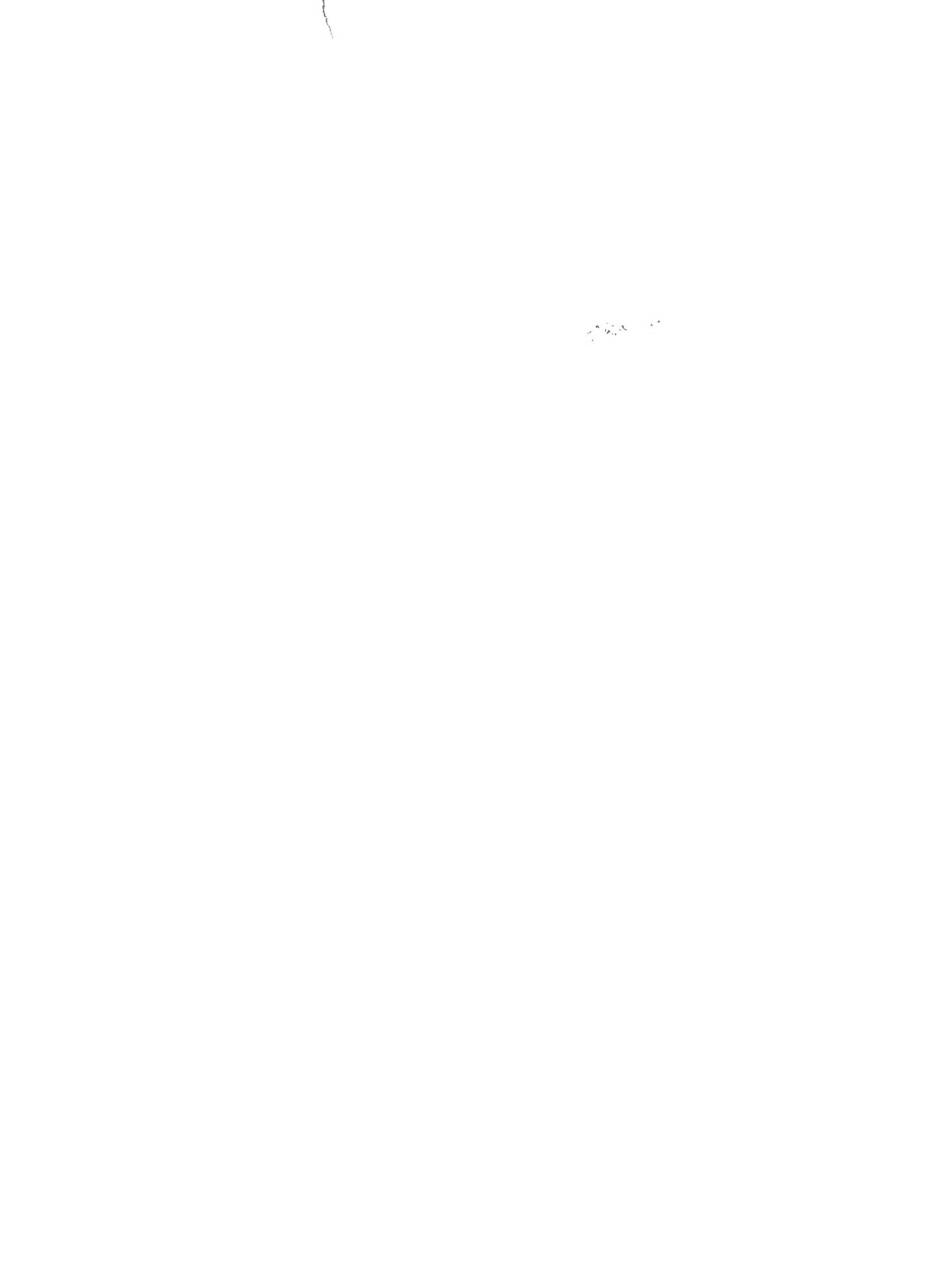
The fishing here is entirely from boats, though on certain islands one can cast from the rocks or shore. But the bass are so widely distributed that this is not productive. This angling has produced, in the course of slow evolution, a boat peculiarly adapted to the needs and requirements of the case : a long, low, light craft, which has become known as the St. Lawrence skiff. She is often built of cedar and copper-fastened, low and swift, and of graceful lines. In the stern, and facing it, one behind the other, are two comfortable cane-seated chairs, the legs cut off and the seat placed on the seat of the boat. Here the anglers sit, one rod to the right, the other to the left. The oarsman is just behind the anglers, and his arrangements are a study in economics. Beneath his seat is a drawer lined with metal to hold the fish. His flies, rods, nets and tackle of various sorts are at hand. The boat is immaculate to correspond with the bass, which is esthetic, and the bass flies a joy forever.

So much for the boat and the boatman with his long, light spoon oars, but what about the tackle ? I have a longing desire to take issue with the good but misguided men who invented



Fig. 42. Prince Pierre d'Arenberg, President of the Casting Club of France.
Fishing for Trout in Normandy, near Dieppe.

1. Normandy Chalk Stream. 2. Keeper Landing the Prince's Trout. 3. Prince d'Arenberg. 4. A French Trout Stream, La Varenne. (From photographs taken for this work). p. 300.



THE BLACK BASS

some of the monstrosities called artificial baits ; but I control the desire, as I have never yet seen any of them. I am going to think that the bogies are made only to figure in the catalogues, to inspire horror in the rising generation, and like the tools of the Inquisition, are to be seen only in the museums to show what the heathen once did to the unoffending bass. I refer to the torpedo-like wooden lures, lined and covered with hooks, from which there is no escape, made for good, misguided, but anarchistic anglers.

The black bass is one of the royal game fishes. He is a hard and desperate fighter, never knows that he is cornered ; hence should be approached fairly and squarely with the disadvantages on the side of the angler. In a word, while he will take anything at times, from a mouse to a wooden hippopotamus wound with a piece of a barbed-wire fence, merely because he is a rough-and-tumble fighter, he should be angled for with flies or his natural food—live minnows—and really only flies.

Your tackle for this finest of game fishes, and I have in mind Dr. Henshall, the Dean of the Black Bass Corps, should be a split cane, made by the best makers, nine or ten feet long, and six inches longer would not do any harm. It should weigh six and a half to eight ounces ; be perfectly balanced, and *feel* right in your hand. Dr. Henshall says seven ounces in split cane, and eight if the rod is of ash and lancewood, or ash and bathabara. It is in three pieces, and should, to quote Henshall, lend ‘ just the requisite amount of resiliency for casting, with sufficient pliancy and elasticity for playing a fish, and embodying all the power and strength needed.’ The mounting should be of German silver, and the line of the best braided silk, enamelled. The reel should be a single-action affair. I have found an English Hardy most excellent, and I have also used Edwin Vom Hofe’s trout reel, and there are many others. The only point I make is, go to the best dealer in England or America and get the *best* ; and, as a rule, ask the advice of some expert, as your rod must fit you in weight, balance, resiliency and other things. Ninety or

THE GAME FISHES OF THE WORLD

one hundred feet of line is sufficient for all purposes, and half or a third is often quite enough.

I am going into these matters not so much to tell the would-be angler what he should have to go bass fishing, as he already knows, and there are books on the subject without number; but the possession of fine tackle is half the game, and always a compensation and delight.

Volumes have been written on flies by men who had no thought of the fish to be caught with them. I have, just at this point, received a letter from Mr. Graham-White, inviting me to fish the Wye with him the next time I am in England; but the real invitation was from the angler's heart, two beautiful salmon flies of his own making enclosed. I have never seen or heard of a man who could explain the philosophy, or madness, of it, how a little bunch of feathers, or an old rod or an old book of flies can charm and delight men who are fed ordinarily on the serious things of life. But they do, and I confess so completely to the weakness that I keep a fly book not far from my hand; as my old friend, Dr. Robert Burdette says, it is 'good medicine.' There is a special punishment (you will find it in your Dante) for the man who sells you poor leaders (traces). They should be from three to six feet long. I was so fortunate to meet a gentleman in Glasgow who had a 'trace factory' somewhere in Spain. It should stand a test of two pounds, according to Henshall, who prefers the natural line. The leaders, of course, you keep between damp pads when fishing; and the one you use should be soaked and made perfectly pliable. In hooks and other details, it is a matter of taste; but I confess to a weakness for the O'Shaughnessey shape, a hook not larger than a number four or six. The hooks may be eyed, a most convenient arrangement, and as for knots, every angler has his own with other possessions.

The one great and fundamental question in angling is the fly. I fancy Oppian knew all about it; as least some one did, as the oldest anglers of whom we know anything, seem to have inherited their knowledge from some one else. Our own Walton filched

THE BLACK BASS

from some earlier Walton, and Juliana Berners had a standard of sport high and lofty that will outlast the ages ; I doubt if it can be improved upon.

I have taken more bass in the St. Lawrence River with a 'St. Patrick' than with any other fly ; and unquestionably the little bass is very freakish ; he prefers something odd and queer, as does the salmon. The 'coachman' is very killing on dark days, and on lighter ones, the darker flies—a rule like the laws of the Medes and Persians. The Indians on the Feather River in California, I have referred to, with their bunch of feathers dangling in the wind, inherited the device from some ancestor. They may have gotten it from Theocritus who, two centuries before Christ, wrote of 'the bait fallacious suspended from the rod' ; or it may have come down from some ancestor in the third century after Christ about which Aelian writes, in his *De Animalium Natura*. He is referring to the Macedonians who fished the little river Astracus, which runs between Boroça and Thessalonica.

Here is the translation, previously referred to.

'I have heard of a Macedonian way of catching fish, and it is this. Between Boroça and Thessalonica runs a river called the Astracus, and in it there are fish with spotted (or speckled) skins ; what the natives of the country call them you had better ask the Macedonians. These fish feed on a fly which is peculiar to the country, and which hovers over the rivers. It is not like the flies found elsewhere, nor does it resemble a wasp in appearance, nor in shape would one justly describe it a midge or bee, yet it has something of each of these. In boldness it is like a fly, in size you might call it a bee ; it imitates the colour of a wasp, and it hums like a bee. The natives call it a Hippourus. As these flies seek their food over the river, they do not escape the observation of the fish swimming below. When, then, a fish observes a fly hovering above, it swims quietly up, fearing to agitate the water lest it should scare away its prey ; then, coming up by its own shadow, it opens its jaws and gulps down the fly, like a wolf carrying off sheep from the farmyard ; having done this, it withdraws under the rippling water. Now, though the fishermen know of this, they do not use these flies at all for bait for the fish ; for, if a man's hand touch them, they lose their colour, their wings decay, and they become unfit for food for the fish. For this reason they

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have nothing to do with them, hating them for their bad character ; but they have planned a snare for the fish, and get the better of them by their fisherman's craft. They fasten red (crimson red) wool round a hook, and fit on to the wool two feathers which grew under a cock's wattles, and which in colour are like wax. Their rod is six feet long, and the line is of the same length. Then they throw their snare, and the fish attracted and maddened by the colour, comes up, thinking to get a dainty mouthful ; when, however, it opens its jaws, it is caught by the hook and enjoys a bitter repast, a captive.'

This is the first mention, I think, of the Red heckle in literature, and referred to in the well-known lines from 'North Country Garlands.'

'THE BONNY RED HECKLE.

'Away frae the smoke an' the smother !
Away frae the crush o' the thrang !
Away frae the labour an' pother
That has fettered our freedom sae lang !
For the May's i' full bloom i' the hedges
And the laverock's aloft i' the blue,
An' the south wind sings low i' the sedges,
By haughs that are silvery wi' dew.
Up, angler, off wi' each shackle !
Up, gad an' gaff, an' awa' !
Cry, " Hurrah for the canny red heckle,
The heckle that tackled them a' ! "

' We'll see if the Shaperton lasses
Are winsome, as in our young days—
If they'll rin to the ringin' o' glasses,
Or the lilt o' the auld merry lays.
Oh, we'll shake off the years wi' our laughter,
We'll wash out our wrinkles wi' dew—
An' reckless o' what may come after,
We'll revel in boyhood anew !
Up, angler, off wi' each shackle !
Up, gad an' gaff, an' awa' !
Cry, " Hurrah for the canny red heckle,
The heckle that tackled them a' ! "'

* * * * *



Fig. 43.

Black Bass and Wall-Eyed Pike. Thousand Islands, St. Lawrence, Canada. Caught by De Forest Fairchild. p. 304.

THE BLACK BASS

'Then back to the smoke and the smother,
The uproar an' crush o' the thrang ;
An' back to the labour an' pother,
But happy and hearty and strong.
Wi' a braw light o' mountain and muirland,
Out-flashing frae forehead and e'e,
Wi' a blessing flung back to the norland.
An' a thousand, dear Coquet, to thee !
As again we resume the auld shackle,
Our gad an' gaff stowed awa',
An'—good-bye to the canny "red heckle,"
The heckle that tackled them a' !'

The following flies are favourites in America :—Parmacheene Belle, Silver Doctor, the Hackles, Seth Green, Lord Baltimore, Royal Coachman, March Brown, Scarlet Ibis, Cherry, Montreal, Professor, White Miller, Golden Dustman, the Henshall, Horicon, the Read, Premier and many more.

There is no better demonstration that angling is not all in the catch than the delights of retrospection. Equipped with the proper rod, reel, line, flies, the angler is prepared to forage in the realms of the bass ; and thanks to the fact that the fish habituates itself to almost any and all conditions, bass may be found in many and unexpected places.

There may be no actual angling, but then the angler turns to his tackle, his book of flies, his rods, and with some boon companion over good cigar and pipe, lives over the scenes of the summer.

'Call to mind the summer day,
The early harvest morning,
The sky with sun and clouds at play,
And flowers with breezes blowing.'

As to the methods, there are the delights of wading and casting in a beautiful river like the Delaware, or from a skiff, with all the esthetic comforts, on the St. Lawrence, and I confess to have enjoyed this the most. I believe my boatman, Bill Massey, knew every stone and rock in the river, as he could always fore-

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cast a rise. The method is to row slowly along and troll with a live minnow on a fly, or with a fly, or cast when doing the latter. We drift slowly along shore, forty or fifty feet from it, casting with one fly in shore into the little bays, and especially over rocks just submerged. The boatman rows very slowly. Suddenly the line straightens out, you strike on the instant, the tip of the rod bends a second, and up into the air in the centre of a miniature maelstrom rises the game. He stands on his tail and dances a wild rigadoun, throws open mouth and gills, and attempts to toss the hook and bunch of feathers into the air, fails, drops with a smash and makes a clean rush for some point of vantage, jerking at the line again and again. Then, as he is forced to the surface, he goes into the air once more, and again, to repeat the performance. If the water is cool and there is current enough to give this bass exercise: in other words, if the bass is in good condition, he continues to fight, and there is no evidence of giving up or surrender, he is simply out-fought by the resilient rod, and slowly comes to the net—in the language of the boatman is 'taken in out of the wet.'

If the bass are not taking a fly, we use live bait, a golden-hued minnow which is hooked through the lips and trolled fifty or more feet astern—a deadly process.

Some of the most delightful bass fishing I have had was in the Canadian lakes, hanging in the hills from one to two thousand feet above the river, where the surroundings are exquisite, and the bass big and difficult to take. At beautiful, Lac Perchaud, my canoeeman looked with wonder at my patience, casting all one morning, trying different flies, with no rises. It was merely that I had not told him, that I enjoyed casting in such a beautiful spot as well as landing fish. Every time I cast I placed my fly in the vermilion reflections of the autumnal foliage, a blaze of colour in the deep green of the spruce, that grew to the water's edge. I often found the bass feeding in the tules, an impossible place to cast; and they took many flies before I landed a three and a half pounder.

THE BLACK BASS

There are two species of bass, the small-mouth and the big-mouth. The latter is generally considered easier to take and not as hard a fighter. But if a small-mouth bass is taken in a lake, where the water is warm, he is a sluggish fish. Give each fish the same and the best conditions, cold water and some current, and there is but little difference, at least in my experience. The large-mouth resembles the small-mouth, and has *Salmoides* as a specific name. He is bigger, his mouth is larger, and his lower jaw protrudes more. He has a wider range than the small-mouth, and now can be taken in many parts of Europe from France to Russia, and far to the south. In Florida this fish attains colossal size; bass weighing twenty-five pounds having been taken with bait, and Dr. Henshall took a fourteen-pounder with a fly. In the north, an eight-pound big-mouth is rare. It forms a little nest on gravelly or sandy bottom, or if the water is deep, on weeds floating at the surface. I have seen a bass so devoted to its nest that it paid little or no attention to me, and would dash at a stick I thrust into the water.

There are a score of fresh-water fishes in American waters that could be included as game fishes but which I have not space to describe. The squaw fish, or the 'king of the minnows,' will rise to a fly, and attains a length of four feet, but is not much of a fighter. The so-called 'white salmon' of the Colorado (*Ptycocheilus lucius*) is the giant of the *Cyprinidae*. Specimens have been taken in the Salton Sea and Colorado River five feet long and weighing seventy and eighty pounds. It is not a salmon, though this name adheres to it. The Horny-head (*Hybopsis*) is a hard fighter, but a member of the minnow tribe, as is the mighty tarpon a herring. The Rocky Mountain whitefish (*Coregonus*), from Western North America, is considered game. It is about one foot in length and weighs four pounds. It will take bait. It is one of the most delicious of fishes to eat. Another, the Broad whitefish of British Columbia, the Yukon, and elsewhere, attains a weight of thirty pounds and is reported to be a gallant fighter in Alaska.

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In the South the croppie (*Pomoxis*) is considered a game fish and a great delicacy. It is difficult to catch on a light rod on account of its delicate mouth. The calico-bass (*Pomoxis*) will rise to a fly and is taken in Indiana trolling. The little sunfish is the game fish of childhood in all America. The pest of the black bass angler, the rock bass, is distinguished for its patent anxiety to be caught. The blue-gill sunfish (*Lepomus pallidus*) is taken with a float, and is the most promising of the tribe, making a vigorous play on the lightest of tackle. The little pumpkin-seed is the joy of boyhood. In the Great Lake region and the Mississippi Valley is found a fine little game fish, the white bass (*Roccus Chrysops*). It haunts the deep waters of the lake, in the home of the lake trout possibly. It bears some resemblance to the striped bass, but is shorter and possesses a high hump. The yellow bass (*Morone interrupta*) adds another game fish to the army found in America. It is confined to the lower valley of the Mississippi and Northern Indiana. It attains a length of nearly two feet and a maximum weight of six pounds. It fights well and is an excellent table fish. The sauger (*Stizostedion canadense*) has its admirers as a game fish. It is caught, by trolling from the St. Lawrence to the Great Lakes west to Montana and south to Arkansas. This fish belongs to the large class whose pugnacity is lauded where it is supreme, but neglected in the land of the black bass, trout, and wall-eyed pike.

The white perch (*Morone americana*) is a game little fish ranging from the Gulf of St. Lawrence to Georgia, and appears to be at home in salt, fresh or brackish water. It will take a fly or a minnow, appearing to be willing to accommodate itself to almost any condition.

‘Nor let the muse, in her award of fame,
Illustrious Perch, unnoticed pass thy claim,
Prince of the prickly cohort, bred in lakes,
To feast our boards, what sapid boneless flakes
Thy solid flesh supplies! though overfed,

THE BLACK BASS

No daintier fish in ocean's pastures bred,
Swims thy compeer.'

Ausonius.

One of the largest of American fresh-water fishes, which I have vainly attempted to catch, is the fresh-water drum or Gaspergou (*Aplodinotus grunniens*). I have seen it in the New Orleans market, and it reaches a length of four feet and a weight of one hundred pounds. I am told it makes an extraordinary resistance. It is found in the Great Lakes of America. In the Ohio it is the perch ; in the rivers of Louisiana the drum.

CHAPTER XXXI

THE CANADIAN LAKES AND STREAMS

'For dere's no place lak our own place, din't care de far you're goin'
Dat's w'at de whole worl's sayin', w'enever dey come here,
'Cos we got de fines' contree, an' de beeges' reever flowin'
An' le bon Dieu sen' de sunshine nearly twelve mont' ev'ry year.'

Dr. Drummond.

FROM the Atlantic to the Pacific, from the Canadian line north, there is what can be described as an angler's paradise, and one can say this without being suspected of having contributed to contumelious fiction. For many years I fished the beautiful River St. Lawrence, with its thousand islands, that becomes a sea before it reaches the Atlantic, and which gives us the splendid fjord of the Saguenay and countless rivers and streams, telling of sea trout, salmon, black bass, muscallunge, ounaniche, wall-eyed pike, red trout and many more. In trolling for muscallunge or bass on the St. Lawrence, I was in, and out, and across the Canadian line time and again, without knowing it.

An adequate description of the charms of this region from Clayton east to Tadousac, the region I know the best, would require a volume in itself; but I wish to refer to one feature rarely mentioned, owing to the fact that the scenic attractions are pre-eminent. This is the remarkable health-giving quality of the St. Lawrence and Canadian air. The spring of eternal youth may have been in Florida in the time of De Soto; but it is in the Canadian woods and the Adirondacks now, and the region from the River north for several hundred miles is, with its balmy air, to my mind at least, one of the great 'cures' of the world. I recommend it to worn out and weary anglers and busy men.

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All eastern Canada is covered with a fine forest and filled with beautiful lakes, which are so connected by 'carries' and brooks, streams and rivers, that the angler can lay out innumerable tours, in as many lake and river systems, and cover hundreds of miles in the heart of the primeval forest, absolutely away from civilization; yet at all times be able to reach Montreal, Quebec or New York in a few hours, or in a remarkably short period.

The region in Quebec north of Montreal one hundred miles is particularly interesting, as here there are many angling clubs, as the Shewinegan and the Laurentian Clubs. The latter's preserve may be taken as an illustration. It covers many square miles to the north of Montreal, embracing a maze of lakes, streams, brooks and forests, many of the former known only to the guides. Some idea may be had of the country when I say that Mr. George A. Weber, who has a seventy square mile preserve, last year found two large lakes, the existence of which he did not suspect; and the year before when I was fishing with him, we discovered a charming lake abounding in game brook trout, which I had the pleasure of naming Lac Weber. It is essentially a region of lakes. Going north by train, one comes to Lac Perchaud, on which is 'Sans Souci,' the summer home of Mr. Weber, on the edge of the primeval forest. From here a carry of half a mile brings one to Lac la Pêche, on which is the attractive Laurentian Club House. Here the angler secures his guide, canoe and provisions, and starts north, fishing lake after lake as he comes to it, passing three or four, coming at night to the first branch of the Club where comfortable quarters and a good chef await him. Here one can rest and fish, then move on north, repeating the experience. There are several attractive clubs luring the angler on, and on, into the land of the moose and trout. If he keeps on to the northeast he comes to other clubs and to Lake St. John, the home of the ounaniche, and the fine rivers which run into the Saguenay, the home of the salmon.

On down to Quebec we may go finding numerous lakes and streams, and in the lower St. Lawrence too many rivers to

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mention, abounding in trout and salmon. On the south shore we find the Rimouski, Grand Metis, Matane, St. Anne des Monts, Mont Louis, Madeleine, Dartmouth, York, St. John du Sud, Grand, Grand Pabos. On the north shore are the following, the Bergeronnes, Escoumain, Portneuf, one hundred and forty-six miles from Quebec; Bersamis, La Val, Betsiamite, Outarde, Manicouagan, Mistassini, Godbout and Trinity, two hundred and seventy-six miles from Quebec; Calumet, St. Margaret, and we are now three hundred and forty miles from Quebec; Moisie, Trout River, Sheldrake, Magpie, and St. John du Nord, which is the boundary between Canada and Labrador that Dr. Grenfel has made famous; Mingan, four hundred and sixty-five miles from Quebec; Romaine, Watsheeshoo, Pashashebo, Nabesipi, Agwanus, and Grand Natashquan. This river is nearly six hundred miles from Quebec, and was famous as a salmon stream fifty, yes, a thousand years ago. From its clear waters, four anglers once took two hundred and two salmon in a week. The Kegashka, Musquarro, Napitippi, Washecootai, Olomanoshebo, Coacoaco, Mecattina, Ha-Ha, St. Augustine and finally Esquimaux River, seven hundred and twenty miles from Quebec, all are more or less famous as salmon rivers.

There is a great difference in these rivers, and they are in active demand, if not leased or fished by the owners. Some idea can be had of the number of salmon, by the following. A few years ago the Montagnais Indians, who fished the Bersimis, had their annual feast. Forty-seven canoes took part in a spearing contest, and nine hundred salmon, weighing eighteen thousand pounds were speared *in one night*.

The catch of some of the rivers is as follows: the St. John's, the property of Mr. J. J. Hill, the Western Railroad President, gave in one year to five rods four hundred and sixteen salmon, weighing four thousand seven hundred and fifty-five pounds, taken between June 23 and July 18. One rod took twenty-four in a day. Sixteen days on the Moisie produced one hundred and thirty-eight salmon, weighing two thousand four hundred

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and thirteen pounds, the average seventeen pounds. One rod took twenty in one day, others fourteen, eleven, twelve, eleven, fourteen, thirteen, eleven, thirteen. The longest fish was forty-six inches and weighed thirty-five pounds. Trout River was fished by Mr. Charles Stewart Davidson of New York from June 20 to July 16; result, twenty-nine salmon, weighing three hundred and eighty-eight pounds. Mr. Napoleon Comeau, the keeper of the Godbout for many years, gives a record of this stream for fifty years from 1859 to 1908; a few of the seasons are as follows:—

Year.	No. of Rods.	No. of Fish.	Weight.
1864	3	164	1,518 lb.
1865	4	477	4,690 „
1868	3	273	3,066 „
1872	4	217	2,346 „
1874	3	273	2,000 „

After the party left the Godbout this last year, Mr. Comeau fished the river, and on July 7 took fifty-seven salmon, weighing six hundred and thirty-four pounds; on July 10, twenty-five; on July 11, thirty-four; on July 13, forty; July 14, twenty-five fish, weight two hundred and fifty-three; on July 16, thirty-seven salmon; on July 20, twenty-seven; on July 22, twenty; making a total of three hundred and sixty salmon for one rod, with a weight of three thousand eight hundred and thirty-two pounds in eighteen days' rod fishing. In 1875 three rods in ten days killed one hundred and seventy-seven fish. In 1907 the rod catch was four hundred and sixteen fish, weight four thousand six hundred and forty-three pounds. In 1908 the score was three hundred and eighty-seven salmon, weighing four thousand three hundred and eighty-nine pounds.

These few scores show the river to be a remarkable one. In these dulcet salmon streams trout prevail, and they are enemies

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of the salmon, as is well shown by Mr. Comeau. In preparing and improving these salmon streams Mr. Comeau hauled the seine for trout in the pools, where they were eating the salmon spawn and young. His average catch was two thousand pounds of trout a year with a gill-net; but in one haul of the seine, he took from this greatest of American salmon rivers, trout to the amount of three thousand four hundred pounds.

Labrador is now the Mecca of many salmon anglers from the United States, as Norway appeals to British anglers. Commodious steamers run from Boston to Yarmouth, Nova Scotia, then *via* North Sydney to Port Aux Basque, Newfoundland, the trip taking about two and a half days. The Little Codroy is an exceptionally fine salmon river with beautiful reaches and fine scenery. Big John Pool, Dead Man's Pool, Kid's Run, Seven Mile Pool, Five Mile Pool, are reminiscent of ten or twenty pounders.

Salmon rods are much the same everywhere, though some Americans use a lighter rod than the typical salmon rod of England, with which I had my first experience on the Tweed, at the Edinburgh Salmon Club. I was amazed that I could place my fly across the beautiful river. Mr. Comeau mentions Jock Scott, Silver Doctor, Silver Gray, Dorian Ranger, Fairy, Donkey, and a white or yellowish fly for late evening. The temperature of the water in the St. Lawrence River is an important factor; about sixty degrees Fahrenheit is good, but under or above that means poor fishing. Long casting is not necessary, forty feet being an average, and the fly should be cast downstream at an angle of forty-five degrees. In the matter of time, on these St. Lawrence Rivers, the best for good luck comes between seven and ten o'clock in the morning, and from three until too dark to cast.

The study of the Eastern salmon is interesting. Mr. Comeau states that in the middle of May a vast school moves in from the Atlantic; one school goes to the north shore, and one to the south. The former divides somewhere near Anticosti Island; one

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part going eastward toward the Strait of Belle Isle, the other moving west up the St. Lawrence, where as soon as the ice and snow is out of the river, or about June 10, they enter and go up the rivers to spawn. They swim about the estuaries a while, as though to become habituated to the fresh water; then slowly move up, the run ending by July 30. During the beginning of the run, while they are in the ocean, they do not travel at night, lying near the bottom at this time, moving on as the sun rises, and at a rate of not over five miles a day. When they enter the rivers, this is reversed almost entirely. They travel at night, but still move slowly. They spawn at the source of rivers, where pure water and gravelly beds can be had, and a good current. When these salmon enter the rivers, they are in the finest condition, silvery in appearance and their flesh pink; but they rapidly deteriorate, and by October are slate-coloured and thin, the males with hooked jaws. On the Pacific coast, the salmon die. Here they do not, and many pass the winter in the rivers and lakes, and are known as kelts and lingards (laggards). There is good reason to believe that the great schools live during the winter not far from the entrance of the great river up which they move in the spring.

The eggs of the salmon are hatched in the spring and the young salmon are known as parr. They remain in the rivers for about two years, going down about the third spring, now known as smolt. The sea paints them a silvery hue, and they become grilse; and from this stage their development or growth is very rapid, their physical development being often complete in the grilse stage.

Up to the moment of entering the river, these St. Lawrence salmon eat a variety of fishes, but chiefly caplin; but when they enter the river, fat, and in good condition, and begin to move toward the spawning ground, they do not eat, but they will take a fly or a spoon. Why they take a fly is not known, but it is impossible for an animal to forget the habit of eating so suddenly; hence, while physically they do not feel the need of food, the habit

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remains and they take a fly or spoon, and before they can eject it are hooked. Ex-Senator George Edmunds told me that he saw a salmon rise to a nut that fell from a tree, just as it would to a fly, and eject it.

The Saguenay is a weird, deep, uncanny fjord of great interest. I journeyed up by its rocky ramparts to Chicoutimi, in search of ouananiche at Lake St. John, and if I did not get it, I feasted my eyes on the big, tame salmon at Tadousac, and the white whales that drifted about like patches of pure white cotton.

I can but suggest the delights of the upper Saguenay, and the game little land-locked salmon, known as Ouananiche, *Salmo salar ouananiche*, of the joys of which Dr. Henry Van Dyke told me, and of which he has lovingly written: 'But the prince of the pool was the fighting Ouananiche; the little salmon of St. John. Here let me chant thy praise, thou noblest and most high-minded fish, the cleanest feeder, the merriest liver, the loftiest leaper and the bravest warrior of all creatures that swim! Thy cousin, the trout, in his purple and gold with crimson spots, wears a more splendid armour than thy russet and silver mottled with black, but thine is the kinglier nature.'

Labrador, Anticosti, Newfoundland, the angling joys of which were discussed years ago by the dean of American anglers, Mr. Charles Hallock, are now open to the people. In the great state of Maine are the Rangeley Lakes, and in New Brunswick and Nova Scotia many charming spots, with big game waiting.

The rivers of Nova Scotia are famous for salmon or trout or both. Some are Middle River, Cape Breton, Brazil Lake, Lakes Rossignol, Kejimikugik, the Medway and Mersey rivers; and at Mira Bay, St. Ann and Cape Breton is the home of the horse mackerel, from eight hundred to one thousand pounds, the same fish known as the tuna on the Californian coast.

In New Brunswick we have the Restigouche, and its principal tributary is the Metapedia and Upsalquitch, the home of the famous Restigouche Salmon Club. Other salmon and trout rivers and lakes here are Charles, Jacquet rivers, Palfrey Lake,

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Bathurst Lake, Miramichi River and many more, the very names of which recall by-gone delights with the rod to hundreds of Englishmen and Americans who for years have fished these glorious rivers and lakes.

Going west and crossing the Ottawa River, we come to the Province of Ontario, a magnificent angling region with rivers, lakes and streams without end. The Gatineau lakes, Pemachonga, Thirty-one Mile Lake, White Fish Lake are all famous in the annals of sport for its bass, muscallunge, pickerel, doré and trout.

I can but mention a few of the fine lakes of Ontario which have a lure for the angler : Lake Nipissing, Lake Temagaming, the Black, Steel and Kenogami rivers, Kawartha and Rideau lakes, and Georgian Bay. The scenery in Algonquin National Park, Ontario, is extremely beautiful, and the fly fishing in such rivers as the Madawaska a delight to the angler. The park is not as well known as it should be, lying north of Toronto and north-east of the Muskoka Lakes, an angler's paradise of a million and a half acres, for which Canadian anglers are indebted to the Hon. Arthur S. Hardy. The Park Gateway is Cache Lake, one of hundreds in this play-ground of Canada, one of the finest trout preserves in the world.

The angler in his Canadian trip should not fail to visit the country north of Toronto between Georgian Bay and the Ottawa River, Muskoka and other lakes and streams in the highlands of Ontario. Here are two high lakes and three systems or groups of many lakes, Simcoe, Georgian Bay, Severn River, French River, Kawartha Lakes, the Lake of Bays, Muskoka and its Falls of Bola, Lake Joseph, Rosseau and countless others, with varied angling interests, the mere consideration of which would fill volumes. One turns from them with regret, Magnetewan, Burkes Falls, Lake Ohmie, Wa-Wa-Kesh and many more.

Pushing into the west, the angler reaches the region of the Canadian Rockies, a wonderland of the world, with Bamf and Lake Louise as central attractions. Beautiful and countless lakes and streams commend themselves to the angler and

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sportsman through this region. He may continue west to the coast, and find at Vancouver with its fine climate, a charming region abounding in trout, salmon, and on the way to Alaska, salmon, grayling, trout and big game of various kinds await, which reminds me that this is a description of game fishes, and not of the localities in which they are found, a fascination hard to resist, and important in the make-up of angling.

The Kootenay Lakes of British Columbia, previously referred to, afford fine angling, where the country with its snow-capped mountains is a solace, if the fish are not rising. Some idea of the fishing here can be obtained from the statement of L. G. Mathews of Cardston, Alberta, who, in a river connecting the upper and lower lake, took from a single pool (three rods) sixty-three trout, which weighed two hundred and fifty-one pounds. In 1912 he landed thirty that weighed sixty-eight pounds.

The clubs and anglers have done much in Canada to conserve the angling. Mr. George A. Weber, of Stamford, New York, and Pasadena, California, has one of the most beautiful preserves in Canada, embracing seventy square miles of countless streams and lakes in the province of Quebec, one hundred miles north of Montreal, in the country loved by Dr. Drummond. His home "camp" is *Sans Souci*, on Lac Perchaud in the Laurentian Club chain, but Mr. Weber owns most of the lake and can travel by canoe and *portage* all summer and not leave his own particular angling paradise. *En passant*, he is without a peer as a clever fly caster. I spent the summer of 1910 in this wonderland, where Eubald and Philarum Juneau, and other famous canoe-men, make life worth the living.

CHAPTER XXXII

THE AMERICAN CHARR (BROOK-TROUT)

‘ Amongst all your quaint readings, did you ever light upon Walton’s Complete Angler ? ’

Charles Lamb to Coleridge.

CHARLES HALLOCK, Dean of the American Anglers, whose trout rod and reel of fifty years ago, hangs in a place of honour in the Tuna Club, wrote many years since in the American Angler :

‘ No fulsome titles do I court,
Science holds no bribe for me,
Slavery for those who love it,
From nomenclature leave me free,
Yet they call me *Salvelinus*,
Can you fancy sin more heinous ? ’

The brook-trout had been known as *Salmo fontinalis*, being so named by Dr. Mitchell in 1814 ; but science had decided upon *Salvelinus fontinalis*, and the famous poem was the protest from the anglers, whom the veteran and distinguished angler, who brought the Michigan grayling to the attention of Agassiz, represented. The brook trout is the indigenous trout of the Atlantic Coast States, and is a charr ; a fish that, doubtless, has brought more joy and delight to the weary soul of man than any other animated solace. Compared to the rainbow, the charr, as it should be called, presents a striking appearance and is as attractive and beautiful in its way. It is decorated with red spots surrounded by whitish or gray circles, and possibly the most striking feature is the dazzling white streak and colours on the edge of the lower fins. The scales are very small and appear

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embedded in the skin ; so small indeed that not a few anglers will tell you the brook trout is scaleless.

' One trout scale on the scales I'll lay,
(If trout had scales) and 'twill outweigh
The wrong side of the balance.'

Lowell.

The brook-trout, *Salmo fontinalis*, the prince of Eastern American game fishes, impresses one that he lives in clear, cold, wild waters. He is trim and well groomed, his colours brilliant and distinct. He is always on parade, alert, quick of motion, and a veritable joy to the real angler, who has fair play, not murder in his heart.

In the United States many of the most beautiful streams and brooks are devoted to brook-trout, which has a wide range from well north in Canada, to Northern Georgia. All the species are entrancingly beautiful, and on light rods they prove themselves fighters of the first quality. I recall a soulful little stream I frequently fished in sight of the White Mountains in Vermont, where the old homestead of a branch of my family stood on a lofty hill affording a fine view for miles, down a long deep valley, with Mount Washington on the eastern horizon. The little trout stream wound down from the hills into the valley, and was a virtual tunnel, elms, beach and willow covering it, and shutting out the sun except here, and there, where vagrant rays broke in, on which the gnats danced in long sinuous lines. The sides were lined with brakes and ferns, the great boulders covered with a tapestry of rich green moss that was a profanation to disturb.

Every few yards there was a diminutive pool in which were many brook-trout waiting for the lure, which, owing to the gloom, was generally a Royal Coachman. Often I merely crept up to the edge and watched them rise at the leaves which sailed down and along like mimic ships. They were little trout for little people, and the children of my kinsmen had fished this dainty stream nearly two centuries.



Fig. 44. Angling in Canada.

1. Mrs. Holder landing a Black Bass in Lake Pechaud, "Sans Souci," Quebec. 2. The Author Returning from a Troutling (Brook Trout) Expedition from Lake Weber, Quebec. 3. Pike from Lake Wapizzagonk, Quebec, near the Laurentian Club. p. 320.

A M E R I C A N C H A R R S (B R O O K - T R O U T)

My largest brook-trout is a two and a half pounder, and this is perhaps above the average. In brooks it ranges from six to eight inches in length, and from a few ounces up to three pounds ; in rare cases six or more pounds.

The brook-trout is at home in the charming lakes of Quebec, especially in the chain of lakes in the preserve of the Laurentian Club on Lac la Pêche. Here appears to be a typical *fontinalis*, and particularly in the splendid preserve of my friend Mr. George A. Weber there are, unquestionably, several varieties. This preserve is about one hundred miles north of Montreal in a country abounding in lakes, with an area of seventy-five square miles. One day we discovered a new lake, which I named Weber, after my host. I fished the entire lake with every fly and lure I could think of, with no result ; then one of our party in another canoe uttered a shout, and my canoemen, Tom and George Cadarette, rounded me up at a little point to become a participant in a wonderful angling symposium.

All the brook-trout in that lake had apparently collected about a spring, in water possibly ten feet deep, and they seemingly covered the bottom in a solid mass. The moment a fly dropped upon the water, up they came, little meteors reversed, taking the lure and going down without stopping. My men paddled the canoe back about thirty feet and I began casting, hooking a trout at almost every rise, using of course one fly. We could, literally, have filled the canoe, but took only sufficient for our camp wants, and passed on to other joys and lakes in this splendid region, which is typical of much of the province of Quebec.

Trout angling in any land is one of the joys of life. From early times it has been the pleasure of studious men, an art and an exact science. Volumes have been written on its ethics and philosophy, and to hundreds of men it is the breaking of a law of morality, as binding as that of the Medes and Persians, to approach a trout with anything but one fly, and a barbless hook. It requires some temerity to break this. I am a strong adherent of the fly ; in fact, I go so far as to say I should like

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to see a law passed preventing anything but fly fishing for trout. I am extremely fond of casting, and this, to me, is a compensation if I do not have a rise. But there are times when trout refuse to take a fly. I have cast for hours with many and varied flies without results, but I generally attributed it to my own lack of skill. There are occasions, as when trout are absolutely needed, when the angler is justified in using a plain one-hook spoon, worm bait, or live bait. The salmon of the Pacific Coast, except in very rare and isolated instances will not take a fly; a spoon, or live bait must be used. At Klamath the very large rainbows will often refuse anything but live bait or a spoon. There is among anglers a very high standard and a demand for fair play; a demand that the angler must not overreach the gallant game with some of the awful 'contraptions' with hooks innumerable and colours resplendent, forced on the verdant and innocent angler by inventors with a Doré imagination.

At the Laurentian Club, with its magnificent chain of lakes, one cannot use a spoon, and many of the members never fish with more than one fly and the barbless hook. The trout lover is a true nature lover. He is not out for slaughter. He enjoys angling as a study. He has, perhaps, been working on a new fly in the Fly Fishers Club 'fly room' on Piccadilly, and is out to study the results. He notes the condition of the water and pools, the habits of the trout, morning, noon and at night. He knows what it feeds on, and what insects are expected in every month. He can tell you about the winds and thunderstorms, rain and fog, and their effect upon the trout, and what flies to use under any condition, and that it is not all in the fishing is suggested.

In canoeing in the lakes of Canada, especially one that hung in the hills like a crystal, I found in many a quiet nook masses of half-submerged branches, which I at first took for the work of a beaver, but investigation showed that it was a shelter carefully arranged by some good friend of brook-trout so that they could spawn in the necessary seclusion. In New England the charrs

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spawn from October to April, more or less, during which period they are protected by law. The hatching period depends upon the temperature. Mr. Ainsworth's experiments showed that if the water temperature was thirty-seven degrees the eggs would hatch in one hundred and sixty-five days; one hundred and three at forty-one degrees; eighty-one days at forty-four degrees; forty-seven days at fifty degrees; and thirty-two days at fifty-four degrees. Seth Green found that if the temperature was fifty degrees, the eggs would hatch in fifty days, each degree, warmer or colder, making five days either way. When the young appear they are attached to the yolk from thirty to eighty days, and from now on they increase in a ratio to the food supply. Thus in two years a well nurtured fish will weigh a pound; a poorly nurtured fish from the same brood half an ounce. Ainsworth observations showed that yearlings weighed two ounces; two year old fish a quarter of a pound; three year old fish a half pound; four year old fish a pound. This for domestic fish.

In the wild state under the most favourable conditions the increase is much greater. A Rangeley Lake charr, which was tagged by Mr. George S. Page in 1871, gained two pounds in two years. Charrs are mature in from one to two years. The nesting habits of the brook-trout are most interesting, and are well described by Mr. James W. Miles as follows:

‘His whole wooing is the most polite attention and the gentlest of persuasions. He moves continually to and fro before his mate parading his bright colours, while she rests quietly, with her head up stream, vibrating her fins just sufficiently to keep her from floating down. At Waterville, Wisconsin, I had the opportunity of watching their habits. A pair of large trout had selected a spot near the bank of the stream, where the water was about ten inches deep. The female had fanned the gravel with her tail and anal fin until it was clean and white, and had succeeded in excavating a cavity. They were frightened away as I came to the edge of the bank. Concealing myself behind a willow bush, I watched their movements. The male returned first, reconnoitering the vicinity, and, satisfying himself that the coast was clear, spent a half hour in endeavouring to coax the female to enter the nest. She resting,

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half concealed in the weeds, a few feet away, seemed unwilling to be convinced that the danger was gone ; and he, in his full, bright colours, sailed backward and forward from the nest to his mate, rubbing himself against her, and swimming off again in a wide circle close along the bank, as if to show her how far he could venture without finding danger. She finally entered the nest.'

The golden trout of Sunapee is a beautiful charr. Its back is a rich olive or brown, the belly flashing with tints and shades of pink, orange or red, the dominant note being orange or gold, especially in the male when in his nuptial garb. As a fly taker this charr is disappointing, but it is taken with a spoon and live bait, and more often in deep water which it affects. The angler who has taken the European charr will note a marked resemblance, and Mr. Garman believes that it is merely an immigrant, the offspring of the Ombre Chevalier (*S. alpinus*), which has been imported and introduced into American waters, and which is the common trout of England, Switzerland, Germany and the Scandinavian peninsula.

The golden trout of Sunapee, which must not be confused with the golden trout of the High Sierras, affords no little sport, according to Dr. Quackenbos, and as I have not taken it, I quote his description :

' The Sunapee saibling takes live bait readily, preferring a cast smelt in spring, when it pursues the spawning *Osmerus* to the shores. As far as is known, it does not rise to the fly, either at this season, or when on the shoals in autumn. Through the summer months it is angled for with a live minnow or smelt, in sixty or seventy feet of water, over cold bottom, in localities that have been baited. While the smelt are inshore, trolling with a light fly-rod and fine tackle, either with a Skinner fluted spoon, number one, or a small smelt on a single hook, will sometimes yield superb sport, as the game qualities of the white trout are estimated to be double those of *fontinalis*.

' The most exhilarating amusement to be had with this charr, after the first hot June days, is in trolling from a sailboat with a greenheart tarpon rod, three hundred feet of copper wire of the smallest calibre on a heavy tarpon reel, and attached to this a six-foot braided leader with a Buell's spinner, or a live minnow on a stiff gang. The weight of the wire sinks the bait to the requisite depth. When the sailboat is running across



Fig. 45. Taking the Giant Ray.

Different Views of the Giant Ray (Manta Manta), taken by The Hon. C. G. Conn, Member of the Tuna Club, in the Gulf of California.

1. Side View. 2. Crew of Mr. Conn's Yacht Trying to Land the Fish. 3. Ventral View, Showing Gills. 4. Mr. Conn. 5. Back View, Showing Claspers. 6. Side View. p. 324.

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the wind at the maximum of her speed, the sensation experienced by the strike of a four-or five-pound fish bankrupts all description. A strong line under such a tension would part at the instant ; but the ductility of the wire averts this accident, and the man at the reel end of the rod experiences a characteristic 'give,' quickly followed by the dead-weight strain of the frenzied Salmonoid. To land a fish thus struck implies much greater patience and skill than a successful battle, under similar circumstances with a five-ounce six-strip and delicate tackle. The pleasure is largely concentrated in the strike, and the perception of a big fish 'fast.' The watchfulness and labour involved in the subsequent struggle border closely on the confines of pain. The ductile wire is an essentially different means from a taut silk line. The fish holds the coign of vantage ; when he stands back and with bull-dog pertinacity wrenches savagely at the pliable metal—when he rises to the surface in a despairing leap for his life—the angler is at his mercy. But, brother of the sleeve-silk and tinsel, when at last you gaze upon your captive lying asphyxiated on the surface, a synthesis of qualities that make a perfect fish—when you disengage him from the meshes of the net, and place his icy figure in your outstretched palms, and watch the tropaeolin glow of his awakening tones soften into cream tints, and the cream tints pale into the pearl of the moonstone, as the muscles of respiration grow feebler and more irregular in their contraction—you will experience a peculiar thrill that the capture neither of ouananiche, nor *fontinalis*, nor namaycush can ever excite. It is this after-glow of pleasure, this delight of contemplation and speculation, of which the scientific angler never wearies, that lends a charm all its own to the pursuit of the Alpine trout.'

This author, who has made a study of this trout, thus describes its nuptial tints :

' As the October pairing time approaches, the Sunapee fish becomes illuminated with the flushes of maturing passion. The steel-green mantle of the back and shoulders now seem to dissolve into a veil of amethyst, through which the daffodil spot of mid-summer gleam out in points of flame, while below the lateral line all is dazzling orange. The fins catch the hue of adjacent parts, and pectoral, ventral, anal, and lower lobe of caudal, are marked with a lustrous white band.

' It is a unique experience to watch this American saibling spawning on the Sunapee shallows. Here in all the magnificence of their nuptial decoration flash schools of painted beauties, circling in proud sweeps about the submerged boulders they would select as the scenes of their loves—the poetry of an epithalamium in every motion—in one direction, uncovering to the sunbeams in amorous leaps their golden-tinctured sides,

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gemmed with the fire of rubies ; in another, darting in little companies, the pencilled margins of their fins seeming to trail behind them like white ribbons under the ripples. There are conspicuous differences in intensity of general coloration, and the gaudy dyes of the milter are tempered in the spawner to a dead-lustre cadmium cream or olive chrome, with opal spots. The wedding garment nature has given to this charr is unparagoned. Those who have seen the bridal march of the glistening hordes, in all their glory of colour and majesty of action, pronounce it a spectacle never to be forgotten.'

In Dublin Pond, New Hampshire, is found a charr, *S. agassizi*, which from its colour is named the gray trout. It has few if any red spots and is an interesting little fish. I have taken the brook-trout, *fontinalis*, in California in the head waters of Feather River, but it had been introduced, there being but one charr on the Pacific coast, the Dolly Varden, *S. malma*, almost a replica of *fontinalis*. Its home is to the west of the Rocky Mountains, where the sun drops into the night, in the clear streams of Northern California, Oregon, and Washington, and far north to British Columbia, Alaska, and even in Kamchatka and the Kurile Islands.

In the north it appears to have taken to the sea, and in Puget Sound and Alaska grows to a large size, specimens weighing ten pounds having been taken. It appears to be a *fontinalis*, but long and slender, in shape resembling a steelhead. It has red spots on the back and side, but not the marblings and blotches of the *fontinalis*, and also its game qualities. It is despised by the Alaskans as it devours the eggs of the salmon.

The Dolly Varden obtained its name in the following way : Dr. Jordan and Professor Spencer F. Baird were at Soda Springs, Mount Shasta, on the Sacramento, when a beautiful specimen of this trout was brought in, glowing with colours. The landlady, struck with its charms, said, ' Why, it's a regular Dolly Varden ! ' Professor Baird said to Dr. Jordan, ' Why not call it the Dolly Varden trout ? ' So Dolly Varden it is, and a very good name, and the fish one of the best of the charrs.

The Dolly Varden may be taken in the McCloud and the

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various tributaries of the Sacramento. One of the sights of the tourist at Soda Springs is the feeding of the Dolly Vardens. Whether the train stops that the trout may be fed, or whether the fish are fed to divert the passengers, I do not know, but an old Chinaman is always on hand with some finely chopped meat which he deals out to the trout at the station fountain where they are confined to enthuse the angler. These Dolly Vardens are absolutely tame and will eat from the hand. In a hotel at Santa Cruz, California, I made the acquaintance of a number of tame trout some years ago. They would leap from the water and take a fly from my fingers—I mean a real fly, and their owner professed to know the individuals. One particularly allowed him to take it out of the water without protest. There are no more interesting pets than the charrs.

The Dolly Varden, which suggests Mr. Tappertit, is the sea-trout of the North Pacific, as *fontinalis* is the sea-trout of the Atlantic seaboard, and not to be confused with the sea-trout, weakfish. Dolly Varden is also called the bull-trout, Oregon charr, red-spotted trout, Malma, Golet, and as many more names in as many places. While an enemy of the salmon, it is a game fish of high degree, taking a fly with avidity. A number eight hook, March Brown, Kamloops, Dun fly, and Royal Coachman are recommended. This is also true in the ocean as in the rivers, though it takes the fly more readily in the latter.

The Dolly Varden charr varies as to weight to an extraordinary degree. In fresh-water streams or lakes, as the Pend d'Oreille, it may weigh six or seven ounces, but at the entrance to the Alaskan rivers ten pounders are taken. The Dolly Varden is now a sea-trout and one of the great game fishes of the northern seas. Jordan says, 'It is game and vigorous, takes the hook freely, with a fly or insect, a salmon egg, or a scarlet petal of some mountain flower. . . . It is a good food fish. In Kamchatka the Dolly Varden is baked in pies, deep pies like those sold in English eating-houses, and in that form is surely good.'

We find the charr in the far north represented by the Arctic

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charr, *S. arcturus*, common in Lake Victoria in latitude eighty-two degrees. Its back is green, the belly silver with reddish tints. In Greenland there is another charr, *S. stagnalis*, a valuable fish that attains a length of two feet. In the ocean it is gleaming silver with all the beauties of a steelhead; but in the rivers it is dark green, its sides ornamented with pale pink spots. Its lower fins are a vivid pink, the upper ones green, while over the sides and back are irregular green streaks.

In America there are innumerable forest regions, wild and beautiful, famed for their lakes, rivers and streams, abounding in charrs, so near New York or the great cities that they can be reached with ease and celerity. An angler can leave New York in the morning and find himself in the heart of the Adirondacks at night, these splendid mountains being but eight hours distant. The mountains range from the Canada line, or near it, south to the Mohawk river, or one hundred and twenty miles, and from the shores of lakes George and Champlain, west, eighty miles, affording the angler and sportsman a splendid park of ten thousand square miles in which are five parallel ranges of mountains, many of the peaks being from thirty-five hundred to five thousand feet in height. This region abounds in charming lakes stocked with various varieties of trout, where I have fished when nearly the entire region was a virgin wilderness. Here are over one thousand lakes of all sizes up to twenty square miles. Some of the most famous are Schroon, 'Tear of the Clouds' Lake, in which rises the Hudson, Raquette, Saranac, Ausable, Placid, St. Regis, Blue Mountain, Long, Round, Tupper, Loon, Rainbow, and many more lakes, rivers and brooks. No more delightful memories are recalled than when casting a fly in some of these lakes, or crossing the carries, my guide with canoe on his back, to stop to watch a bear or deer. I witnessed the first tragedy on one of these lakes—the launching of a power boat, considered a crime, deep dyed, a desecration.

In the fine Rangeley Lakes of Maine is found an interesting charr, *Salvelinus oquassa*. The lakes are famous in America, and

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stand in New England as prototypes of the beautiful Adirondack group in New York. They hang in the hills of Maine like emeralds in a deeper emerald setting, from twelve hundred to fifteen hundred feet above the Atlantic, covering an area of possibly eighty square miles. They are also known as the Androscroggin Lakes. They number sixty or more. Ranglely Lake or Lake Oquossoc is about nine miles long, the forests about it uncontaminated, an outdoor man's paradise. Nearly as large is Lake Mooselucmaguntic. Among the smaller lakes are Cupsuptic, Lake Mollychunkamunk, five miles long, Lake Welokenebacook, which you may call Lower Richardson if the Indian name is a menace. This attractive lake is narrow, but five miles in length. Not far away is Lake Umbagog from which the white peaks of the White Mountains of New Hampshire are seen, where Mount Washington rears its peak six thousand feet in air, the dominant note of the most beautiful part of New England. Half a mile above the sea and thirty miles distant, is Lake Parmacheenee, from which the American fly Parmacheenee Belle was named. Not connected with the above, but the largest lake in Maine, is Moosehead Lake, thirty-five miles long, from one to fifteen miles wide, and with over four hundred miles of shore; a splendid sheet of water abounding in trout, while in the forests are caribou, deer, moose, ruffed grouse and other game. All these lakes abound in camps and clubs, and the angler has every convenience. He might be thousands of miles from civilization, so primitive are the fine forests, so uncontaminated the country in its depths; yet the great eastern cities, and Montreal and Quebec can be reached in a few hours.

The Blueback trout, or Rangeley Lake trout, *Salvelinus oquassa*, rarely grows larger than twelve inches; is long, slender and very graceful, and has a forked tail, calling to mind that of the Japanese hucho. Its back is bluish-black; the head small, and the red, black, and yellow 'spots' are vivid and found mainly on the sides of the body. This charr is believed to be more hardy than *fontinalis*. Their spawning habits are similar to those

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of the brook-trout, but living in the large lakes, they affect the habit of lake-trout and take to deep water during the greater part of the year. On the approach of the spring season they move in large numbers from Lake Oquassa, from which they take their specific name, to the Kennebago River. The spawning season over, they return to Oquassa Lake, and on the fifteenth of November, sooner or later, as the case may be, they go to Lake Moosellokmaguntic, remaining there until the following October. As a game fish they rank far below *fontinalis*, in which are centered all the elements of a great game fish.

I can mention only a few of the most beautiful spots for trout fishing in Eastern America, as they are legion. The Alleghanies, Blue Ridge, Green Mountains, Cumberland ranges—all abound in streams the home of the charr, Lake George, the rivers, lakes and streams of Western New York along the Erie railroad, the Delaware and its tributaries, the maze of streams in the heart of Pennsylvania, Pike county, the Cheat River in West Virginia, Blackwater, Seneca Creek, Laurel, Gode, Fish and many more, and the beautiful valley of the Juniata. In North Carolina there are attractive charr streams—the Toe River, Cranberry Creek, Elk, Linville, New River, rising in a region of mountains, as Pisgah, Table mountain, Smoky, Bald, and Cold Mountains.

From here you may follow the brook trout into Tennessee, and fish the Shenandoah and the Sweetwater branch of the East Tennessee. The streams of the Catskills, Catskill Creek, are charming regions where I have taken the charr among rocks that bristled with the trilobites and crinoid stems of a seashore of a million years ago. The various charrs have been so universally introduced, and are found in such unexpected places, as my taking one when casting for rainbows in Feather River, California, that one is often confused, if not skilled in the science of Ichthyology. I have taken trout which I was positive were *fontinalis* in the lakes of Canada, fifty or one hundred miles north of Montreal and Quebec, and I am confident there are several species ; but, in all probability, they could be referred to the Lac

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de Mabre or Marston trout, *S. marstoni*, of Lac de Mabre. I took a two and one-half pounder in Lac Edouard of the Laurentian Club chain that was, apparently, a typical *fontinalis*, and in Lac Weber another charr, that, while like *fontinalis*, was still different.

The home of the red-trout, according to my guide, was in a lake farther to the north. All these Canadian charrs, and I took a number, were splendid game, hard fighters. I can wish the British angler no better luck than to spend a summer in these Canadian lakes, the land of trout, bear and moose, scarcely a week from London by the St. Lawrence route.

The true lake trouts are well represented by a charr, the Great Lake trout, Mackinaw trout, 'lunge,' and by other names, as it is the great lake trout of the region from New Brunswick and Maine west to Vancouver and into Alaska, Hudson Bay, and Labrador. It is also found in the Yukon. To science it is *Cristivomer namycush*. Instead of red spots, it has gray ones, and it bears a close resemblance in shape and form to many of the small charrs. But here the resemblance ceases, as this charr is a giant. It attains a length of several feet, and specimens weighing over one hundred pounds have been hauled up with various instruments of torture from the depths of the great lakes of America, some of which are nets five miles long, which take from four to five tons of these charrs at a haul. The fish is taken by anglers trolling with a spoon or a minnow.

'The generous gushing of the springs,
When the angler goes a trolling;
The stir of song and summer's wings,
The line which shines, and life which sings,
Make earth replete with happy things
When the angler goes a trolling.'

Thomas Tod Stoddart.

Another lake trout is the Siscowet (*C. siscowet*), found in the deep waters of Lake Superior, lakes Huron and Erie.

CHAPTER XXXIII

THE RAYS

'Hugest of all fishes in the sea,
For they were formed by heaven's great king,
Before all other earthly thing.'

The Voyage of St. Brandon (Mediæval).

DOUBTLESS it requires a stretch of the imagination to include the rays among the game fishes, and I will concede them to be on the fringe of the aristocracy of the fishes and not common subjects of piscatorial eclogues. My reason for including them, is that the weird bat-like creatures are among the most powerful of fishes, and when played with rod and reel, often gives the angler a surprising fight, which in any other fish would result in encomiums and much praise.

But in some way, in some quarters, the rays are looked upon as vermin and classed with sharks. It is not advisable to draw the line too closely, especially in sea angling, as in certain localities there may be a dearth of typical edible game fishes, when the rays, skates, and their tribe save the day for the angler.

I have had some exciting hours with various rays in the Tropics, and have always found them fishes of extraordinary strength, vitality and other qualities, which in other forms go to make up what is known as a game fish. In all probability, the ray or flat fish, which will make the most impression on the angler is the torpedo. I have heard of men being knocked down by them in New England, and a ray I attempted to lift in Italian waters gave me a shock which I still remember with interest but not satisfaction. I believe I once hooked one of these living batteries at Laguna Beach, in Southern California,



Fig. 46. A South African Kabeljou.

A 57½-Pound Fish taken on a 6¾-Ounce Diamond-Ribbed Rod. (Photo by W. Breston Todd.)
p. 332.

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where the wind whispers soft and low. I certainly experienced a peculiar shock, but the fish never stopped, I fancy it is still going. I have felt the same something when holding a big jack by the tail in Florida.

In Florida there are a number of rays that are particularly designed by Nature to worry the angler who hooks them. They are bird-like in the general shape of the long graceful wings or fins, and the pectoral fins are employed very much like the wing of a bird, up and down, embodying the so-called poetry of motion. I recall no more graceful object than the whiparee of the Tortugas reef, coming flying along over the pure white sand, so bird-like, that I always thought of a shadow and intuitively looked upward to see what great bird was flying overhead—pelican or man-of-war hawk.

The typical sting ray or whiparee here was black, about five feet wide, with long side wing-like fins, streaming out behind a tail three or four feet in length and about the size of a whip in use and effect. That the tail was a weapon seemed evident, but I never saw it used. The real weapons of the ray were three long serrated pointed darts or 'stings' just above the base of the tail, one above the other, the lower being the longest. With these the fish can strike in some way a vicious blow. On one occasion a companion who was sitting in the bow of the boat with legs overboard, was cut in some way directly across the instep, each spine leaving a deep jagged wound cut to the bone. I was poling the dinghy along with a grain or spear pole, graining crayfish, and succeeded in killing the ray and securing its knives as trophies. This fish when speared put up an extraordinary fight, towing us around half an hour. When I brought it up by hauling on the cord we did much dodging to escape the flying tail, not directed at us, but whirled about during the gyrations of the fish.

On this growing seeming atoll, which was about four by ten miles square and near Long Key, formed by it and Bush Key and a long submerged reef, there was a beautiful lagoon a quarter of a mile wide at the upper end, or less, gradually widening and

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deepening as it extended south, where the wreck of a large ship marked its limit, then making a turn to the west it culminated in Bush Key. A large part of this was but two or three feet in depth at low tide and covered with groves of branch coral—a radiant marine forest in rich olive tints—cut by winding channels through which I could walk or swim or scull my boat. The entire north end of the lagoon was of clear white sand with here and there patches of a low algae which gave shelter to various shells and at night was the browsing-ground of a multitudinous host of crayfishes. Every day I sailed, rowed or poled my light boat over this dreamland of the sea as here were the ‘gulfs enchanted.’ At times, in extraordinary tides, the tops of all the corals were exposed and the long barrier of dead coral rock was seen. It was a delight to go out, shod in thick wading shoes impervious to the jagged coral heads, and walk over it. Every rock was the home of countless strange and often beautiful animals. Here the brown cowrie made its home, the scarlet fan shell, and myriads of worms which vied with the flowers in the beauty of their breathing organs. Groves of vivid yellow gorgonias were within reach, some garbed in lavender, others like the plumes of the ostrich of a deep velvet-like brown, all presenting a scene challenging the brush of the painter, or the verse of the poet to describe their beauty.

This inner lagoon with the white floor could be reached by channels from various sides, and for some reason was a favourite feeding ground of the fishes. On dark nights we frequently had a crew of negroes row us out, or I would drift on the lagoon in my own boat and watch the dark forms of strange fishes change the calm sea into a seething caldron of light, due to the presence in the warm water of hosts of phosphorescent *Noctilucae* and jelly-fishes of infinite variety.

At such times the sting rays of several varieties, and occasionally the great manta, the colossus of the tribe, came in. One of the latter leaped so near our boat one night that we beat a precipitous retreat. A ton or two of animated manta would

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have made short work of a boat. The black whip ray and a beautifully spotted eagle ray were the chief visitors, and whether in play or in battle they were constantly jumping and falling, their broad shapes striking the water with a report like that of a cannon, a sound that would go reverberating away over the reef to be repeated by others, the sounds coming like echoes. Such nights were often hot, as it was in latitude of the Tropic of Cancer, and the Southern Cross was just looking over the horizon ; but the heat was tempered by soft, gentle night winds. We frequently fished for sharks at night, or any big game on the edge of the channel, and played them from the shining sands of Long Key. It was not a difficult matter to hook a ray, day or night. Baited with a mullet or some equally succulent game, the line would be taken, sooner or later, and often by a stingaree, when we would jump into a boat, and let the game tow us away.

With a sixteen-ounce rod the spotted eagle ray will give the angler a contest that is worthy of the name and at times prove itself to be conqueror, leaping into the air repeatedly, coming down with a startling crash to dash along, a weird and ghostly shadow, to come up again and involve the angler in a maze of convolutions often, at least here, to his undoing. The water was shallow, rarely over four or five feet deep ; hence the manœuvres were always visible during day fishing.

I think the most exciting method of taking the large rays is to grain them. The Florida grain is a two-pronged barbed spear like a U, which fits over the pointed end of a pole and is attached to a long cord. I used a light dinghy, and sculling with my left hand, holding the grain pole in my right, could steal up on the big eagle rays and take them. I have frequently been jerked off the deck of my little boat when playing the eagle ray, or thrown over into the shallow water as the powerful fish would turn suddenly. Of all the rays this *Aetobatis narmari* is the most attractive, owing to its spots.

In fishing for channel-bass just inside the pass at Aransas,

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Texas, about one hundred miles south of Galveston, an eagle ray of large size jumped near us, went four or five feet into the air and nearly landed in the boat. At Tortugas I once jerked a large moray into my boat, and in a few moments it had, accidentally or otherwise, chased me overboard. I think if this eagle of the sea had landed in the boat I should have taken to the water without discussion.

In California there are several rays which make a good fight when hooked. One resembles the eagle ray, but is black, with a white under surface and a lash-like tail which is elevated at an angle of forty-five degrees when the ray is resting on the bottom. I have played individuals which weighed forty or fifty pounds, and concede them to be hard fighters, easily tiring out a tyro with a rod or hand-line. The objection to them all is, they are useless, not edible.

The king of the ray tribe is the great *Manta birostris*, the devil-fish, or sea-devil, fairly common in Florida and the Gulf and on the Pacific side up to Santa Catalina, where one specimen has been seen. Taking a manta is like shooting an elephant or a rhinoceros. It is fishing of the most strenuous kind, and can be compared only to whaling, as the fish is taken with the grains or larger harpoon. So many stories are told regarding the terrible nature of this fish that it is difficult to separate truth from fiction ; but it can be said that it is merely a giant ray, often twenty, and doubtless thirty feet across, weighing possibly a ton in large individuals. It is a harmless creature when left undisturbed, and even when attacked is dangerous only in that it can tow ten or twenty boats out to sea unless killed, and a blow of its extraordinary ' wings ' is sufficient to kill a man and crush a small boat. Its very size and clumsiness make it dangerous. I can conceive of nothing more interesting than to see this wonderful fish swimming, the personification of grace. It is shaped very much like the eagle ray, the tail being shorter and stouter. The really extraordinary features are the two fin-like claspers at the mouth which, doubtless, are used to wave food into it.

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Fifty years ago, chasing this fish in rowboats, harpooning it and allowing it to tow the boat for miles, was the sport of sports of the wealthy planters on the coast of South Carolina. Every year dozens were killed amid much excitement. The fish is fairly common from Tampa down, and my father once saw a large school at Tampa Bay sailing around and around in a great circle. At Tortugas a large one picked up the anchor of a schooner by running against the chain, and towed the vessel out of the harbour—a feat that has been duplicated several times in other localities. A friend took several mantas near the mouth of the Mississippi and sent me his photograph sitting in the mouth of one of the monsters. I have had some interesting experiences, if being towed about counts for sport. At St. Petersburg, Fla., boats have been built like catamarans, by members of the Tarpon Club, especially for this sport, and a number of mantas taken with exciting accessories. At the Tarpon Club, Aransas, a manta was harpooned some years ago that did not appear annoyed at towing fourteen boats.

The most extraordinary experience I know of with a large manta is that of the Hon. C. G. Conn of the Tuna Club, in Mexico. He harpooned the enormous fish, which after towing him about, settled on the bottom, but not before it threatened to haul a launch under water. Mr. Conn made a most gallant and dangerous fight with this fish, but at the end of a long-continued battle he could not move it or pull it to the surface. The battle was made from a twenty-foot gasoline launch, but to end it Mr. Conn hailed his seventy-ton steam yacht, passed the rope aboard and by this means started the fish and brought it to the surface, killing it after the pluckiest fight on record with so large a fish. Mr. Conn's fish is shown in various positions in the accompanying illustrations. The name of the California sea-devil is *Manta hamiltoni*.

The dimensions of this extraordinary fish, for which I am indebted to Mr. Conn, are as follows : depth, two feet six inches ; weight, one ton four hundred and fifty-two pounds ; width across

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the back from tip to tip of the fins, 'wings,' twenty feet. Actual length of the wings, five feet five inches. Width of the mouth, two feet nine inches. Across the head from eye to eye, five feet; from base of the tail to mouth, eleven feet eight inches. Length of tail, six feet six inches. The fish literally weighed two thousand six hundred and fifty-four pounds; was twenty feet broad, and about nineteen feet long, which, doubtless, gives Mr. Conn a record which will stand a long while on the records of the Tuna Club.

In the Mediterranean and in European waters an equally gigantic devil-ray is found, *Mobula edentula*. Another species, *M. hypostoma*, is known from Brazil, and one equally large from Japan, *M. japonica*, where it is sometimes brought in and generally eaten by the Japanese. The manta will not appeal to the angler, but harpooning and graining is an art and a most interesting one; one requiring, if the game is large, no little skill, cleverness and good judgment. Graining a ray or a sawfish is productive of excitement in all its variety. The sawfish up to six hundred pounds has been taken by Mr. Edwin Vom Hofe with tuna tackle—a remarkable catch. As I write these lines my mind reverts to a duel I once had with a sawfish ten or more feet long. I grained it and was towed about for some time, but finally, with the aid of a companion got alongside. I have a vivid picture before me of the big fish rearing up, practically standing upright, waving its deadly saw up and down, then driving it into my cedar boat until the ivory pins broke off, suggestive of what might happen. It is sufficient to say that when this occurred I dropped into the bottom of the boat and laid low, while my dusky companion stood not on the order of going, but dived overboard. In the confusion the sawfish broke the grain-line and swam away, much to my relief.

CHAPTER XXXIV

SOME GAME FISHES OF AFRICA, AUSTRALIA, NEW ZEALAND AND NEW SOUTH WALES

'By the way, old Cotton's instructions, by which I hoped to qualify myself for the gentle society of anglers, are not worth a farthing for this meridian.'

Redgauntlet.

IN the enormous coast-line of Africa the angler may expect to find a variety of possibilities, and he will not be disappointed, as there are in the Indian and Atlantic Oceans, the Red and Mediterranean Seas prototypes of all the great game fishes of the world : the tunas, bonitos, great crevallé, ponderous representatives of the sea-bass, white and black sharks of all kinds, the black grouper, and off Madagascar, one of the most wonderful of all the swordfishes, the sailfish, the resplendent dorsal fin of which opens up like a sail, and is painted all the colours of the rainbow. It is more like some radiant tapestry than a fin, to be folded up and stowed away, or elevated at pleasure.

I passed Tangier one wishful day, but have never fished there. There are fishes to be had—wrasse, bass, red and gray mullet, and offshore is the highway of the tunny and swordfish. In Morocco you may go to the Wad Tensift and angle for barbel.

The greatest tunny fishery in the world is found not far off the North African coast. Its rivers abound in strange fish of stranger habit, yet with all the wealth of material there is less attention paid to angling than in almost any other region of the world. Fishes are caught, but with very little idea of sport, except where Englishmen are stationed at the various ports. In Natal there are fishing clubs, and the inherent love of sport crops out ; but the coast at Natal is not a particularly happy one for

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angling, due to the fact that the land has few beaches. The deep water comes suddenly, and the angler is forced to cast from the rocks into the surf, or into deeper water, or go out into the rougher water from the pier. Surf fishing is very popular here, as it is on the long sloping beaches of California, where hundreds of anglers angle and cast for the fine surf fishes of these regions. In Natal there are a number of casting teams, which in 1908 competed for the Nicholas challenge cup, the anglers coming from the south coast, Durban and other localities. The teams in that competition were named after the fishes angled for: the 'Benders,' a large rod-bending fish; the 'Crackers,' a big mussel-eating sheepshead-like fish; and the 'Springers,' named for a leaping fish, calling to mind the ten-pounder of Florida or the lady-fish (*Elops saurus*). The competition here was most exciting, some fishing at night, and landing a most interesting assortment of fish, among which was a variety of white sea-bass, known in Natal as salmon-bass (*Sciaena*), which tipped the scales at seventy-five pounds, the so-called shad (*Temnodon*), not to speak of skates, sharks and other game. The sand-shark here of twenty pounds is highly appreciated for its hard fighting proclivities.

The game fishes of Natal include the barracuda, the kingfish, which attains a weight of over two hundred pounds, and is taken trolling with a live bait. The Cape salmon, though not a salmon, but of the white-fish group, is esteemed by some. Then there is the grunt, which ranges up to twenty pounds, and the mullet, which is taken by the natives with floats and a paste lure. The rock-cod of from ten to seventy pounds is a good fighter. Here, too, is a bream, a white fish with a yellow stripe along the side.

One would hardly expect to find American rainbow trout in Central Africa; but, according to Mr. William Wheeler, they have been introduced at Zomba, the fish having grown eight ounces in eight months, proving themselves well adapted to the rivers. Brown trout are also to be introduced.

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In all probability, the best or most satisfactory big sea-fish, from the angler's point of view, is the gigantic white sea-bass, to use the California term, as it is of the same family, but known in Africa as Kabeljou. It makes an extraordinary fight on tuna tackle, though it is often taken with very heavy rods and the enormous reels (winches) used by some of the African anglers. One of the largest of these fishes was taken in 1911 by Mr. Breeton Todd of St. Johns, Pondoland, South Africa. The fish was nearly six feet in length, yet was taken on a six and three-quarter ounce steel-ribbed trout rod in an hour's play. It weighed fifty-seven and one-half pounds.

One of the most attractive streams of New South Wales is the Goodbarragandra in the Thumut District. There is good bass fishing in the coastal streams of the south coast with a fly. This is particularly true of the Kangaroo River where members of the New South Wales Rod Fishers Society fish. This club, of which Dr. A. J. Brady, of Sydney, is president, is doing yeoman's service in seeing that streams are stocked and a high standard of sport maintained. Mr. J. E. Patterson fished the Wollondilly River and had excellent fly fishing for bass, taking fish up to four and a half pounds, while Mr. H. J. Soloman took many in the Brindabella. New trout streams have been developed lately by members of this club, as the Upper Tumut, the Upper Snowy, the Lower Snowy near Bobundra. Good bass streams are the Tuross near Bodalla, Upper Nepean, Grose River, Wandrawandian, Middle Harbour, Cowan Creek, and others. The Snowy River has been stocked with Macquarie or Murrumbidgee perch.

The rivers and streams of New South Wales afford excellent sport and the Rod Fishers Society, of which the Earl of Dudley, late Governor General, is patron, has done excellent work in improving the fisheries and exalting the sport. Among the good streams are the Williams, Hunter, Paterson, Nepean and many more, mentioned in the Trout Fishers Directory and Map used by the Club. Other good streams are the Big Badja, the

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Tumut, and the stretch from the Junction of Jonnama Creek to seven or eight miles below the Budlong Falls, according to the report of the Club, abounds in trout.

It is a remarkable fact that New Zealand, a beautiful country with abundant water, splendid streams, had practically no game fishes when originally discovered. It is now well stocked: salmon and Loch Leven trout from England, and many American fishes including the rainbow, chinook salmon, brook trout, white-fish, sock-eye salmon, Sabago Lake salmon, Mackinaw trout, lake herring and catfish. The rainbow trout has been particularly successful, specimens weighing twenty pounds having been caught; these from a little stream running into Lake Tarawera. They are abundant in Lakes Rotorua and Rotoiti. The chinook now spawns in the Hakatar river, and anglers have taken the chinook at the mouth of the Waitaki River. An interesting fact was developed here. The eggs of chinook were from winter run salmon in the United States, and so far, in New Zealand there has been no summer run. Mr. Agson, inspector of fisheries for New Zealand, says:

‘The value of the introduction of these foreign fresh-water fishes into New Zealand waters cannot be estimated. Formerly it was a country where rivers and lakes were devoid of fresh-water fish of any value; now they are teeming with fish of the finest quality for sport and food. All this has been attained partly by the perseverance of our own people and by the generous assistance given our Government by the United States Bureau of Fisheries and its officers, in supplying any fish eggs required.’

New Zealand has a great future as an angling paradise. It has five thousand miles of sea coast, and it is difficult to travel a mile without finding a stream, most of which are rivers fed from glaciers, hence never dry. There are countless lakes and chains of them, capable of supplying fresh-water fishes of all kinds.

In Sydney, Australia, the sea anglers of the various clubs, one of which is the Kuriwa, have sport with a large bream-like fish called the Schnapper, which resembles a Florida reef porgy,

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one of which I caught of such size that he had a convoy of two or three remoras that undoubtedly thought it was a shark. The Sydney schnapper also resembles one of the red snappers of Florida, and is taken in the Gulf of Mexico in just about the same manner. He looks like the schnapper and is just as red, but has not the large hump of the Australian red bream. The anglers go offshore at night at times and, according to Mr. Aflalo, in whose delightful *Salt of my Life* I find the account of his own experience, have a sort of tournament. The fishing is at Botany Bay, beginning at daybreak, about a mile from shore. Each angler has a station, chalked off on deck, and at the word the secretary fires a pistol and the sport is on, the red schnappers beginning to come in just as I have hauled up the red snapper from the deep holes of the Gulf of Mexico a few miles off East Key. The same hand-line tackle is employed, rods being no aid in such sport, though the bass anglers of New York, who go out in steamers to the banks off Sandy Hook, all use rods.

The Australian schnappers run up to five or six pounds and are hard fighters. Botany Bay affords good sea angling for black bream and various other fishes. There is also rock fishing for the local grouper, which comes after various trigger fish and others, and is large and strong. Then there is trumpeter fishing at Hobart and a giant perch in the mouth of Fitzroy River, one of the interesting estuaries of Queensland, a fish requiring infinite patience to catch, I judge, as Aflalo drops into poetry while angling for it and quotes :

‘ I am waiting, I am waiting
Just to tell thee how I love thee.’

He waited a week or more, then as he was about to sail, his boatman or guide caught a perch, a thirty pounder, and sent it aboard. I had the same experience on the St. Lawrence. After fishing for weeks I sailed away down the Lachine rapids. As we left the pier some one ran down to the shore and held up a forty or fifty pound muscallunge which a lucky angler had just brought in. Such are the vagaries of the angler's life.

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Mr. Aflalo says, 'It was always amusing to watch the little mud skippers, true fishes, out of water hopping about at play among the uncovered mangrove roots.' I think this must have been the really wonderful little *Periophthalmus* of which Moseley speaks in his '*Voyage of the Challenger*.' If our author had taken out his fly rod and baited his fly hook with grasshopper and cast onto the dry, waterless muddy flats he might have hooked one and played him on dry land as he hopped about, and laid the foundation for a wonderful fish story, and a true one, as I understand the feat has been accomplished though I do not recall who told me the tale, at least Dr. Gunther states that this little fish feeds on terrestrial insects which it catches out of water.

CHAPTER XXXV

THE GAME FISHES OF JAPAN, CHINA AND THE PHILIPPINES

‘ You strange, astonished-looking, angle-faced,
Dreary-mouthed, gaping wretches of the sea,
Gulping salt water everlastingly,
Cold-blooded, though with red your blood be graced,
And mute, though dwellers in the roaring waste.’

Leigh Hunt.

IN the garden of a great Prince of Japan, poised on a wooden base over a beautiful miniature lake, is a gigantic and grotesque fish, which must weigh a ton, possibly several. As to its significance, or what it means, I do not know, but there it is ; and of all peoples the Japanese are the only ones who seem to have thought the fishes of enough importance to enshrine a statue of a fish as the central point of a most beautiful estate.

I fancy this fish was caught by Ebisu himself and placed here in his honour, as it is just about the sort of fish one would imagine Ebisu would land, if he landed anything. My reason for so thinking, is that Ebisu was the very oldest fisherman of whom we know anything. He told fish stories twenty-five hundred or more years ago.

We can go farther back even than Ebisu to his father, who was one Oanamuchi, who lived by the seashore off which there was a large island, like the Isle of Wight or the Isle of Man ; only this particular island had tall mountains whose crests were hidden in the clouds most of the time. For something, possibly exaggeration on the high seas, Ebisu was sent or banished to Oshima, where he was expected to die of starvation ; but he went fishing instead, and became so wonderful an angler that he even refused

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to catch more than he could use ; and so became the immortal of the anglers, for this was a wonderful virtue twenty-five hundred years ago.

Ebisu was so patient that he at last attracted the attention of his mother, who said to him on the gentle winds of the morning, which in this instance was the *Kuro Shiwo*, ' Fish, fish, my son. By fishing shalt thou live. By fishing shalt thou be made a man.' So Ebisu became the great fisherman of the universe to the Japanese. All things came to his net, and as a natural consequence, he became a fish-god : and the big fish you may see in the garden of the Prince, is an offering to Ebisu, who at least took his catches inland where he met the god of good luck Daikoku. It does not require much imagination to see the picture : Ebisu with a big red tai or snapper beneath his arm, and Daikoku, smiling with good luck, sitting on a bag of rice, ready to exchange rice for fish, good luck for anything. If you wish proof of this, you may turn to the books of the Japanese or to their wonderful ivories, where you will see Ebisu with his fish and Daikoku with his smile of good luck, so essential to the angler, every one of whom ought to carry a little ivory figure of Daikoku, instead of a rabbit's foot.

These two gods appear to have struck up a happy companionship and became the twin luck gods of Japan ; no two gods are better known or more cheerful additions to the life of anglers in Japan, or anywhere, as Ebisu is just as efficacious a god in England as in Japan. Ebisu and Daikoku have had many trials and experiences. Their combination of good luck and good angling enabled them to take marvellous catches of tuna, conger, bass, and all the fishes of the sea ; and as emblematic you may see Ebisu everywhere in Japan with a big red tai under his arm and Daikoku smiling good luck in ivory, wood and stone.

The moral of all this, is that when the reader goes to Japan to take Benisashi or Kajika, he should first make his obligations to Daikoku, then to Ebisu, and having the right bait, and a good boatman, he will catch all the fishes of the sea.

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We know little about Daikoku or Ebisu in America, or the mother country ; but did you ever notice when you are going off on a fishing trip, your less fortunate friend calls out, ' Good luck ! ' You may be sure that Daikoku had something to do with it, as the Japanese have not a monopoly in good luck.

Japan, the Japanese and Japanese fishes have something very much in common. They suggest one another. The wonderful three-tailed Japanese carp or gold-fish could have originated nowhere else than in Japan. I once saw a Japanese book on them, giving the many different varieties, their names, and pictures of them ; some with two tails, some with three, and some with telescopic eyes. They were white, red and gold, plain and diversified ; and I remember that one was the fish of the black cross, the fish bearing a black cross on its back.

I am indebted to the Hon. Shinnosuke Matsubara, Director of the Imperial Fisheries Institute of Tokyo, for some interesting data relating to these strange fishes. He says that the Japanese obtained them from China ; but they have improved them and produced many new varieties. Some of their names are Wakin—slender, long, vermilion-red, with white tail which has four lobes ; the Ryukin has a short rounded body, with a flowing tail ; the Ranchu is almost round ; the adult has a reddish crown and is called the Shishigashira or lion-headed ranchu. Then there is the rare-headed ranchu, Oranda, the Demekin with telescopic eyes ; the Watonai with a flowing tail. The Japanese, as Mr. Akiyama Kichigoro, a ' Gold-fish Breeder in Tokyo,' produce these extraordinary fish much as they would a new chrysanthemum.

The Shukin, ' autumn brocade,' fish is a wonderful creature. Shu is the breeder's name and ' kin ' meaning brocade, from its beautiful colour. In 1876 I saw one of these fishes in New York, which was said to have cost \$30,000, and the owner claimed to have refused \$50,000. It was called the Kin-Kiyo. Its tail was a mass of fluffy creamy lace at least six inches long, the body a golden-red. Most of these wonderful fishes are produced in Tokyo, Koriyama, Yamato and Nara Prefecture. The breeding

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is most carefully carried on, and the oddest fishes are sold much as we sell or buy birds as pets. Just how old the industry is, no one knows ; but it is known that there was a fish breeder of the name of Sato Sanzaemon at Koriyama in the Hoyei era in 1704-1710.

The fish of the 'black cross' and various quaint designs are produced by applying dilute hydrochloric acid. Every year in the autumn an exhibition is held and thousands of the quaint and beautiful fishes sold from two cents to twenty-five dollars a pair.

With all the fine sea fishes of Japan, the inhabitants do not obtain the benefit of them, due to the situation of the Islands rising precipitously from deep water and often abysmal depths. The fishermen do not venture offshore where the large fishes are, their boats being very small. The area about Japan within the six hundred-foot line is but seventy-seven thousand square miles ; and this naturally has been very seriously depleted by the four hundred thousand small boats. Up to within a few years, the Japanese knew little or nothing of the fine game in the Kuro Shiwo off their shores ; and in 1906, when a modern gasoline fishing-boat, the twenty-five ton Fuji Maru, went offshore away and made a great catch of bonito, they were amazed and a sensation was created all over Japan.

Salmon and trout have been introduced, and there are twenty hatcheries. American Rainbow trout have been placed in lakes Nikko and Aizu, and in a short time the Japanese will copy our rods and reels, and will be among the cleverest of fly casters and makers.

The most noticeable trout-like fish in Japan is the Hucho (*Hucho blackistoni*), similar to the big trout we have seen in the Danube, where it affords excellent sport. The angler of an inquiring mind will wonder why this trout should exist in these two widely separated regions alone : the northern rivers of Japan, and the Danube, and certain streams in the vicinity of Austria and Germany—one of the seeming puzzles of nature.

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The Chinese have long devoted themselves to fishing, but not to angling, although there is reference to rod angling in their early works. Their ancient classics refer to the time many centuries before the Christian Era when there were officials appointed something like the game-wardens of to-day, or Fish Commissioners ; one Chiang Tzū-ya, who flourished three thousand years ago, is, doubtless, the first man known to fish with a rod. Wei-Ching, W. Yen, Second Secretary of the Imperial Chinese Legation at Washington, says that the man fished with an iron rod, at the age, of eighty. The emperor Wên Wang heard of it, and paid him great honour for twenty years. The clever poet of Punch, author of the following lines, must have had in mind Chiang Tzū-ya :

‘ THE FIRST FISHERMAN .

‘ Beside a vast and primal sea
A solitary savage he.

‘ Who gathered for his tribe’s rude need
The daily dole of raw sea-weed.

‘ He watched the great tides rise and fall
And spoke the truth—or not at all !

‘ Along the awful shore he ran
A simple pre-Pelasgian ;

‘ A thing primeval, undefiled
Straightforward as a little child—

‘ Until one morn he made a grab
And caught a mesozoic crab !

‘ Then—told the tribe at close of day
A bigger one had got away !

‘ From him have sprung (I own a bias
To ways the cult of rod and fly has)
All fishermen—and Ananias ! ’

Punch.

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The modern fishing industry came from this source. Fish culture in China was founded by the Chinese philosopher, Tao-Chu Kung, in the fifth century before Christ. Angling has not become a sport in China for the reason that fishermen are, in a sense, ostracised ; it was not supposed to be a very honourable profession in the old days, and has not yet recovered. American fishes will be introduced into Chinese rivers ; and China now has the sturgeon, perch, mackerel, pomfret, eel, shad, sole, mullet, flounder, herring, carp and bream.

There is little or no angling in Japan, as we understand it ; no definite theory of sport ; but the Japanese are the cleverest fishers in the world. To them the objective is the fish and an abundance ; the ways and means count for nothing. They have invented a weird little fly of all colours that is a killing lure for young sardines and mackerel. They are philosophers in training birds to work, so saving them the trouble. It is a marvellous sight to see them go out with a dozen long-neck cormorants, their necks encircled with a ring, each bird held with a cord, and each bird catching fish for its master as fast as the latter can pull it in and make it disgorge. Fish caught in this way are eaten only by the lower classes. The Japanese fisherman has come to America, and will doubtless drive out the Italian and the Greek. He is too clever, and he invents methods of taking fish that are uncanny. As an illustration : the Santa Catalina Channel, from one to five miles off shore, is the feeding and spawning ground of the long-fin tuna or albacore. Anglers with the rod, troll for them with sardine bait, a bone jig or spoon, and with this tackle, they take four or five and call it a morning's sport, as the fish run from twenty-five to forty pounds, and have been seen up to one hundred. Sometimes this tuna will not bite ; but not far away you will see four or five staunch sea-going power boats stretched across the channel, half a mile apart. Ebisu is in the forechains and Daikoku in the prow ; and astern stands a Japanese who is hauling in the long-fin tunas so rapidly that the deck is two feet deep with them, and in a manner only

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possible to Ebisu. In one hand the Japanese fisherman holds a stiff but very long bamboo rod with a ten-foot stout line, the hook baited with a live bait. In the other, he holds a bamboo staff, the end of which is a little paddle. He casts the live bait, which swims and struggles, and with his left hand scoops up the water with the paddle and scatters it about, making as much noise, apparently to frighten the fish, as he can, at least that is the opinion of the American anglers, who without Ebisu are watching this extraordinary performance on their own preserves. Instead of alarming the tunas, it seems to attract them. In any event, he sees the splash from far below and thinking it is a school of fry feeding, rushes upward like an arrow from the bow, sees but one fish and takes him, to be unceremoniously dragged aboard. I once watched this astonishing spectacle for several hours; and the Japanese, aided by Ebisu and Daikoku, took a long-fin tuna of twenty or thirty pounds every ten minutes, filled their boat to overflowing, and steamed away to San Pedro, where the fish were either canned (tinned as tunny) or sold to the fertilizer plant to be ground up and sold to orange growers. In this and other ways, the Japanese is devastating the fisheries of Western America, and is accounted an extinguisher of game.

Japan is washed by the fine tropical Gulf-Stream of the Pacific, which sweeps up from the tropics, and moves in as the *Kuro Shiwo*, carrying balmy airs to Alaska and the North Pacific, British Columbia, and the coast of California, Washington and Oregon. Up this great highway from the south come countless hordes, and many varieties of fishes from No Man's Land. Some remain in Japanese waters, others go on and on, in the *Kuro Shiwo* until they reach Santa Catalina; two notable instances being the Catalina swordfish and the yellow-fin tuna, both of which were first known from Japan. The former is now more plentiful at the California islands than it is in Japan, where it was named *Tetrapturus mitsukurii*. It has been described, as has the yellow-fin tuna, in another chapter, and these two fishes can be considered the chief game fishes of the Mikado's dominion.

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In and about the four islands of Japan—Hondo, Hokkaido, Kiusui and Shikoku, there are nine hundred species of fishes, many of which can be included in the term game, *i.e.*, edible, and hard fighters on rod and reel. Add to these about two hundred species from the islands to the north, and we have, according to Jordan, a grand total of one thousand one hundred species, fifty of which are from the lakes and rivers.

So similar are the fishes of China, that a description of one practically applies to the other. In Northern Japan, or north of Yania and Mats-shima Bay, we find salmon and trout and good sport. In the south, there are trout, though gradually disappearing, the Ayu or Japanese dwarf salmon taking their place.

The Japanese have a large catfish called Namazu (*Parasilurus asotus*) that affords a certain amount of exhilaration in the catching. Dr. Gunther, the English author, pointed out a remarkable similarity between the fishes of Japan and those from the Mediterranean. This he explained by stating that at one time the coast of Spain and Italy had a continuous line to Japan. Japan has four hundred and eighty-three or more genera of marine fishes. Of these, one hundred and fifty-six are common to the Mediterranean, one hundred and eighty-eight to the West Indies and Japan, one hundred and sixty-nine to the Pacific coast of Japan, California and Mexico. When we come to Hawaii, the angler will take there ninety genera which he has landed in Japan, and the angler of New Zealand takes sixty-two, which are common in Japan, two hundred and four are identical in India and Japan; and the members of the angling clubs of Australia catch two hundred different genera identical with those taken in India; hence, even to the angler, the geographical distribution of fishes is a fascinating study, and can be used in a way in determining the rise and fall of continents and the existence of ancient coast-lines.

Of all the game fishes of Japan, the little Ayu or Japanese samlet is the most appreciated by visiting anglers, as it is sure to take a dry fly. Now, I have only hearsay for this, but Dr.

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Jordan tells us that he ranks it second among the food fishes of the northern hemisphere, giving the little candle-fish, *Eulachon*, first place; a valuable little fish, so full of fat that you may stand it on its tail and light it as you would a candle, then blow it out and eat it.

A fine trout of Japan is the Yamabe (*Salmo perryi*). The Japanese do not waste time with a two-ounce rod to take the Ayu, but go after them with a pack of trained cormorants as previously described. The Tamagowa is said to be a fine stream for fly fishing, but is devoted to the cormorant, that swallows the little Ayu and is forced to disgorge by its master, who sees nothing out of the way in the process.

In Tokyo Bay you may see men and boys angling with bamboo for Tai, the redfish of Ebisu, one of the best of the fishes of the people. The Kuromutsu is also a hard fighter about Misaki, and the ocean abounds in several Tunas and Cavallys that carry destruction to the lines of the men or the nets of the fishers after the gigantic spider-crab.

The bass tribe is represented by several large and fine game fishes, notable among which is Susuki, *Lateolabrax Japonicus*. It resembles, tastes and fights like the Florida Robalo. Then there is the Ara, a big fighter of the bass clan. This is the *Nippon spinosus* of science. The Japanese have their jewfish or black sea-bass in the Ishinagi (*Megaperca*), better known as the stone bass. Another big bass is *Abura bodzu* or fat priest (*Ebisus sagamius*). A friendly angler told me that he had fished for several of these fishes and found them hard and lusty fighters. There are several large grouper-like fishes—the red grouper (*Epinephelus*), and one of the most beautiful of the family. The black-banded grouper. Other quaint Japanese game are known as Tengudai, Matodai, and Odawara, the latter a fine fish and thoroughly game.

A fine handsome fish taken after the fashion of the American bluefish is Aphareus. The Japanese porgy, Tai or Akadai, previously referred to, is of national importance with the chry-

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santhemum and rising sun. This is the Red Tai, always pictured under the arm of Ebisu. But there is another, the Kurodai or Black Tai. The tuna ranges into Japanese waters and several large jack-like fishes, while the wanderers from the south are many and sufficient to justify the angler in stopping in Japan, and trying them with rod and reel.

The taking over of the vast area known as the Philippine Islands, off the coast of Asia, by the government of the United States, to hold them and to educate the natives and fit them to govern themselves and have independence, is an illustration of one of the great national philanthropies of the age. The accession is of interest to anglers, as the United States government has had the region most carefully investigated and explored, with a result that while the work on the fishes is in no wise exhausted, enough has been done to show that here is one of the most remarkable fields for the sea-angler.

The Philippines, that were well named by Ruy Lopez de Villalobos in honour of King Philip II., are particularly interesting to the angler from the fact that they begin virtually in the Tropics and reach the Temperate zone, or about sixteen and a half degrees latitude, beginning between the fourth and fifth degrees north of the equator and extending for one thousand one hundred and fifty miles, occupying an area of about seven hundred miles in width or east and west. This vast area ensures a marvellous variety of game. The north islands of the Batan group are but one hundred miles from Japanese Formosa, two hours travel in a modern aeroplane, while the Sultan of Sulu, now an *American*, could reach north-eastern Borneo in one hour if he was inclined to utilize this method of navigation.

Assuming this is a vast fishing ground, we observe some of its features. There are over three thousand islands. Luzon and Mindanao have areas of forty thousand and thirty-six thousand square miles. There are nine others, with areas of from one thousand to ten thousand square miles, and three hundred and

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fifty more having an area of from one mile upward, making in all a land area of one hundred and fifteen thousand square miles, a water surface to fish on of seven hundred thousand square miles, and a vast and varied coastline of many thousands of miles.

Its possibilities in the way of angling are seen in the fact that it rises out of deep water, yet there is a shelf of from one hundred to three hundred miles offshore. It lies entirely within the Tropics, yet its lofty mountains, from four thousand to nine thousand feet in height, give it an assortment of cool and delightful climates. It has numerous rivers, as the Cagayan, Agno, Pampanga, Agusan, and Colabata in Mindanao. In their higher reaches black bass have been placed, and trout will follow. Dr. David Starr Jordan has prepared lists of the fishes of the Philippines, which have been published by the Bureau of Science of Manila, 1910, which show a rich and valuable fauna, practically a virgin field for the angler. In Dr. Jordan's catalogue of species he gives eight hundred and thirty, and states that the actual number to be found here is undoubtedly over sixteen hundred species included in which are some of the finest game fishes of the ocean.

Previous to the arrival of the Americans in the Philippines, little or no attention had been paid to the subject of angling from the standpoint of sport, or even to developing what undoubtedly are the remarkably valuable fisheries. It has been found that the islands shores abound in fine game fishes, and I am informed by Mr. Benjamin Folsom, that the finest fishing in the world has been discovered at Apo Reef, between Mindoro and the Calamianes Islands, not a long trip from Manila. Dean Worcester, the eminent authority on the Islands, was the discoverer of this sea-angler's paradise, where the big barracuda, yellowtail and many large fishes can be taken with great ease and in vast numbers. In a word, here on the Apo Reef, is a Western Pacific Santa Catalina for the delectation of the Americans who are now the protectors of the Philippines and who are educating the natives for governmental responsibilities.

The fishes of this region, while they are tropical, include

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many that are represented in California. Mr. John R. Arnold gives in the following an inkling of the possibilities. He says :

‘ There is some good sport to be had, however, in the comparatively shallow inter-island waters. A party of five on a recent excursion, lasting about a week, captured forty-six pompanoes, with a total weight of four hundred and seventy-two pounds, fifty-seven barracudas, with a total weight of four hundred and thirty pounds, fifty-six groupers, with a total weight of two hundred and twenty-nine pounds, ten Spanish mackerel, with a total weight of one hundred and twenty-five pounds, and seven red snappers, with a total weight of forty-one pounds, besides others, bringing the gross weight up to sixteen hundred and sixty-four pounds, and the total species to twenty-two. The best fishing grounds were found in Malampaya Sound off the Culion (north of Palawan and Sztanki), south of Mindanao.’

Not far from here, about forty miles north of Mindanao, is one of the great mysterious deeps of the sea, where a region of eternal night prevails, almost incomprehensible pressure and a temperature just above freezing. This hole is six miles and four hundred and six feet in depth ; so from the actual base of the vast mountain, represented by the Philippines, one would climb upward six miles, then a mile more to the peaks of some of the Philippine mountains. The ocean is nearly six miles deep near Guam. This is of no particular interest to anglers except that it is theoretically possible to go a-fishing with a line six miles long, and it is known that near some of these great deeps the fishes could find the lure by their phosphorescent lights.

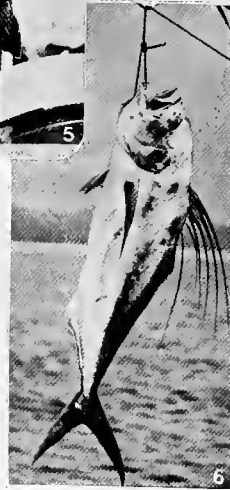


Fig. 47. Sea Angling in Mexico.

1. Black Sea Bass (a morning's catch by Hon. C. G. Conn). Gulf of California, Mexico.
2. Major F. R. Burnham—and author after. White Sea Bass, Sonora. 3. Group of Mexican Fishes. 4. White Sea Bass 5. Spotted Bass. 6. Rooster Fish (Papagello), taken by Hon. C. G. Conn.

CHAPTER XXXVI

THE GAME FISHES OF HAWAII

'And there were crystal pools, peopled with fish,
Argent and gold; and some of Tyrian skin,
Some crimson-barred.'

Thomas Hood.

THE angler who visits the Hawaiian Islands, if of an inquiring turn of mind, will observe two peculiarities in the fish life. They are beautiful beyond adequate description, and appear to be entirely different from those of any other locality. It is a well-established fact that the fishes of this region are isolated and peculiar to a remarkable degree; and there are many species indigenous to the Islands and absolutely unique.

Why this is so, the angler may demonstrate by studying the great ocean currents and the locality. The Islands are alone, in the centre, one might say, of a great whirlpool or vortex. Up from the islands of Clarion and Socorro, of the Revillagigedos group, sweeps a great current, passing to the north and west by the Islands and on to the Ladrões. Over to the north flows the great sea-river, *Kuro-Shiwo*, carrying soft whispering winds and summer to the coast of California, where, perceptibly cooled, it is deflected to the south, yet modifying the entire coast and forming a highway down which wander fishes of Japan, Otchotch and Alaska. To the north-east is an extraordinary spiral current, known as Fleurien's Whirlpool. Westward from the vicinity of Hawaii flows a great current, the hot Celebes river of the ocean, which becomes the great Black Current of Japan, the *Kuro-Shiwo*, which we have seen. To the north are the islands discovered by Captain Cook, among the most beautiful and romantic of all the islands of the Pacific—the greatest and

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deepest of all oceans, averaging three miles in depth for thousands of miles.

Under these circumstances it is little wonder that the fishes in the market, in the Aquarium, and those brought in by the fishing boats, arouse the greatest admiration; yet, so far as sport is concerned, very little is heard of the game fishes of Hawaii. The uku (Apion) is a fine fish. The Hawaiian mullet (*Mugil cephalus*) is said to take a fly, though my memories of mullet are always a school enveloped in a coppery cloud of mud which they stir up on the Florida reef, at least in feeding. The large parrot-fishes of Hawaii are resplendent creatures and will astonish the angler by their strength. Few are taken in this way, as a small but very powerful hook is required.

While many of the fishes of Hawaii are peculiar to it, many of them are found elsewhere, as the swordfish, the large cavally-like fish, and many more found outside the reef. The awa (*Chanos chanos*) attains a length of five feet at Hawaii, and would be considered a game fish in many lands. It is found commonly in the old artificial fish ponds of the old kings with big fat mullets. It is also taken on sandy beaches in the Gulf of California.

The Hawaiian Islands were discovered by Captain James Cook of the British Navy, on the eighteenth of January, 1778, and named by him in honour of his friend the Earl of Sandwich. The *Resolution* discovered Maui on the twenty-sixth of November, 1778, and Hawaii on the twenty-ninth—a remarkable and interesting find in mid-ocean. I refer to this as the expedition took to England a few of the fishes which have since become famous for their beauty, and which were described by Sir Joseph Banks. Since then several British zoölogists have collected fishes here, as well as those of other nationalities, and Dr. Gunther alone recorded seventy-eight species. In 1902 the United States government made a most elaborate survey of the Islands under Dr. Jordan and Dr. Evermann. They describe four hundred and forty-one species of fishes, called shore fishes. Of these two hundred and thirty-

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two species are confined to Hawaii, Tahiti, Fiji, Samoa, etc ; fifty-three common to Hawaii and Japan ; thirty-four common to Hawaii and Maui.

There are some familiar American fishes, as the ten-pounder, *Elops saurus*, one of the most active of the tarpon-like fishes. In the Oio we recognize the lady-fish, and the Kaku is the barracuda, of which there are two species. Among the mackerels the Frigate mackerel (*Auxis*) is common ; a fine fish on the rod, occasionally taken at Santa Catalina. Here, too, is the Aku, which means ocean bonito, and the 'little tunny,' or common Santa Catalina bonito, known as the Kawakawa. Also the hard-fighting long-fin tuna, now called the Ahi. The California bonito, *Sarda chilensis*, is found here, with the Peto or Ono, the giant mackerel, which the ancient islanders found by Captain Cook believed was the father of all the small mackerels. The Walu (*Ruvettus*) is a savage-looking fish, shaped like a yellowtail, powerful, alert, and doubtless will receive the attention of the angler of the future in these seas of romance and plenty. The yellowtail (*Seriola*) is represented at Hawaii by a number of fishes, and locally known as the Kahala. It attains a length of three feet. Another is Kahala opio (*S. Sparna*), and is a composite between the Santa Catalina yellowtail and the amber-jack of Florida.

In the Tuna Club collection of photographs, at Santa Catalina Island, there is one of a Hawaiian fish known as the Ulua. This means literally big fish, but it is applied to a member of the Jack family, cavally or Carangus. There are Carangus Papio pio (small), Pá upáu (medium), and Ulua (large size). Nine species of these hard-fighting fishes are found here. The Ulua at fifty pounds is easily the head of the list and a great and powerful fish, that, when rod and reel sea-anglers begin to invade these beautiful islands, will become well known.

The photograph referred to was of a fish taken here by a member of the Tuna Club who compared it to the tuna as a hard and tremendous fighter. There is in the Straits of Florida a

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fish closely resembling the Ulua, which refers to *Carangus marginiatus* or *C. fosteria*.

Native names for others of the tribe are Maka, Amuka, Ulua Pauá, Omilu; all very beautiful fishes. The young of many are barred, the adults having splendid tints of gold, yellow and silver. The dolphin, taken at Santa Catalina, is common here; also a small dolphin (*Coryphaena equisetus*). The sea basses (*Serranidae*) are well represented, and the large groupers so common in Florida, Jamaica, Barbados and Bermuda, are here known as Hapú pú u, and a common catch.

A stroll through the market at Hawaii will afford the sea-angler an astonishing suggestion of the infinite range of the tropical fishes, and their beauty of colouring. One of the comely game fishes of the region and a good food fish, up to two feet, is the Opakapaka (*Aphilus*), a most attractive fish peculiar to the Islands and bearing some resemblance to the gray snapper or black bass.

A fine big game fish, sure of a warm place in the heart of the sea-angler, is the Uku (*Aprion viresceus*), its large powerful tail telling the story of a hard fighter. It should be remembered that scarcely any of these fishes have been experimented with by the angler with the rod, and it is to be hoped that Mr. Afiato can some time visit these radiant islands with the light tackle he has carried all over the globe, and give to the anglers of the world, and the British Sea Anglers Society, a report of the invasion of this island paradise with the rod and reel.

Volumes could be filled with the descriptions of the resplendent beauty of these fishes alone, and if the reader desires information regarding them, he should obtain from the British Museum Library, or that of New York, Boston, or elsewhere, the now rare and out-of-print report entitled *The Aquatic Resources of the Hawaiian Islands*, by Jordan and Evermann, 1905, printed by the government, as here are scores of illustrations in the natural colours of the fishes, showing so bewildering an array of tints, shades and hues that one might well believe that some artist of weird and impossible fancy had attempted to see what

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he could do in imaginary flights of the brush, colour and shape.

One of the handsomest of the fishes is *Ulaula* (*Etelis*). Like the Florida yellowtail, the fins are large; the upper lobe of caudal being long and graceful. This fish is a gorgeous rosy-red and silver. The Mu is a porgy, and by any other name just as hard a fighter, and there are endless mullets. The beautiful whitefish of Santa Catalina is represented here by the Makaa (*Melacanthus*), and one resembles a long-drawn out Santa Catalina whitefish, with extraordinary colouring.

If the tints of these fishes are remarkable what shall be said of the shape, as in the Kikakapu? The horned Makukana, fishes with knives, which they can unsheath; fishes which inflate themselves into balloons and when released float away before the wind gigantic globules covered with spines; fishes that shoot drops of water; wonderful coral fishes, coloured like birds of paradise, vying with the most gorgeous birds of the Tropics, and in such numbers and variety that the angler is amazed and bewildered at the prodigality of Nature.

The fishes which correspond to the parrot-fishes of the Florida reef are the most marvellous in shape, colour and variety. Nature appears to have literally gone mad in attempting to outdo herself in these isles of the sea, the land of romance, found by Captain Cook not so many years ago and now a territory of the United States.

River fishing in the Islands is uncertain as the rivers are small and either torrents or dry, according to season; but by damming, making artificial lakes, attempts have been made to introduce foreign species. The principal rivers are the Kauai, Oahu and Hawaii. Black bass have been placed in the Walluke near Rainbow Falls. Carp have been introduced into the waters of Maui and Kauai. Catfish have also been introduced, and the hibernating *Ophiocephalus* of China, that successfully resists the dry rivers by burrowing in the mud. Goldfish, introduced by the Chinese, can be found in the ditches. Salmon and trout eggs were sent to the Islands in 1876, but so far the experiments have not been perfectly satisfactory.

CHAPTER XXXVII

SOME GAME FISHES OF SOUTH AMERICA

'I will give thee for thy food,
No fish that useth in the mud.'

Beaumont and Fletcher, 1611.

THE great continent of South America, covering many of the degrees of latitude of America of the north, possesses, especially in its sea angling, many fine game fishes, which find a prototype in those of the north or Europe; Germany, England, France. Many European countries have sent their people to South America, and they have taken their angling tastes with them; hence we find American and German trout, and English, American, German, Spanish and Portuguese methods all over the continent. In the north, along the Amazon and its tributaries, are found some of the most interesting fishes in the world, from the weird electric eel to little fishes, veritable man-eaters, and along the British, Dutch and French Guianas are many sea fishes which lend themselves admirably to the rod and reel.

The tarpon is found along the north South American coast and in vast numbers at Tampico, Mexico. The Caribbean Sea is noted for its big sea game, the Jacks (*Caranx*), especially being fierce, large and numerous. One of the large and extraordinary fishes of South America is the Arapaima, *Studis gigas*, found in the upper reaches of the Amazon, and giving South America the claim of having in all probability the largest of fresh-water fishes, as the big, pike-like *Arapaima*, a cousin of the herrings, attains a length of fifteen feet, weighing from three to four hundred pounds, and is a match for half a dozen natives.

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A friend who had taken this monster gave me the following account :

‘ We were moving up one of the upper branches of the Amazon, on a hunting and fishing trip, and José, our guide, had promised to take us to the lair of the game fish of South American waters, a monster that attained a length of fifteen feet and a weight of twelve hundred pounds, and whose strength and activity he was never weary of dilating upon.

‘ The river bank which we were passing was four or five feet in height, and covered to its very edge with trees, which, in turn, were wound with interminable vines or lianes. The stream was continually undermining the banks, bringing down sections of forest into the water with a resounding reverberation, and which floated away as small islands. Soon again José stopped rowing, and again we heard the peculiar splash repeated several times in succession. We were now at the turn, only a narrow spit being between us ; and as the Indian pulled cautiously, we turned just in time to see an enormous fish hurl itself clear of the water, shake itself like a dog in convulsive bends, seemingly scattering a number of small animals that were clinging to it.

‘ “ The otter ! ” said our guide, briefly, giving the canoe a vigorous pull which sent it into the stream. “ See, they are after the *Arapaima*.” And now we observed five or six cat-like animals swimming about in the water, as if looking for prey. In a few seconds they dived, and up came the gigantic fish, so near the boat that we distinctly saw its plight as it rolled over and over. Clinging to it by the gills and fins and throat were several of the little animals, while a number were following and diving after the monster. When they saw the canoe they dropped away and made for the shore. I was tempted to shoot, but the Indian had seized his spear and was now in the bow, asking us to row slowing along.

‘ Instead of a branch of the river, we were in a small inlet or bay, not over six feet in depth, and up this the *Arapaima* had dashed, as we could see by the ripple, and would soon reach the end and turn. This was just what occurred. The big fish almost ran out of the water on a sandbar, scattering a score of turtles that were sunning themselves there, and then, with a convulsive effort, turned and plunged again in our direction.

‘ On it came, its big fin cutting the water like a knife, reminding one of a shark. As it reached us, José drew back and plunged the spear into its side with an underhand blow that lodged beneath the pectoral fin in a vulnerable spot. The moment the fish felt the cold steel it gave a magnificent leap into the air, seeming to rise bodily, showing at once its enormous size, the gleaming coat of armoured scales with which it was enveloped, and also dragging with it three of the otters that had apparently with remarkable ferocity clung to their victim.

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‘The fall of the fish so near the canoe almost swamped it ; but José jerked the handle of the harpoon from its socket, tossed over the coil of line, and with a vigorous sweep of the paddle turned the frail craft in the direction of mid-stream just in time, as it dashed away with the speed of an arrow, then leaping into the air, to fall back heavily, beating the water with its ponderous tail.

‘These actions soon exhausted the line, and with a jerk the canoe dashed ahead, towed by the *Arapaima*. There was no need of José’s warning to get astern ; the first lunge of the fish sent the bow of the canoe deep into the water, half-filling it, at which we tumbled aft as best we could. This brought the bow up into the air, where José stood and managed the line, with his knife between his teeth, ready to cut it if necessary. With unerring instinct, the fish made for mid-stream and deep water, towing us at a rate not to be despised by a steam-boat, making the water hiss about the bow, and carrying a big wave of disagreeable dimensions on either side.

‘In the stream were numerous trunks of palms that had been undermined and were on their slow journey down the river, and beneath one of these the big fish plunged. It was evident that the end had come ; but José was equal to the emergency ; and seizing the paddles, he guided the canoe around the root, and on we sped. “He soon get sick,” José kept repeating ; and finally, when the fish had made a desperate lunge to the bottom, he began to take in the line, passing it along so that each one aided in the work.

‘That one fish, eleven feet in length, could weary and tire out three men seems incredible, but it is a fact. The rushes of the game monster were of a kind undreamed of by the sportsman, and when its plunges came, they could not be met. The line hissed through our fingers and smoked as it went over the slight gunwale ; and to have fastened it meant a break ; so we possessed ourselves in patience and played the game, allowing it to wear itself out, which in time it did. When the line slackened, we took it in, hand over hand, as rapidly as we could, every pull felt by the fish being answered by a lunge that sent the rope hissing through our already burned fingers. But finally the pace began to tell on the big fish. It had towed the canoe an eighth of a mile with leaps, plunges and struggles that proved it a worthy foeman, and now gradually succumbed. Its rushes grew less and less frequent, and without the force and power that characterized them at the onset, and finally José announced that the game was up ; the fish barely responded to the hauls on the rope, and the fight was over. The fish sulked like a salmon and allowed itself to be hauled alongside without a struggle, merely moving its great tail back and forth, propelling the canoe slowly along. Once alongside, a shot in the vertebrae of the neck put an end to it, and it was towed ashore and



Fig. 48

Fishes of Jamaica—Greater Antilles. (Photographed from life, by Hunt).

1. Nassau Grouper. 2. Gray Snapper. 3. Coney. 4. Yellow Tail. 5. Porgy.
6. Angel Fish. p. 364.

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hauled upon the sand-bar, where its dimensions could be admired. No wonder it towed us at steamboat speed so long. No wonder it had put our endurance to the severest test. The fish was over twelve feet in length and must have weighed nearly one thousand pounds. It was encased in an armour of scales of flinty hardness that would easily have resisted a bullet or caused it to glance.'

The streams of South America abound in weird and really remarkable catfishes, some of which build nests; one bears its young in its mouth, while one is game for the angler. This is the *lau lau*, fairly common in the Essequibo River in British Guiana. A friend told me of his adventures with this fish, which I published at the time in the *St. Nicholas Magazine*:

'The Americans made their way in a trading-schooner up the Essequibo River, in British Guiana, to where the Mazaruni flows into it. From this point the journey was continued in a canoe rowed by a native crew. At a spot fully sixty miles from the mouth of the river, camp was made on a white, sandy beach.

'Among a number of curious fishes these American travellers had noticed in the Essequibo was a catfish called by the natives the *lau lau*; and as several had been seen by them, preparations were made for their capture. A large line about two hundred feet in length was baited with fish and carried out into the stream by a small boat, a crotched stick being thrust into the sand on the beach, to which the line was attached to serve as a telltale, and around this a number of the party sat waiting for a bite.

'In a little while there was a sudden jerk, and the line began running out in the hands of one of the Caribs. Twenty or thirty feet of leeway was given to the rushing fish, and then several of the men grasped the rapidly stiffening line. As it came taut they braced themselves and jerked the hook into the fish. For a second there was no demonstration; then a violent plunge tore the line from their hands, hurling them upon the sands, and an enormous fish rose bodily out of the water, falling with a thundering crash and darting off at lightning speed. Knowing that when the slack-in was exhausted the line probably would not stand the strain, it was quickly unfastened from the stick and attached to a small canoe, into which several of the fishermen sprang. This was not done a moment too soon, for with a rush the line straightened out. The boat seemed endeavouring to dive to the bottom, and then away it dashed, hurling the spray high in air behind the invisible steed.

'For an eighth of a mile the great fish towed the canoe with undiminished speed, darting here and there among the sand-banks, now turning

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suddenly to one side, hurling the occupants off their feet and threatening them with constant danger of an upset. The strength of the gamy creature, however, was rapidly failing, and as soon as the speed slackened the men took the line in hand and endeavoured to reduce the distance between them ; but this resulted only in another furious burst of speed. Finally the line was torn from the bowman's hand and it slipped over the gunwale, and in a moment the water was pouring into the canoe. The crew rushed to the other side, climbing up, and finally succeeded in shifting the line and averting a catastrophe. The line was again manned and the canoe slowly brought nearer the victim. After a long struggle the black form was seen darting back and forth under the bow. The man at the bow guarded the line closely, keeping it in the notch, while another native stepped forward, and raising a long, three-tined spear, drove it with all his force into the monster. The result was entirely unexpected. Enraged or frightened by this new attack, the fish seemed to pause for a moment, then rose into the air, and fell upon the stern of the boat, carrying it down under water. As the monster fell, the crew, with the exception of one man, sprang overboard, and swam for the shore ; but the man in the end of the canoe climbed on to the roof of the cabin-like part. As one end of the boat sank, he was lifted high in the air. The fish then, in its terrific struggles, rolled off, and the boat settled, with the terrified native still clinging to his high perch. The fish was now striking the water with his powerful tail, rolling over and over, winding the line about its body, and giving every evidence of its wonderful strength, and might ultimately have escaped had not the party been followed by another canoe of natives, who, having picked up the swimmers, made for the struggling lau lau. In a few moments several spears and arrows had been sent into it, and it was speedily dispatched.

'When the sunken canoe was righted, it was found to be crushed in on one side. The harpoon lines were made fast to the fish, and it was slowly towed to camp and safely landed on the beach.

'As the fish slowly rose and fell on the water behind the line of haulers, it presented a remarkable appearance to our travellers. Nearly thirteen feet in length ; it seemed much larger from its extraordinary bulk. The upper surface was a rich greenish-black tint with a silvery white below, the mouth and fins being a rich yellow. Its head, which was large and flat, was protected by a strong bony plate that extended back to the first dorsal fin. But perhaps the most unusual and curious feature was the long, slender barbels, or whiskers, that depended from each side of the mouth, giving the fish an extremely grotesque and forbidding appearance.'

There are countless fishes in the rivers and their vast tributary systems ; but among the natives, angling as a sport has a very

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indefinite meaning ; but some of the fishing is very picturesque. Thus at Altar Do Chao and up the Topajos, the natives go out at night with lighted torches, harpooning the Pescada, the Cichila, and many more. Fish are taken here also by crushing the vine known as Timbo in the water, which has a disastrous effect on the fishes, bringing them to the surface where they are easily taken in nets. H. W. Bates thus refers to the fishes :

‘ The port swarmed with fishes, whose movements it was amusing to watch in the deep, clear water. The most abundant were the Piránhas. One species which varied in length, according to age, from two to six inches, but was recognisable by a black spot at the root of the tail, was always the quickest to seize any fragment of meat thrown into the water. When nothing was being given to them, a few only were seen scattered about, their heads all turned one way in an attitude of expectation ; but as soon as any offal fell from the canoe, the water was blackened with the shoals that rushed instantaneously to the spot. Those who did not succeed in securing a fragment, fought with those who had been more successful, and many contrived to steal the coveted morsels from their mouths. When a bee or fly passed through the air near the water, they all simultaneously darted towards it as if roused by an electric shock. Sometimes a larger fish approached, and then the host of Piránhas took the alarm and flashed out of sight. The population of the water varied from day to day. Once a small shoal of a handsome black-banded fish, called by the natives Acará bandeira (*Mesonauta insignis*, of Günther), came gliding through at a slow pace, forming a very pretty sight. At another time, little troops of needle-fish, eel-like animals with excessively long and slender toothed jaws, sailed through the field, scattering before them the hosts of smaller fry ; and in the rear of the needle-fishes a strange-shaped kind called Sarapó came wriggling along, one by one, with a slow movement. We caught with hook and line, baited with pieces of banana, several Curimatá (*Anodus Amazonum*), a most delicious fish, which, next to the Tucunaré and Pescada, is most esteemed by the natives. The Curimatá seemed to prefer the middle of the stream, where the waters were agitated beneath the little cascade.’

Many of the Indians have dances pertaining to the fishes. One fish dance is called the Pira-purasséya, in which each player takes the name of a fish, as the Jaraki.

The Tocantins catch their fish in the clear waters with bow and arrow. I have essayed this on small fishes in the shallow

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lagoons of Garden Key, Florida, with indifferent success. There are great species of crevallé, allies of the Florida jack, that afford sport to the sea-angler in many ports and harbours all along-shore, while the ubiquitous tuna often appears, several bonitoes, the barracuda, relations of the white sea bass, with an assortment of rays, more than satisfying to the lover of big game at sea. The islands adjacent to the coast are rich in fishes known to be game. This is particularly true of the Barbados, where the fishes are taken beneath the British flag and where the flying fish is the *bonne bouche*. Mr. Aflalo ate them and has 'dreamed of them ever since.' I agree with him, and regret the Catalina flyer is not so good. Years ago the small local restaurants cut off their wings and served them as 'trout.'

One of the finest game fishes of Chili is *Sarda chilensis*, which roams the seas widely; and here is a distinct and splendid Spanish mackerel. But perhaps the finest of all is the great Guahu or Peto, a six-foot sharp-nosed mackerel that weighs one hundred and twenty or so pounds and is known as a wrecker of heavy tackle. It has teeth serrated like a shark. The amber-jacks are represented off this coast by *Seriola lalandi*, and has been taken up to one hundred pounds and over. A large and really beautiful game fish, the Papagello (*Nemalisticus*), abounds on the South American coast; it resembles the amber-jacks, but has long and filamentous dorsals, giving it a most grotesque appearance. I have taken it in the Gulf of California, off the delta of the Yaqui, and lost many a hook before I succeeded in landing one. A fierce fighter is the dorado, known in the north as the dolphin. Many of the American trout, the rainbow and others, the brown trout of the East and the brook-trout have been placed in the rivers of the Southern Continent and in many instances have done well, affording promise for the future.

The coast of Trinidad particularly has fine sea angling; and the angler with a good trolling rod of sixteen ounces and a twenty-one thread line will find abundant sport with tarpon, barracuda, the big jacks (crevallé), the leaping kingfish of sixty



Fig. 49.

Fishes of Bermuda Islands. (Photographed from life, by Hunt).

1. Schoolmaster (Snapper). 2. Sheepshead. 3. Yellow Grouper. 4. Yellow Fin Grouper. 5. Black Angel Fish. 6. Grunt.

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or seventy pounds, and many more. The Bocas between the islands are the favourite places, and the angler proposing to go there will do well to read the article by Captain W. J. P. Benson, F.R.G.S., in *Badminton Magazine* of September, 1912, which is the best account of this angling I have seen.

America has contributed to the sport of Argentina, and Lago Nahuel, near the Chilean boundary, has been stocked with several kinds of trout, and so distributed over the state. Land-locked salmon were placed in Lake Nahuel, Huapi, Traful, Gutierrez and Correntosa. These are large lakes, from ten to thirty miles long. Brook-trout and lake-trout have done well, also land-locked salmon and various others. Lake trout have been placed in Lake Argentino and Lake San Martin; Rainbows in the Rio Santa Cruz. Steelhead have also been successfully introduced, and cod in the sea waters; so the American fishes are going around the world. One of the interesting South American fishes is the Dorado (*Salmus maxillosus*), not uncommonly taken by the natives of Bolivia. The river Pilcornago is an especially good locality for it. The fish is a hard fighter, attains a length of three feet, and according to Mr. E. Baynes Babcock, who describes it in the *Fishing Gazette*, it is a good, edible, and sporting fish.

CHAPTER XXXVIII

FISHES OF THE BAHAMAS, BERMUDAS, JAMAICA, ETC.

'I know a magic circle in the Sea,
Etched on the blue pale gray coral sand ;
A mountain sank there once, and patiently
Its widening eddies stiffened into land,
With lazy surges flapping on the strand.'

Rhyme of Mary Atoll.

WHILE the sea fishes of England do not include the tarpon and others, England really owns what may be accounted among the finest fishing grounds. England has the tarpon at British Guiana, the tuna at Malta in the Mediterranean, and the British flag floats over some of the best of the world's angling grounds. This is very evident off the American coast. Mr. Ross, a Canadian, holds the tuna record at Nova Scotia, the best ground for *large* tuna—between six hundred and one thousand pounds ; and from Bermuda to Nassau and at the Barbados, including Jamaica, the English have a notable and splendid fishing ground, including practically all of the great Florida fishes about which so much is written, and which afford so much genuine sport.

This is so nearly true that in writing of the game fishes of all these regions, I could dispose of them by merely stating in a general way that the Florida fishes are practically duplicated in the Bahamas and Bermudas. Here are over seventy-five species of fishes available to rod, line or net, many valuable as game, and all as beautiful as the coral reefs about which they live.

The base of the Bermudas is a sunken atoll, shaped like an

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ellipse, extending twenty-five miles northeast and southwest, and thirteen the other way, the main island being on the southeast edge of the ellipse with a more or less continuous line of twenty-five or twenty-six miles. The main islands are five in number, separated by little channels, narrow but with fifteen or twenty feet of water, and abound in bays and indentations, shallow lagoons and various nooks and corners for the wonderful fishes of the region.

The reef proper comes within a thousand feet of the main islands to the south, but on the north side it is from five to nine miles distant; the region between being an angler's delight, abounding in miniature keys, submerged and partly submerged reefs, coral ledges, and masses of coral lime-stone; a region filled with a wealth of animal life; a fascinating place to drift over with rod or spear, or even with open eyes. The central or inner portions of the atoll range in depth from seventy to one hundred feet, in all constituting a natural home for the tropic and semi-tropic fishes, whose pursuit is the chief industry of the majority of the negro population of over seven thousand and some whites.

The angler will find at the quays of Hamilton and St. George many fishing-boats equipped with wells, from which the fishes are sold alive and fresh; and one obtains a definite idea of the wealth of material. Here are several kinds of angel-fishes (*Holocanthus*), which I have often taken, requiring a very small but very stout hook, their broad sides presenting a resistance that is a surprise to the angler. The hogfish, yellowtail and the many snappers are fine fishes.

The Bermudas are the most northern islands of the coral reef and the northern limit of the tropical fishes of the Atlantic. Professor G. Brown Goode gives twenty-five species as common to Bermuda and the West Indies; half a dozen or more found in Bermuda, West Indies and Madeira, Cape Verdes, West Africa, St. Helena, and the river Amazon. Many are common to these localities, Brazil and Ascension Island, all due to the Gulf Stream, in which I have often drifted off the Bermudas or

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Bahamas, watching the strange animals in the great patches of sargassum, the component material of the Sargasso Sea.

The common names of the fishes here are squirrel, black jack, green grouper, Spanish hogfish, black hogfish, runner, blue porgy, white porgy, shad porgy, scotch porgy, red-tail, bone-fish, yellow tang, mermaid, skipjack, slippery dick, prickley hind, sand-mullet. As I have said, prototypes of many of these fishes, as the snappers, porgies, grunts, angel-fish, barracudas, etc., are found in Florida, where other common names are used, as jack, snapper, yellowtail, grunt, jewfish, lady-fish. The hogfish, a replica of which is seen at the entrance of Hamilton Harbour, at ten or twenty pounds, on a seven- or ten-ounce rod, number nine line, will give the angler abundant sport. If bigger game is required, the swordfish, *Xiphias* and *Tetrapterus*, and the Florida *Histiophorus* are found in deep water off the islands.

Here is the jack up to ten pounds ; cavally, dolphin, bonito two feet long, and many more. This reef is the home of the gray snapper ; to my mind, one of, if not the cleverest fish of the sea. I have taken many up to twenty pounds on the reef during many years' fishing ; but the average fish is six or seven pounds. Here are seen snappers, grunts and groupers ; and in the 'Devil's Hole' at Hamilton, groupers of huge size, three and four feet long, may be seen. The spotted kind is a beautiful fish. The barracuda is among the hard fighters and occasionally a tarpon is seen.

When we go south to the Bahamas, we find many similar forms, but a greater variety ; and from here on one can find the home of the Spanish mackerel, so common in the Gulf off Key West, and around to Aransas and Galveston, and undoubtedly down the coast to South America.

The mackerel-like fishes with their steely sides, their trim cut, powerful fins, are ideal game fishes of the sea ; and from the Spanish mackerel to the pintado or kingfish they present a series of hard fighters, especially if they are approached with the right kind of tackle.

But a few years ago the hand-line was used everywhere. I

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have seen men at Tarpon, Texas, fishing for this wonderful leaper with a big cotton line not over fifty feet long. The tarpon never gained a foot. The finest Spanish mackerel fishing I ever saw was going on at the same time with that of the tarpon, and one day I found myself with about thirty men, women and children in the Pass angling for Spanish mackerel. I was using an eight-ounce trout rod and was angling for sport. The rest had ten-foot bamboo poles with ten-foot lines, and were fishing for the next winter's food supply. I remember I caught four, while my amazed next-door neighbour took forty, and he was amply justified, as he needed them. The fish were three or four pounders, radiantly beautiful in their tints of silver, yellow and blue, quick as a flash of light, dashing this way and that, coursing along the surface to the song of the reel. They caught five to my one, and laughed at me heartily, until a big man-eater shark came along and broke up the fishing and the angling party, literally driving the women ashore in sheer fright.

The Spanish mackerel, *Scomberomorus maculatus*, is a valuable game fish, as the catch of a recent year brought in to the men in all the United States nearly \$75,000,000. This little mackerel attains a weight of ten or eleven pounds, but five pounders are the ones generally caught. The Texans were salting down the Spanish mackerel for the winter, literally joining business with pleasure. One woman was carefully skinning a fish to get the silvery skin to cover a box, while others were collecting all the tarpon scales they could find. I have often wondered why some ingenious milliner did not perch certain fishes on ladies hats, until one day I met a woman coming down the walk at Avalon with the wing of a flying fish on her hat, doubtless, the first to be so used. It is more than remarkable that the fishes have escaped the fate of other animals so deftly outlined by an American wag in the *Brooklyn* (New York) *Eagle*:

‘ MARY’S ATTIRE.

‘ Mary had a little lamb—

’Twas Persian on her coat;

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She also had a mink or two,
About her dainty throat ;
A bird of Paradise, a tern,
And ermine made the hat
That perched at jaunty angle
On her coiffure, largely rat ;
Her tiny boots were sable topped,
Her gloves were muskrat, too ;
Her muff had heads and tails of half
The "critters" in the Zoo ;
And when she walked abroad, I ween,
She feared no wintry wind ;
At keeping warm 'twas plain to see
She had all nature "skinned."

When the angler reaches the semi-tropics, as Bahama, he will find that fish scales are used in ornamenting boxes and frames, various objects being covered with them, calling to mind a room in the old Tarpon Club in Texas, where the walls were covered with tarpon scales, each signed with the name of a victorious angler. On one is my own name, though I have forgotten the length of the fish, it being impractical to weigh tarpon, as they are not killed unless needed.

In 1909, I was off Key West, Florida, in the centre of a fleet of boats fishing for kingfish and mackerel, and the sport was fast and furious. The kingfish resembles a giant Spanish mackerel, and it is only a different species. The larger fish is a living silver arrow, and when leaping and biting, it presents a splendid spectacle, as, like the tuna, it is a jumper *at* the bait, rarely doing so when hooked ; covering with great leaps ten feet or more, tossing the lure into the air, and playing havoc with poor tackle and the nervous angler. One can really obtain a better idea of the strength of the fish with a hand-line, as it is a marvellous fighter and leaper ; its movements being like beams of light. Jordan calls it 'one of the greatest of all game fishes,' and it certainly justifies this encomium when played, with rod and reel, as the late Mr. St. John Newberry played it, with the finest tackle. Anglers take specimens thirty and forty pounds in weight, one

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hundred pounds being known off the Florida reef and in South American Waters. The fish is taken trolling (trailing), from either a sail-boat or launch, any kind of bait or a spoon serving the purpose so long as it is conspicuous, the angler using a tarpon rod, a No. 21 line, No. 10 hook, or a spoon or metal jig.

To see these big racing mackerel come leaping at the bait is a most exhilarating spectacle. Mr. St. John Newberry says : ' To really enjoy this sport a good launch is advisable, and if the sea is smooth, the angler should sit in a rowboat astern, and either row or be rowed, and have the pleasure of fighting the kingfish from a small boat.' This at Nassau.

Occasionally on the reef, and more often south of Cuba, is taken a hard-fighting mackerel-like fish called the Peto, *Acanthocybium solendri*. It doubtless exceeds the kingfish in size, specimens having been reported weighing one hundred and twenty-five pounds ; and one taken from a man-eater shark's belly must have weighed more : such a fish would have measured nearly seven feet. Mr. Newberry shows in his book a large specimen taken by him with rod and reel.

Mr. St. John Newberry is one of the angling authorities on Bahaman fishes. He has fished the waters from Nassau in every direction ; and describes it as a most remarkable region for the sea angler in winter. He did most of his angling for kingfish from a sailboat, and when the strike came the latter was thrown into the wind, while he played the fish. In the delightful volume, *Caught on the Fly*, he gives his graphic experiences with ' thirty-eight, forty-one and fifty pounders.'

The winter angler can find no more interesting trip than to follow down from Bermuda to Nassau, Bahama, and visit the islands down to Barbados, then to Jamaica, ending at Tampico, Mexico, where the winter tarpon fishing is excellent and comfortable. The fishes of all this region are interesting, often beautiful, and include many that will meet the expectations of the most critical angler. Goss, the English naturalist, has invested Jamaica with a charm that a most searching investigation

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does not dispel. If the angler is yachting, he can visit some of the most fascinating keys in the Caribbean Sea, keys or islands that are most extraordinary peaks, rising like needles from the greatest depths known to man, invested in certain parts with finny inhabitants, including many game fishes, and 'benders,' to use the word coined by the anglers of Natal.

CHAPTER XXXIX

SOME FAMOUS ANGLING CLUBS

‘Neither fish, nor flesh, nor good red herring.’

THE angling clubs of the various parts of the world have a direct bearing upon the angling, and to them is mainly due the growing high standards in sport, the increased sentiment for the conservation of the game, the enactment and observation of intelligent game laws, and the education of the masses as to the economic value of game of all kinds as an asset of state or county.

England leads in this direction and has an extraordinary number of clubs, some of which, as the British Sea Anglers Society and the Fly Fishers Club of London, have international fame. The British Sea Anglers is the most complete and well organized club for its purpose in the world, and differs essentially from all other clubs. Offhand, I should say that its purpose mainly is education along lines somewhat similar to those of the Tuna Club, which ranks with it in size and utility. The British Sea Anglers is in the heart of Westminster, in Fetter Lane, up a narrow ancient flight of stairs, about as far away from angling as it can get ; yet it is in touch with every angling station of Great Britain and Ireland of any importance. The rooms of the British Sea Anglers are very attractive, and are really a museum of the game taken by members through the years ; the walls decorated with big fishes, records of contests on river, lake and ocean, while a choice little library shows the catholicity of interests of the members. Every week the members meet and listen to an address from some member on his fishing experiences ; then follows

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a discussion, and it was particularly interesting to me, an American honorary member, to observe the intense interest the Sea Anglers had in the subject, and how seriously they took it. At the end of the year these papers are published in a journal or magazine, so become permanent contributions to the history of the Club and of great value in providing accurate data to all Great Britain.

The Society has a perfect organization for obtaining information, having over five hundred agents all alongshore in Ireland, England and Scotland, who report to the Society at stated times ; so members know exactly what to expect in any day's fishing, or can telephone to the club-room and obtain from the secretary just the desired information. Aside from this, the Society publishes for the benefit of its members a small red book, which can be slipped into the pocket, and which contains a veritable fund of valuable information regarding all the conditions of interest to an angler at all the important points in Great Britain and Ireland.

Here we have the name of a good fishing-place, a hotel that is known to be of the first class, the name of the club agent, the name of a good boatman who will not rob one, the list of fishes which can be caught under fair and favourable circumstances ; in fact, a complete history of the place and situation. What this means to an angler who has but a limited time to spare, only the angler knows who has gone to a new ground and has been obliged to spend several days in obtaining just these data which the red book provides. It is to cover this point that the Tuna Club began its reciprocal arrangements with various clubs, and to-day it has a friendly alliance with the British Sea Anglers Society, the Fly Fishers, the Casting Club of France, the Aransas Pass (Texas) Tarpon Club, the Asbury Park Fishing Club, the St. Petersburg Tarpon Club, to the effect that each club agrees to extend its courtesies to accredited visitors or members of other clubs. Thus when any member of any of these clubs arrives at Santa Catalina and presents a card of introduction to

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the secretary of the Tuna Club, he becomes, virtually, an honorary member of the club during his visit. Ordinarily it would take a visitor several days to get his bearings, but with this alliance he is posted at once, obtains the best boatman, and meets the members who are delighted to extend to the guests every possible courtesy and attention. I shall always hold in delightful remembrance my own reception by the members of the British Sea Anglers Society and the men I met; this is also true of the Fly Fishers Club. I had long been honorary vice-president of the former, while the latter honoured me with an honorary life membership.

It is often the fate of such clubs not to receive public recognition, but this is not the case in England. This friendly organized body of authors, anglers, and distinguished men, embracing all the learned professors in its membership, has a distinct influence in Great Britain along the line of fish protection, conservation, and particularly in elevating the standards of sport. The Club includes in its membership some of England's most distinguished sportsmen and anglers. The president, Lord Desborough, is well known in America as a big game hunter and tarpon angler.

While the British Sea Anglers Society devotes itself to sea angling, the Fly Fishers Club in Piccadilly is as influential in its own distinctive field, and one of the most delightful clubs in this great city of clubs, impossible anywhere else in the world except in England, where a love of sport has been handed down generation after generation from the time of the Anglo-Saxons who long ago took the big salmon of English streams with spear and bow. The Fly Fishers Club has an atmosphere all its own, and in its delightful rooms, the walls covered with big trout and trophies, its incomparable library, its fly room where the member can make his own flies, the collection of all the living flies of England from many if not all of her famous trout and salmon streams, all this, and much more, renders it the *vade mecum* in this direction, the last word in angling clubs. The founder

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of the club is Mr. Marston, the distinguished editor and author, as well known in America as in England.

One is bewildered with the angling clubs of England and even of London alone. But when one remembers that London has something like eight million inhabitants and the majority of her intelligent dwellers go a-fishing, or dream of it, it can be understood. When I was in England, in 1910, the anglers of Glasgow were organizing a Sea Anglers Society, and I had the pleasure of meeting them in the rooms of the Glasgow Fly Fishers' rooms; a delightful club made up of the distinguished scholars and anglers of Glasgow. Another interesting and I think the oldest club in Scotland I visited was the Edinburgh Salmon Club on the Tweed, where I made my first cast with a typical long heavy salmon rod. What I caught I leave for my host to tell.

A mere enumeration of the angling clubs of Great Britain would make material for a book, I recall the Blenheim Angling Society, the City of London Piscatorial Society, the Llandudno Sea Anglers Association, United Brothers Angling Association, the Norwich Angling Club, the Aberystwyth Angling Association, Bramtree and Bocking Angling Association, Rye Home (Herts) Angling Club, Thames Angling Preservation Society, Hull and District Amalgamated Anglers Association, Northern Angling Association, County Palantine Angling Association, Barbourne Angling Club, Otley and District Angling Club, and many more.

Across the Channel the Casting Club of France, of which Prince Pierre d'Arenberg, as president, is shaping affairs piscatorial, so that the rivers of France will be protected and that valuable asset for state or nation—good fishing—be the result. The tournaments of the Casting Club attract many anglers from England and America.

It is said that there are two hundred thousand anglers in New York City who fish the lower river and go down the bay, and while clubs are not in evidence, as in England, due possibly to the cosmopolitan nature of the people, there are many fly-casting and bait-casting clubs which have a strong and virile influence

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for good. In that connection should be mentioned the Canadian Camp Fire Club, made up of men who hunt and angle in Canada, or have been participants in these keen and passionate joys in the field of piscatorial endeavour. Down the Jersey coast, at Asbury Park, we find the Asbury Park Fishing Club, a club associated with the Tuna Club in a friendly alliance, which is influencing the entire Atlantic coast for a high standard of sport, for better laws and more logical rules relating to the fisheries. This club offers valuable trophies for anglers who shall take the splendid game of this region with light tackle and display a strong tendency toward fair play. I mean by this the Rooseveltian attitude to game. Colonel Roosevelt is not an angler; he would be if he but once tried conclusions with a Santa Catalina sword-fish. In reading his book on hunting in Africa one is more touched by his attitude as a gentleman and a civilized sportsman of the highest type than by his perfect courage and poise under dangers of the keenest sort.

There are literary scavengers, famed for their sustained contumelious fiction, who prod this American hunter for his alleged savage nature, but I repeat one cannot but be impressed with his constant sparing of game, because it was not needed, there was no use for it, and when he does shoot a buffalo or an elephant or a rhinoceros, perhaps to save his life or that of some one else, there is always an apologetic note, a regret that he had been forced to kill or wound unnecessarily. One could hardly imagine Colonel Roosevelt wounding an animal and leaving it to die. This book is one of the finest sermons on fair play and respect for animal life in the English language. The working hypothesis is that every animal has its rights, but the law of right, justice and scientific demand, allowed a certain killing. Despite the extraordinary numbers and the constant temptation to shoot, not an animal was killed that was not needed or could not be used.

This is the principle that actuates gentleman sportsmen everywhere, and this idea was what induced the author to establish

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the Tuna Club. At this time there was little demand for fishes of the sea off Los Angeles county. The population of Los Angeles was not fifty thousand, but the fishes were as the sands of the beach and as easily caught. There had been no adjustment of imaginative values. Men went fishing to see how many fish they could catch, and to beat the other man in numbers, not skill. So the Tuna Club was founded, supposedly to catch fish, but really that it might become the Pacific coast protagonist of a new sporting philosophy. 'Thou shalt not kill unless it is necessary.' Sport is legal, justifiable, and eminently proper when the game can be used, but it is only a dog that will worry a cat to enjoy the blood lust. It is only an odoriferous civet that will creep into a hen coop and suck the blood of one hen after another to see how many it can kill. And that was what happened in Southern California when Los Angeles had fifty thousand inhabitants. Now it has almost six hundred thousand, and tons of fish, the day's catch of one hundred hand-liners, are not towed out into the channel and thrown away. The Tuna Club stopped this desecration by educating the people, and with the other clubs of the country it is still educating them, as there will always be some who fish to kill; we have not reached the millennium. The Tuna Club accomplished what is conceived to be a remarkable reform by organizing and setting a fashion in angling. It was useless to ridicule or abuse a man for fishing with a hand-line and catching a yellowtail in three minutes with a small rope; but you could appeal to his pride and vanity, and without his knowing it. Few men or women care to be very much out of the fashion. So the Tuna Club was organized, funds raised for clubhouse; but we could not secure the land on Avalon Bay; this came later. We organized as a fishing club of gentlemen who had taken a one hundred-pound tuna with a sixteen-ounce rod and a line not over No. 24. I had taken a one hundred and eighty-three pound tuna a few days before. No one could vote, but the one hundred pound or over, tuna anglers. There were one hundred members in a short time, then two or three hundred. There were no dues

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unless one wished to pay them, and such money was used in the purchase of cups, medals of gold and silver. The movement took with the public, and business-men anglers gave prizes, until the club had cups, medals and tackle enough to almost establish a shop.

In the meantime a number of men of national reputation who had served the public in conserving its natural resources, were elected honorary members. Colonel Roosevelt was then governor of New York, and he was an early member; later Dr. Gifford Pinchot, U.S. Forester and professor of Forestry at Yale; Charles Hallock, the dean of American anglers, James R. Garfield, Dr. Henry Van Dyke, J. K. L. Ross, Dr. David Starr Jordan, Dr. George F. Kunz, R. B. Marston, Prince d'Arenberg, and many more.

The public supposed the Club was organized to catch tunas, and so it was, and monsters were landed. But they were all taken with rod and reel, and the men who caught them performed such prodigies of valour that their battles were often telegraphed all over the world. A friend told me that he read an account of my capture of a tuna, which sunk the boat and might have drowned us a mile or so offshore, in an Italian paper in Italy the day following. The wonderful part of it to the Italians was that the big fish was taken with a rod.

A tournament was now organized, to last from May to October, and prizes offered in the various classes. First came the tuna, and the Club, which had taken as its motto 'The Protection of the fishes of California for a higher development of the art of angling,' stated in a little book which it published and gave away, that the members of the Club had decided that such and such tackle was fair for the tuna and offered the general public the following prizes for the largest fish of the season; the second and third largest, etc. Then followed the list which I copy from the little book of 1912. The prizes have increased in number in fourteen years:

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TUNA (*Thunnus Thynnus*).

Banning Cup—For exceeding Club record, 251 pounds : silver loving cup, presented by the Banning Company. Winner's name engraved on cup each season ; cup remains property of the Club.

Earlscliffe Cup—For exceeding his record, 180 pounds, under 1898 Club Rules (barring drags) : silver loving cup, presented by Mr. H. Earlscliffe, Santa Barbara, Cal. Winner's name engraved on cup each season ; cup to become property of angler winning it two times.

Burns Cup—For exceeding Club record, 251 pounds : silver loving cup, presented by Colonel Dan M. Burns, San Francisco, Cal.

Morehous Cup.—For exceeding Club record, 251 pounds : silver loving cup, presented by Colonel C. P. Morehous, Pasadena, Cal.

Club Medal.—For largest of season over 100 pounds : gold medal, presented by the Tuna Club. Winner's name engraved on bar each season ; medal remains property of the Club.

McMillan Medal—For first Tuna of season over 100 pounds : gold medal, presented by Mr. W. N. McMillan, Nairobi, British East Africa. Winner's name engraved on bar each season ; medal remains property of Club.

Stearns Prize—For exceeding his record, 197 pounds : Edward Vom Hofe tuna reel, presented by Colonel J. E. Stearns, Los Angeles, Cal.

Coxe Prize—Reel to the member taking largest tuna of season over 100 pounds, presented by J. A. Coxe.

Gunn Prize—For second tuna of season over 100 pounds : gold medal, value \$50, presented by Geo. E. Gunn, Salt Lake City.

Enterprise Manufacturing Co.'s Prize—For largest of season over 100 pounds, taken by lady angler : Pflueger's Patented Inlaid Reel, No. 729, presented by the Enterprise Manufacturing Co., Akron, Ohio.

Holder Consolation Cup—For smallest of season : miniature loving cup, presented by Chas F. Holder, Pasadena, Cal.

Brock Medal—To the Club member taking the largest tuna of season over 100 pounds : gold medal, presented by Brock & Co., Los Angeles. Winner's name engraved on bar each season ; medal remains property of the Club.

Club Prizes—For First, Second and Third largest of season, respectively : gold, silver and bronze medallions, presented by Tuna Club.

Then came the prizes for the swordfish of various sizes. The prizes are as follows :

SWORDFISH (*Tetrapterus mitsukurii*).

Holder Cup—For largest of season : silver loving cup, presented by

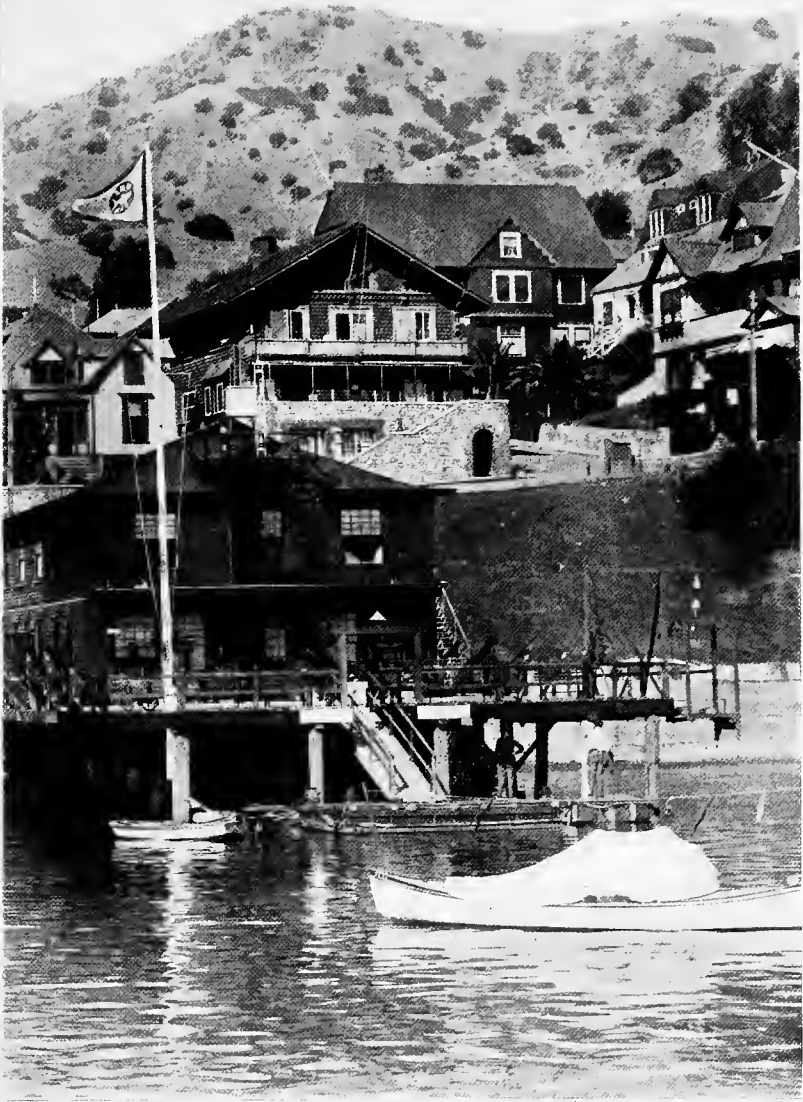


Fig. 50. The Tuna Club, Avalon, Santa Catalina Island, California. p. 384.

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Chas. F. Holder, Pasadena, Cal. Winner's name engraved on cup each season ; cup to become property of angler winning it two times.

Victoria Alden Cup—For largest of season : silver cup, presented by Dr. B. F. Alden, San Francisco. Souvenir cup to winner.

McMillan Medal—For first swordfish of season over 200 pounds : gold medal, presented by Mr. W. N. McMillan, Nairobi, British East Africa. Winner's name engraved on bar each season ; medal remains property of Club.

Club Prizes—For First, Second and Third largest of season, respectively : gold, silver and bronze medallions, presented by the Tuna Club.

BLACK SEA BASS (*Stereolepis gigas*).

Tufts-Lyon Cup—For exceeding Club record, 436 pounds : silver loving cup, presented by the Tufts-Lyon Arms Co., Los Angeles, Cal. Winner's name engraved on cup, which remains property of the Club.

Rider-Macomber Medal—For largest of season : gold medal, presented by Mr. Frank V. Rider and Dr. H. K. Macomber, Pasadena, Cal. Winner's name engraved on bar each season ; medal remains property of the Club.

WHITE SEA BASS (*Cynoscion Nobilis*).

Under Tackle Specifications of Tuna class :

Harding Medal—For exceeding Club record : 60 pounds : gold medal, presented by Mr. C. H. Harding, Philadelphia, Pa. Winner's name engraved on bar ; medal remains property of the Club.

A light tackle class was next introduced. The tackle had to be a nine-ounce rod not under six feet, a nine-thread line. The angler, as in other classes, to land his fish unaided. In this class, which was suggested and formulated by Mr. Arthur J. Eddy, the prizes for 1912 were as follows :

TUNA (*Thunnus macropterus*).

Potter Tuna Cup—For largest of season over 50 pounds : silver loving cup, presented by Mr. Thos. McD. Potter, Los Angeles, Cal. Winner's name engraved on cup each season ; cup remains property of Club. Winner presented with souvenir cup.

Tufts-Lyon Prize—For largest of season : hand-made light tackle split bamboo rod, presented by the Tufts-Lyon Arms Co., Los Angeles, Cal.

Newport Prize—For largest tuna over 50 pounds, killed on light tackle : reel and case, presented by Fred. T. Newport.

Club Prizes—For First, Second and Third largest of season respectively : gold, silver and bronze medallions, presented by the Tuna Club.

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YELLOWTAIL (*Seriola dorsalis*).

Western Hardware & Arms Co. Cup—For largest of season : silver loving cup, presented by the Western Hardware & Arms Co., of Los Angeles, Cal. Winner's name engraved on cup each season ; cup to become property of angler winning it two times.

Nordlinger Cup—For largest of season taken by lady angler : silver loving cup, presented by S. Nordlinger' Sons, Los Angeles, Cal. Winner's name engraved on cup each season ; cup remains property of the Club. Winner presented with souvenir cup.

Gillies Medal—For largest of season : diamond medal, presented by Mr. Donald B. Gillies, Tonopah, Nev. Winner's name engraved on bar each season ; medal remains property of the Club.

Simpson Prize—For exceeding his record, 60½ pounds : gold ring, made by native gold workers of Madras, India, presented by Mr. W. W. Simpson, of Whalley, England.

Club Prizes—For First, Second and Third largest of season respectively : gold, silver and bronze medallions, presented by the Tuna Club.

WHITE SEA BASS (*Cynoscion nobilis*).

Nordlinger Cup—For largest of season : silver loving cup, presented by S. Nordlinger's Sons, Los Angeles, Cal. Winner's name engraved on cup each season ; medal remains property of the Club.

The Potter Medal—For largest of season : gold medal, presented by Mr. T. Mc.D. Potter.

Club Prizes—For First, Second and Third largest of season, respectively : gold, silver and bronze medallions, presented by the Tuna Club.

LONG-FIN TUNA (*Albacore*).

Montgomery Bros. Cup—For largest of season, taken by lady angler : silver loving cup, presented by Montgomery Bros., Los Angeles, Cal. Winner's name engraved on cup each season ; cup remains property of Club. Winner presented with souvenir cup.

Hogee Cup—For largest of season : silver loving cup, presented by W. H. Hogee, Los Angeles, Cal. Winner's name engraved on cup each season ; cup to remain property of angler winning it three times.

Whitley Co. Medal—For largest of season : gold medal, presented by the Whitley Co., Los Angeles, Cal. Winner's name engraved on bar each season ; medal remains property of the Club.

Club Prizes—For First, Second and Third largest of season, respectively : gold, silver and bronze medallions, presented by the Tuna Club.

BONITO (*Sarda chilensis*) :

Harding Cup—For largest of season : silver loving cup, presented by

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Mr. F. L. Harding, Philadelphia, Pa. Winner's name engraved on cup each season ; cup to become property of angler winning it three times.

DOLPHIN.

Mattison Cup—For angler exceeding his record of 25½ pounds in 1907 : silver loving cup, presented by Dr. F. C. Mattison, Pasadena, Cal.

FOR LARGEST FISH.

Brewster Medal—For largest of season (including Black Sea Bass) : gold medal, presented by Mr. Edwin H. Brewster, Los Angeles, Cal. Winner's name engraved on bar each season ; medal remains property of the Club.

Eddy Cup—For largest gold button fish of season : silver loving cup, presented by Mr. Arthur J. Eddy, Chicago, Ill. Winner's name engraved on cup each season ; cup remains property of the Club.

YELLOWTAIL.

The Club was progressing, and Mr. Thomas McD. Potter introduced what he called a Three-Six Class for yellowtail only, giving a \$500 silver cup as a trophy. The specifications read as follows—

THREE-SIX CLASS OF THE TUNA CLUB.

An angler using Three-Six tackle is given a handicap of 25 per cent. in his favour as against Light Tackle. Thus, a yellowtail of sixteen pounds, caught on Three-Six tackle earns a bronze button ; one of twenty-four pounds, a silver button ; one of thirty-two pounds, a gold button. The complete table follows—

Buttons.	Bronze.	Silver.	Gold.
Yellowtail . . .	16 pounds.	24 pounds.	32 pounds.
Albacore . . .	16 "	28 "	40 "
White Sea-Bass . . .	16 "	28 "	40 "
Tuna . . .	16 "	28 "	40 "

Three-Six Class.—Rod to be of wood, consisting of a butt and tip, and to be not over fourteen inches in length. Tip not less than five feet in length, and to weigh not more than six ounces. Line not to exceed standard nine-thread. Line.—The standard set by this club for the line to be used under its rules, is as follows : the line to be a standard linen line, manufactured solely from the grade of linen yarn known in the trade as 'No. 50.'

It was necessary to interest the clever boatmen of Avalon in

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this subject and the Club early began to offer prizes to them, of which the following are the specifications :

AWARDS TO BOATMEN.

Potter-Streeter Cup—For boatman qualifying largest number of anglers under tackle specifications of Light Tackle Class : silver loving cup, presented by Mr. Thos. McD. Potter, Los Angeles, Cal., and Mr. L. P. Streeter, Chicago, Ill. Winner's name engraved on cup each season ; cup remains property of Club. Souvenir cup to winner.

Potter-Streeter Three-Six Cup—For boatman qualifying largest number of anglers under tackle specifications of Three-Six Class : cup, presented by Messrs. Potter and Streeter.

TUNA.

Hooper Prize—For professional boatman to angler taking largest of season over 100 pounds, from a launch : cash prize of \$50, presented by A. W. Hooper, Boston, Mass.

Stearns Prize—For boatman who takes the largest number of tuna over 100 pounds from October 1, 1911, to October 1, 1912 : cash prize of \$25, presented by J. E. Stearns, Los Angeles, Cal.

Club Prize—For boatman to angler taking first of season over 100 pounds : tuna rod.

Club Prize—For boatman to angler taking largest of season over 100 pounds : tuna rod.

SWORDFISH.

Stearns Prize—For boatman who takes the largest number of swordfish from October 1, 1911, to October 1, 1912, cash prize of \$25, presented by J. E. Stearns, Los Angeles, Cal.

Club Prize—For boatman to angler taking first of season over 100 pounds : tuna rod.

Club Prize—For boatman to angler taking largest of season : tuna rod.

BLACK SEA BASS.

Club Prize—For boatman to angler taking largest of season : tuna rod.

Club Prize—For boatman to angler taking second largest of season, 900 feet of 24-thread line.

YELLOWTAIL.

Reyes Prize—For boatman to angler taking largest of season : No. 4 Anoco camera and leather case, presented by Mr. P. V. Reyes.

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The result of this was apparent at once. The catches made with rod and reel aroused great interest all over the country as the fish were large, the lines used the size I used for trout and black bass when a boy; now two hundred and fifty-one pound tuna, four hundred and fifty pound black sea bass, fifty pound white sea bass, sixty pound yellowtail, three hundred pound swordfish, were taken with these lines. In the face of so much skill and the new mode, the visiting public began to regard the old hand-line as a relic of the dark ages. Again, the sporting spirit became apparent, and the public wished to fish for a prize and the little blue button that told the story of a battle with the big game. So the boatmen were obliged to equip their boats with rods of the prevailing weight and fashion, but not for this reason. They thoroughly believed in the good work and the higher standard, and naturally they wished to win the prizes and to have their patrons win them. As a result, in a marvellously brief period, out of the small army of boatmen (the angling investment is now valued at \$200,000), one could not be found who would carry a handline in his boat or allow one to be used. It was an archaic device and a man would be ridiculed who did. Presto! and hundreds of rods, the finest Vom Hofe and other reels, lines costing \$3 and \$4, became the equipment, and a standard of sport of the highest character became the fixed rule at Santa Catalina. There was no complaint. Every one was delighted, as it enhanced the sport a hundredfold and accomplished the prime *desideratum*—an absolute halt in the waste of fish. Why? The angler will have suspected it. The directors of the Tuna Club reduced the tackle to such seeming ephemeral limits, made the lines so light, the rods so beautifully adjusted to the work, that the man who had been in the habit of fishing for numbers, pulling in, in a few minutes, three or four big fish when they were biting savagely, now found that to take a sixty-pound yellowtail on the 9-9-tackle took him possibly half an hour, but gave him better sport than he had ever dreamed of. Also, the man who fished for a thirty-pound yellowtail with a 3-6 rod and line, found tha

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he was accomplishing what appeared to be an angling miracle worked out by Mr. Potter for his special benefit though it took him a half hour to land his fish that perhaps was only a seventeen pounder.

The reader will see the point. The man who had a natural craving, what the late Professor McGee of the Department of Ethnology called a 'blood lust,' suddenly discovered what real sport is ; also the gentleman's conception of sport, that it is against all the laws of God or Nature to destroy life and throw it away. The result is that an exalted standard of sport has been established at Santa Catalina, and as two hundred and fifty thousand, or more people visit the field of the Tuna Club per annum the lesson has been far-reaching. Not to burden the reader too much with the machinery of this humanitarian proposition, I will quote the specification and rules which must be observed, and are observed, by most of the anglers who fish here, though it must not be imagined that every one who visits the locality strives for a prize or cares for a button. The man who is an angler and who knows how to fish is not in need of buttons, though it is a fact that all fish by the rule for the simple reason that it appeals to man as pre-eminently fair ; it is the square deal applied to the fishes.

The fourteenth annual tournament of the Club has recently closed, and as a matter of interest, the following results are given. A winter tournament is now held to meet the demands of the winter or tourist contingent. The Tuna Club has several hundred members, and an associate class of several hundred who have all the privileges of the Club, except voting, the actual management being in the hands of men who are entitled to wear the blue button, or have won it. In fourteen years but seventy-six men have qualified under this test. The Club takes an active interest in the fisheries and the state laws. It has employed deputies to enforce the game laws and stands with the law. The clubhouse, which is the property of the Club, the money to purchase it having been paid by the dues of members all over the country,

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stands over the smooth waters of Avalon Bay, but five minutes walk from the *Hotel Metropole* and the pier. The upper story of the unostentatious clubhouse is devoted to rooms and baths; the lower to the rod and tackle room, the office of the honorary secretary, Mr. T. S. Manning, and the spacious lounge which faces the water and which bears the remarkable records of the Club from the Colonel C. P. Morehous two hundred and fifty-one pound tuna to the three hundred and thirty-six pound swordfish of Mr. Conn, and the forty-nine pound yellowtail of Mr. Beebe. Here is the only specimen of the 'Luvarus Jack' known; one of the rarest and most beautiful of fishes, silver and scarlet. By it hangs the great opah, so rare that few have ever seen it. Among the preserved specimens is a large ribbon-fish, one of six or eight that have been taken here. On the walls hang also dolphin, barracuda, golden trout, big rainbow, bonito, record white seabass, three kinds of tunas—leaping, long-fin and yellow-fin—and practically every game fish found in this remarkable region, presumably the meeting ground of the fishes of the world. Near by are the cups and trophies of the Club, the library, with its collection of authors' books, members of the Club, as Colonel Roosevelt, Dr. Henry Van Dyke, Mr. Marston, editor of the *Fishing Gazette*, London, Mr. Aflalo, Charles Hallock, Dr. Gifford Pinchot and others. Here are the journals of the day relating to angling, and a set of scrapbooks containing the photographs of the notable catches of the Club for fourteen years, probably without equal in any club in the world.

This is particularly true of swordfish, this being the only locality where this fish is taken with rod and reel. On the upper story the Club has a branch of the U. S. Weather Bureau for the benefit of the town of Avalon and vicinity, and a system of signals for passing vessels. It also keeps a careful record of the climatic conditions. A nautical air is given to the Club by its broad verandah in front, a stair leading down to a floating dock; and on either side of the wharf are swung ships davits and small boats of the members. In summer when the yachts of the coast and else-

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where are in Avalon bay the Club presents a gay scene, and is the centre of interesting life, often including anglers from all over the world.

The Club, as has been stated, has affiliations with a number of clubs in America, England and France, ensuring visiting members of these clubs a hospitable greeting and practical honorary membership while at the Club. The season of 1912 was notable, due to the extraordinary contests with swordfish. The season extended into November. The last one hundred and fifty-pound swordfish, making one hundred for the season with rod and reel, was caught on the third of November.

A remarkable club has been formed in Texas on the Gulf of Mexico—the Aransas Pass Tarpon Club. The story of light tackle at this club, of which Mr. Hooper of Boston is president, and Mr. Cotter honorary secretary, is partly told in the chapter on the Silver King. The town of Aransas, is a small settlement at the entrance of the Pass and a stone's throw from the water where the best of tarpon fishing is to be had, usually under the most favourable conditions. The Club holds to a high standard of sport, and has many prizes and trophies which are fished for each year and which serve in establishing a high standard of sportsmanship.

In San Francisco there are several clubs devoted to striped bass, to salmon, and to casting. In Los Angeles there is a large and influential club, the Southern California Rod and Reel Club, under the presidency of Max Loewenthal, a distinguished attorney of that city. The field of endeavour of this club is the long coast, twenty or thirty miles up and down the shore, where the surf-fish, croaker, yellowtail and various large fishes are taken. The Club has a series of prizes approximating those of the Tuna Club and modelled after it in a way. It uses a still lighter tackle, known as the '3-4,' the rod very light, and the line an ephemeral fabric. Mr. Shaver, who designed the tackle, has made some remarkable catches, as well as Mr. Hedderly, who was the founder of the Club that has taken a very active interest in fishing legislation in Cali-



Fig. 51. Members of the Tuna Club and their Launches, in the Tournament.

Santa Catalina Island, California.

1. F. G. Aflalo, of England, Founder of British Sea Anglers' Society. 2. Mr. Jones. 3. Mrs. Manning landing a Yellow Tail. 4. Mr. Murphy, and a big Sword Fish just gaffed. p. 392.

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fornia, having the best interests of the anglers and the professional fishermen at heart.

All the American clubs show the advantage of organized effort to obtain just game laws and their enforcement, and were it not for the laws and the sportsmanlike anglers, the fishes of lake, stream and ocean would be wiped out of existence, so unreasoning and soulless is the average class that purports to provide the public with its legal and lawful patrimony of the sea.

The Asbury Park (N.J.) Fishing Club gives tournaments, and the following are the records and awards for the season of 1911:

Striped Bass—First taken, Ed. J. Waters, 15 pounds; largest, Horace Dutcher, 30 pounds, 4 ounces; second largest, William Fenrich, 21 pounds, 4 ounces; third largest, W. W. Scheffler, 18 pounds, 3 ounces; greatest number of fish taken, W. H. Schwartz, five fish; largest amount of pounds, James A. Mackintosh; fourth largest, Ed. J. Waters, 15 pounds; largest taken on a Seger rod, Wm. W. Scheffler, 18 pounds, 3 ounces; fifth largest, Gus Popkan, 14 pounds, 5 ounces; largest taken in October, Chas. O. Perry, Jr., 6 pounds, 8 ounces; the last taken during year, Geo. C. Borden, 3 pounds, 13 ounces; largest taken at night, Wm. W. Scheffler, 18 pounds, 3 ounces; sixth largest, Wm. H. Schwartz, 14 pounds, 4 ounces; for largest taken by member who has not caught any since joining the club, Horace Dutcher; greatest aggregate weight, month of June, W. W. Scheffler; largest taken month of June, W. W. Scheffler; largest month of July, Wm. Fenrich, 21 pounds, 4 ounces; largest month of August, Horace Dutcher, 30 pounds, 4 ounces; largest month of September, Wm. H. Schwartz, 14 pounds, 4 ounces.

Channel Bass—Largest, B. Weisenfeld, 40 pounds, 11 ounces; second largest, W. C. Glass, 39 pounds, 9 ounces; greatest aggregate weight, month of September, B. Weisenfeld, eight fish weighing 221 pounds, 2 ounces; third largest, Robert Wiechert, 39 pounds, 3 ounces; fourth largest, A. Clayton, 34 pounds, 1 ounce; fifth largest, Harry W. Metz, 33 pounds, 4 ounces; sixth largest, John F. Seger, 33 pounds; seventh largest, Fred Wilkie, 32 pounds; largest, month of September, B. Weisenfeld, 40 pounds 11 ounces.

Tuna—Largest, Capt. H. H. Maddox, 44 pounds, 12 ounces; second largest, Jos. B. Cawthorn, 25 pounds, 2 ounces.

Bluefish—First taken, H. K. Satow; largest, W. Harry Scott, 3 pounds, 5 ounces; largest aggregate weight, five fish, Jesse T. Meeker, 14 pounds, 10 ounces; largest taken off shore, Capt. H. H. Maddox,

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9 pounds; largest aggregate, two off shore, Capt. H. H. Maddox, 16 pounds, 8 ounces.

Kingfish—First taken, J. M. Gentle; largest, Dr. J. L. Dulaney, 2 pounds, 4 ounces.

Plaice—First taken, H. R. Woodward; largest, John Vogler, 6 pounds, 9 ounces; second largest, C. L. Woodruff, 6 pounds, 7 ounces; largest aggregate, five fish from beach, John Vogler, 15 pounds, 9 ounces.

Weakfish—First taken, Jos. Dettrich; largest, C. M. Wyrant, 4 pounds, 4 ounces; largest aggregate weight of five fish from beach, Chas. O. Perry, Jr., 9 pounds, 1 ounce; largest taken off shore, H. C. Rydell, 6 pounds, 7 ounces.

Deep Sea Fishing—Sea bass, largest, Capt. H. H. Maddox, 4 pounds, 10 ounces; largest aggregate, two, Captain H. H. Maddox, 8 pounds, 14 ounces; largest porgy, Hartie I. Philips; largest blackfish, Horace Dutcher, 8 pounds, 8 ounces.

Ladies' Prizes—Largest striped bass, Mrs. J. A. Mackintosh, 8 pounds, 9 ounces; second largest striped bass, Mrs. J. A. Mackintosh, 2 pounds, 3 ounces; largest kingfish, Mrs. J. A. Mackintosh, 1 pound, 10 ounces.

L. P. Streeter Cup—Largest Bass, 9-9 tackle.

France has a large number of interesting and influential clubs, and it is to be hoped that Prince d'Arenberg can interest them all to join and give France the protection for its game found in England. Some of the clubs are as follows:

'Société de Pisciculture et de Pêche,' Aix-Les-Bains (Savoie); *Président*: M. J. Chiron. 'Le Pêcheur Solognot,' Argent (Cher). 'La Truite Auxiloise,' Auxi-Le-Chateau (Pas-de-Calais); *Président*: M. G. Maincourt. 'La Conservatrice,' Baneins (Ain); *Président*: M. Comby, propriétaire. 'Société amicale des Pêcheurs à la ligne Bayonnais,' Bayonne (Basses-Pyrénées); *Président*: M. J. B. Dolhats. 'Société des Pêcheurs à la ligne,' Boulogne-sur-Mer (Pas-de-Calais); *Président*: M. E. Canu. 'Syndicat des Pêcheurs à la ligne de Brioude,' Brioude (Haute-Loire), 'La Truite de l'Ouvèze,' Buies-Les-Baronnies (Drôme); *Président*: M. Jacquet Armand. 'Société de pêche et de pisciculture,' Cany (Seine-Inférieure); *Président*: M. A. Bapaume. 'Les Francs-Pêcheurs,' Chambery (Savoie); *Président*: M. F. Cognard. 'La Gaule Régionale Champagnolaise,' Champagnole (Jura); *Président*: M. Louis

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Bassaud. 'La Matinale,' Charleville (Ardennes); *Président*: M. E. Maréchal. 'Société Amicale des Pêcheurs à la ligne,' Compiègne (Oise); *Président*: M. Delondre. 'Société des Pêcheurs à la ligne de Dieppe et des environs,' Dieppe (Seine-Inférieure); *Président*: M. Etienne Mallet. 'L'Hameçon' (Côtes-du-Nord), Dina; *Président*: M. F. Rouault. 'Les Francs Gauleurs Dolôis,' Dole (Jura); *Président*: M. J. Coutou. 'La Truite,' Donzy (Nièvre); *Président*: M. J. Perreau. 'L'Authie,' Doullens (Somme); *Président*: M. G. Sydenham. 'Société des Pêcheurs à la ligne d'Evergnicourt,' Evergnicourt (Aisne); *Président*: M. Roudier, maire d'Evergnicourt. 'La Gaule Fougèraise,' Fougères (Ile-et-Valaine); *Président*: M. L. Roussel. 'Société Amicale des Pêcheurs à la ligne de Gray,' Gray (Haut-Saône); *Président*: M. A. Guillemant. 'L'Amicale des Pêcheurs à la ligne de Guéret,' Guéret (Creuse); *Président*: M. Jamot. 'L'Epinoche Langraise,' Langres (Haute-Marne); *Président*: M. E. Prudon. 'Société des Pêcheurs à la ligne de l'Arrondissement de Lorient,' Lorient (Morbihan); *Président*: M. Emile Blin. 'Club des Pêcheurs Sportifs de Lyon,' Lyon (Rhône); *Président*: M. Girardon. 'Le Goujon Marmandais,' Marmande (Lot-et-Garonne); *Président*: M. Rousseau. 'La Gaule Mendoise,' Mende (Lozère); *Président*: M. P. Béchard. 'La Gaule Monterelaise,' Montereau-Fault-Yonne (Seine-et-Marne); *Président*: M. Gardavot. 'La Sentinelle,' Montluçon (Allier); *Président*: M. Robert Villate Des Prugnes. 'Société amicale des Pêcheurs à la ligne de Montreuil-sur-Mer,' Montreuil-sur-Mer (Pas-de-Calais); *Président*: M. Delpierre. 'La Truite,' Moret-Sur-Loing (Seine-et-Marne); *Président*: M. de Brequeville. 'La Gaule des Ollières,' Ollières (Les) (Ardèche); *Président*: M. Moulin. 'La Truite Appaméenne,' Pamiers (Ariège). 'Syndicat des Pêcheurs à la ligne de Pontivy,' Pontivy (Morbihan); *Président*: M. Grainche. 'Société des Pêcheurs à la ligne de la Vallée d'Auge,' Pont-L'Évêque (Calvados). 'Société Amicale des Pêcheurs à la ligne "Le Gardon,"' Proisy (Aisne); *Président*: M. Alfred

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Demay. 'Société des Pêcheurs de Quimper,' Quimper (Finistère).
'Société de Pêche "Le Carpeau,"' Rambouillet (Seine-Oise);
Président: Albert Barrert. 'Société de Pêche et de Pisciculture
de Roanne et du Coteau,' Roanne (Loire); *Vice-Président*:
M. Claudius Charpenet. 'Société des Pêcheurs à la ligne de
Mortinais,' Saint-Hilaire-Du-Harcouet (Manche); *Président*:
M. Lebreton. 'La Goujonnière Saint-Mihilois,' Saint-Mihiel;
Président: M. Malard. 'Les Amis de la Gaule,' Saint-Pol-
sur-Ternoise (Pas-de-Calais); *Président*: M. Leopold Castelin.
'Le Barbeau,' Tannay (Nièvre); *Président*: M. J. Denoux.
'La Protectrice de la Dore,' Thiers (Puy-de-Dôme); *Président*:
M. A. Vailhe. 'Le Nénuphar Thouarsais,' Thouars (Deux-
Sèvres); *Président*: M. A. Jouet. 'La Bienfaitante,' Tournus
(Saône-et-Loire); *Président*: M. P. Benoit. 'Le Barbillon,'
Vierzon (Cher); *Président*: M. L. Cosson.

The Casting Club of France gives tournaments of great interest
to anglers in England, Germany and America. The following
are the events of the tournament of November 24, 1912, for which
I am indebted to M. L. Bougle:

SUNDAY, NOVEMBER 24.

Event No. 1.—Bait-Casting, Distance, 40 grammes.—Class A (seniors).
—First, Louche, 70 metres; second, Maymou, 64.75 metres; third,
Hughes, 58.50 metres. Class B (juniors).—First, Cognard, 62.25 metres;
second, Desrues, 57 metres.

Event No. 2.—Distance, Bait, 15 grammes.—Class A.—First, Decantelle,
54.50 metres; second, Bouglé, 52.25 metres.—Class B.—First, Bergès,
58.10 metres; second, Chaintron, 54.40 metres.

Event No. 3.—Distance Bait, 7.5 grammes.—Class A.—First, Bouglé,
36.65 metres; second, Camus, 33.65 metres; third, Hughes, 30.25 metres.
Class B.—First, Deiches, 40.30 metres; second, Bergès, 35.80 metres.

Event No. 4.—Accuracy, Bait, 15 grammes.—First, Hughes, 30 points;
second, Louche, 24 points; third, Camus, 19 points.

Event No. 5.—Distance, Bait, 70 grammes.—Class A.—First, Bergès,
90.50 metres; second, Decantelle, 89 metres; third, Louche, 71.25
metres. Class B.—First, Maymou, 90 metres; second, Deiches, 68
metres; third, Cognard, 67.75 metres.

Event No. 6.—Accuracy, Bait, 7.5 grammes.—First, Bouglé, 38 points;
second, Hughes, 33 points; third, Bergès, 29 points.

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MONDAY, NOVEMBER 25.

Event No. 7.—Trout-Fly, Distance, Switch.—Class A.—First, Hughes, 22.75 metres ; second, Decantelle, 22 metres. Class B.—First, Bergès, 18 metres ; second, Deiches, 17 metres.

Event No. 8.—Salmon-Fly, Distance, Switch.—Class A.—First, Hughes, 29.50 metres ; second, Decantelle, 25.25 metres. Class B.—First, Bergès, 24.75 metres ; second, Louche, 21 metres.

Event No. 9.—Trout-Fly, Accuracy.—First, Seutin ; second, Telquel ; third, Louche ; fourth, Camus.

Event No. 10.—Trout-Fly, Distance, Light Rods.—Class A.—First, Seutin, 26.50 metres ; second, Hughes, 26 metres. Class B.—First, Deiches, 24 metres ; second, Louche, 23.75 metres.

Event No. 11.—Trout-Fly, Distance.—Class A.—First, Hughes, 28.75 metres ; second, Seutin, 28.50 metres. Class B.—First, Telquel, 24.25 metres ; second, Camus, 23 metres.

Event No. 12.—Salmon-Fly, Distance.—Class A.—First, Hughes, 33.25 metres ; second, Decantelle, 31.50 metres. Class B.—Bergès and Seutin (tie), 32 metres. Tie was not recast.

SPECIAL PRIZES.

No. 1 for total of longest cast in each of the distance bait events.
Winner : Bergès.

No. 2 for total of longest cast in each of the distance fly events.
Winner : Hughes.

No. 3 for total of points over the whole tournament. Winner : Hughes.

No. 4 for total of points in the bait and fly accuracy events. Winner : Hughes.

APPENDIX I

Assuming that the angler is starting from England on an angling tour the following are made as suggestions :

TRIP A.

Leave England in May or April for the St. Lawrence regions for tuna, sea-trout, salmon, trout, ouaniche, black bass. The Canadian Lakes may be included in a short trip.

Time tables may be had by applying to the London office of the St. Lawrence River line.

TRIP B.

If the angler has but a short time at his command in winter and desires sea angling I would suggest that he go to New York in mid-February, six days, then take the train from New York to Key West. Eight or ten days from London, one reaches Long Key Camp on the east coast of Florida. The hotels are of the finest character on the Florida coast. If a little diversion is desired he can go to Key West and in a night run over to Havana or to Nassau. This Winter trip includes amber-jack, barracuda, etc., but not tarpon.

TRIP C.

Winter Tarpon.

If Winter tarpon fishing is required the angler should go to Tampico, Mexico. This can be done in steamers from London to Mexican ports, or to New York, from there taking steamer. All these lines have offices in London. The Southern Pacific are particularly courteous in supplying itineraries.

TRIP D.

Tarpon, Swordfish and Tuna.

The most comprehensive trip I can imagine should take two or three months, and includes tarpon, Santa Catalina Island swordfish, tuna,

A P P E N D I X

yellowtail, kingfish ; is in fact a combination Gulf of Mexico and Pacific Coast menage. Call on the Southern Pacific Company, London, for time tables, etc., then sail for New York in June, July or August. Southern Pacific steamers from New York to New Orleans, Sunset Line to San Antonio, Texas, then to Port Aransas on the Gulf, a day's ride, to the Tarpon Club, Mr. Cotter, secretary. Here the tarpon fishing is assured. The heat I have found here in August was by no means oppressive, and it was delightful on the water. Tarpon, kingfish, jewfish, channel bass, etc., are the game, practically that of Florida. Two or three weeks here then *via* Sunset Line from San Antonio to Los Angeles (three days). This brings us to Santa Catalina Island, three hours or so from Los Angeles, by the middle of August or September. The tuna may and may not be here, but in September 1912, the Tuna Club records show one hundred swordfish, and the other game is yellowtail, white sea-bass, black sea-bass, etc. The angler can fish this region, then return *via* the Grand Canyon on the A. T., Santa Fè road, if he is short of time ; if not, he should go north on Southern Pacific or Santa Fè road and fish Lake Tahoe for the regal trout, the Tahoe trout ; to the Kern River Canyon for golden trout ; to Del Monte on the Bay or Monterey for sea salmon ; then to San Francisco for striped bass ; to the Russian River for steelhead ; then to Klamath Lake for big rainbows, and so on north to Vancouver for more trout and salmon.

By addressing the Southern Pacific Company's agent, R. Falack,¹ in London, a pamphlet on the various localities can be obtained. The tourist-angler will perceive that he is swinging around in a great circle trying the greatest angling localities in the world, most of which are mentioned in this volume. From Vancouver he may go into the splendid Canadian Rockies, the Lakes of the Kootenay country to Bamf, Lake Louise, not missing the Yellowstone National Park and its angling. To accomplish all this properly the start from London should be made in June. From Bamf the angler proceeds East to the various trout rivers and streams, black bass and muscallunge, to the Laurentian lakes, etc., finally reaching Quebec or New York again, having swung completely around the greatest angling circle in the world, well worth taking ample time to enjoy.

¹ Mr. Rudolph Falack also has offices on the continent, 6, Rue des Peignes, Antwerp ; 46, Quai des Chartrous, Bordeaux ; 117, Via Balbi, Genoa, Italy ; 22, Rue du Mail, Paris ; 49, Leadenhall St., London ; 25, Waler Street, Liverpool ; 25, Ferdinand Strasse, Hamburg.

APPENDIX II

ANGLING BOOKS OF REFERENCE

As the present volume does not make an *exhaustive* presentation of the great subject of the Game Fishes of the World, that being impossible in a volume of this size, I have given below a number of works, authentic and exhaustive, which will give the reader all the details necessary on so large a subject :

- 'The Rod in India,' H. S. Thomas: Thacker, London, Publisher.
- 'A River of Norway,' C. Thomas Stanford. Longmans & Co., London.
- 'Book of the All-Round Angler,' 'John Bickerdyke.' Upcott, Gill, London, as follows :
 - 'Wild Sports in Ireland.'
 - 'Days of My Life on Waters Fresh and Salt.'
 - 'Sea Letters to Sea Fishers.'
 - 'Angling for Coarse Fish.'
 - 'Angling for Pike.'
 - 'Angling for Game Fish.'
 - 'Angling in Salt Waters,' by the same author.

Works of F. G. Aflalo, as follows.

- 'Sea Fishing on the English Coast.' Upcott, Gill Co., London.
- 'Sunset Play Grounds. Scribners.
- 'The Salt of my Life.'
- 'Encyclopædia of Sport.'
- 'Sport in Europe.' Sands & Co.
- 'The Call of the Sea.' E. Grant Richards.
- 'Fishes of England,' by Day.
- 'Fishes of India,' by Day.
- 'The Outdoor Library.' Scribners.
- 'Bass, Pike, Perch and Others,' by Jas. A. Henshall. Macmillan & Co.
- 'The Black Bass.'
- 'The Dry Fly in America,' Dr. Emlin Gill.
- 'American Fishes,' Prof. G. Brown Goode: Estes & Lauriate.
- 'The Works of Dr. Henry Van Dyke.'
- 'Fishes,' 2 vols., Dr. David Starr Jordan. Henry Holt & Co.
- 'American Food and Game Fishes,' Jordan. Doubleday & Page.

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- 'Fish Stories,' Holder & Jordan. Henry Holt & Co.
- 'Game Fishes of the U.S,' Holder. Macmillian & Co.
- 'Sea Game Fishes of America,' Holder: The Outing Co.
- 'The Channel Islands of California,' Holder. A. C. McClurg, Chicago.
- 'The Fishes of the Pacific Coast.' Dodge & Co.
- 'Recreations of a Sportsman,' Holder. Putnam Sons.
- 'Big Game at Sea,' Holder. The Outing Co.
- The Works of R. B. Marston.
- 'Walton and the Earlier Fishing Writers.' Elliott, Stock, London.
- 'Salmon trout,' by Dean Sage. Macmillan & Co.
- Papers of the British Sea Anglers Society.
- 'Sport Fishing in Alpine Austria.' The Board of Trade, Vienna.
- The Game Fishes of the Pacific Coast. Southern Pacific Co., San Francisco.
- 'The Fishing Tourist,' Charles Hallock.
- 'Idyls of Fishermen,' Hall. The Columbia University Press.
- 'Sports in the Scotch Highlands,' St. John
- 'The Log of a Sea Angler,' Holder. Houghton, Mifflin & Co.
- Books of the U.S. Fish Commission.
- 'Angling Sketches,' Andrew Lang.
- 'The Trout,' Marquis of Granby. Longmans & Co.
- 'The Salmon,' Hon. A. E. Gathorne Hardy. Longmans & Co.
- 'Fishing in American Waters,' Genio C. Scott.
- 'The Badminton Library of Fishes.'
- 'The Rivers and Streams of England.'
- Guide to Fishes and Localities in the United States.
- 'The Field and Stream,' New York.
- 'Forest and Stream,' 'Outing Magazine,' 'Field and Stream,' 'The American Field Recreation,' are Journals devoted to angling and sports.
- 'The Field,' 'Fishing Gazette,' 'Angling News,' and many more in London.
- 'The Angler's Diary.' 19, Adams St., London.
- 'The Sporting Fish of Great Britain,' Mr. Cholmondely Pennell.
- 'The Book of the Salmon,' Young.
- 'The British and Irish Salmonidae,' by Day.
- 'Salmon Problems.'
- 'The Tweed.'
- 'Fly Rods and Fly Tackle,' Walls.
- 'Salmon Fishing with a Fly,' Badminton Library.
- 'Salmon and Sea Trout,' Sir Herbert Maxwell.
- 'Aquatic Researches of the Hawaiian Islands,' David Starr Jordan and Barton W. Evermann.
- Publications of the U.S. Fish Commission.

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