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I

COARSE FISH

BY CHARLES H WHEELEY

COARSE FISH

WITH NOTES ON TAXIDERMY
FISHING IN THE LOWER THAMES, ETC.

BY

CHARLES H. WHEELEY

MEMBER OF THE PISCATORIAL SOCIETY, THE GUILDFORD ANGLING SOCIETY

AND THE THAMES ANGLING PRESERVATION SOCIETY

HONORARY ASSISTANT RIVERKEEPER TO THE THAMES CONSERVANCY, ETC.

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PREFACE

IN the following pages Mr. Wheeley gives a practical account of the modern methods of taking coarse fish, with special reference to the Thames.

The chapters on perch and pike have been included to render the work complete, though a later volume of the Library, contributed by Mr. A. Jardine, deals exclusively with those fish.

The flounder, though ostensibly a sea-fish, finds appropriate place in any work on river, particularly tidal, fishing ; and the concluding chapter on Thames trout gives the latest methods—practically coarse-fishing—of taking that remarkable fish. The Editors have to acknowledge some assistance in connection with the illustrations, their thanks being more particularly due to Messrs. Allcock and Bartleet of Redditch, Cummins of Bishop Auckland, Farlow of London, Hardy Bros. of Alnwick, and Watson and Hancock of London.

F. G. A.

H. M.

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HENRY STANNARD, DEL.

BARBEL.

SWAN ELECTRIC ENGRAVING CO.

COARSE FISH.

THE BARBEL.

THE barbel is one of the strongest coarse fish that the angler has to cope with. Gregarious like bream and roach, if they can only be induced to feed, and due care is exercised, these fish may be caught by the hundredweight: it is not an uncommon occurrence to fill a punt-well when barbel really feed in earnest. They seem built for heavy, sullen fighting; their great length, broad fins, and habit of feeding on the bottom all indicate their character. They are boring, deep-plunging fish, making for the bed of the river with extreme doggedness when hooked, and, as a rule, are not then addicted to gymnastics on the surface. The angler will find his hands full with a big barbel on fine tackle.

Barbel are queer-looking fish; their small eyes are knowing and crafty; the wattles and sucker-like mouth increase the peculiarity of their appearance, and the angler's first barbel is usually examined with considerable interest.

Thames and Trent anglers seem to be much at variance as to barbel-swims, to judge at least

from a conversation with a Trent angler whom
Thames I met on the bank. On telling him of
and a day's fishing in July, he asked the depth
Trent of the water fished. I told him from fifteen
to twenty feet, and he seemed surprised at getting
barbel at such a depth at that time of year. I
invited him to try, and, sure enough, we got barbel,
float-fishing in that depth of water. The great
disturbance of the water may account for this,
causing the fish to seek deeper swims, where punt-
poles seldom or never touch the bottom. Excessive
punting has done much to spoil Thames fishing of
late years; in shallow water, there is so much
thrusting down of poles into the gravel (or mud, as
the case may be), and the fish are more disturbed
and worried than by the passage of a sculling or
rowing boat. Nearly all the shallow water is
probed by punt-poles, incessantly on busy days;
sculling-boats and canoes disturb the surface, but
punt-poles reach the bed of the river, and disturb the
whole water wherever it is shallow enough for the
pole to be used. Add to this the churning up of the
water by launches in the summer, and it is not
surprising that fish should resort to the deeps for pro-
tection and quiet. I have never fished the Trent, but if
Trent anglers bear in mind all the disturbance of the
Thames, regattas included, the differences may then
be to a great degree adjusted. For mature fish,
this disturbance may mean preservation, as it drives
them away from the banks and shallows to the
pools and weirs, into places almost inaccessible to
the angler, whether fishing from punt or bank. I
am certain, however, that the wash of the launches
kills millions of fry of all sorts, to say nothing of
the damage done to spawn.

Large catches of barbel are frequently made in the Thames on the sixteenth of June, the opening day of the season; the fish have had a long rest, and have not been alarmed by leger-bullets being dropped amongst them. There are, moreover, no fish swimming about with broken tackles in their mouths; for nothing does more harm in a barbel-swim, if the fish are feeding shyly, than for one or two to break away. At this early season of the year barbel are seldom in good condition. I therefore prefer the latter end of July, August, September and October for barbel-fishing. After October, frosts begin, and cold weather is not favourable for this particular sport. A peculiarity is that one rarely takes a barbel of much under a pound in weight. Much discussion has recently taken place as to whether barbel feed in winter, and some few anglers appear to have baited swims and tried their luck. Although I have never deliberately angled for barbel in winter, I do a good deal of worm-fishing for roach and perch; and if barbel made a habit of feeding regularly at that period of the year, I think I must have picked up a stray fish or two. This I have never done, and I therefore conclude that their feeding in winter is very exceptional. Because perhaps on a mild spring or autumn day two or three barbel are taken, and only then by baiting well, I do not consider we can therefore assume that barbel feed during the cold-weather. On the Thames, ninety-nine anglers out of a hundred look upon barbellling after October as next to madness, and my views entirely agree with those of the ninety and nine. With respect to Thames fishing, I regard winter barbel-fishing as so much waste of time, as chub, pike, roach and perch

are then in their prime, and the angler will do far better to try for these fish and let barbel alone. As an experiment, winter barbellling may be interesting, and that is all. I have heard of large barbel being taken in winter, but they may have been foul-hooked in some way, i.e., hooked outside the mouth, and not in seizing a bait. Even when they are by chance caught in the winter, I should think they would give little or no sport.

Although barbel play down heavily when hooked, they may frequently be seen leaping, especially very early in the season. It is strange that, being a ground-feeding, routing fish, very large barbel should take the spinning bait in weirs, chiefly in May, more especially when the trout fisherman is using a heavy lead. Molesey Weir has attained notoriety for the large barbel landed there in the trout season ; and for specimen fish of all sorts, indeed, this weir is difficult to beat, though nowadays terribly over-fished, as is the case with many of the weirs near London. For good barbel-fishing, commend me to a Kennet pool, with its beautiful sparkling water, little fished, as most of these pools are private.

I always select a gravelly swim for barbel-fishing, **Leger-** though on one occasion an angler came **ing** from town to the Weybridge water and had a good catch by fishing on the mud with fine, light tackle. As barbel frequent deep, heavy runs of water, a powerful rod, able to lift a large lead and kill a weighty fish, is chiefly used on the Thames when legering, which is the style or method most practised. A leger-line is one that rests on the bottom ; a shot is placed two or three feet above the hook ; above this, a perforated bullet is slipped on the line ; the bullet cannot get below the shot,

but, by keeping a taut line, the bite of a fish is easily felt, giving a peculiar "knock" to the rod-top, which should be followed by striking. The bite is thus known by touch and not by sight, as is the case when float-tackle is used. So swift and heavy is the water in many pools, that we occasionally have to employ two large bullets on the line to keep the bait down. It is therefore evident that a weak rod, running line and fine gut tackle are useless to cope with so powerful a water; indeed, it is best to err on the side of strength of tackle, for, as I have previously remarked, tackle broken in barbel is the very worst thing for sport. These bullets should run together on the running line, or on gimp, being stopped by a good-sized swivel from reaching the gut. If they travel on the gut, they will soon fray it.

A twelve-foot greenheart rod, with a stout top, good strong brazings and winch fittings, will stand the strain. In shallow, gentle swims, much lighter tackle and cane rods may safely be employed; but barbel, if they feed at all, usually feed most greedily. Much time is wasted in play by using very fine gut; hold your barbel as hard as you dare, and get him out as soon as possible; slip on another worm and down with it; if the fish are well on, it will most likely be taken as soon as it is on the bottom. Thames fishermen usually keep the hook three feet or more from the bullet in straight runs, and a swivel below the weight saves a lot of twisting in the gut length. If you are punt-fishing, the punt must be kept as steady as possible; in a swift weir run this is sometimes no easy matter, and the rypecks must be driven in at a considerable angle to resist the force of the stream, fixing the

punt lengthwise, not broadside, in the run. Two rypecks are generally required, and sometimes a weight as well. Steadiness of the punt is essential to keep the rod steady ; it is impossible to fish properly with a leger-line if the punt sways about. As the punt works the rod shifts, but the rod must be quite still or the tackle will not work properly. The leger-line is, of course, used without a float, and the bait is swung out to the required spot, letting the lead rest on the bed of the river. After lowering the rod and tightening the line, the angler awaits the peculiar "knock" of a barbel bite, just keeping a taut line on the rod top without lifting the lead off the ground. The rod should also be kept in as straight a line as possible with the bullet, to ensure striking dead on the fish. If the rod is held out sideways from the punt, the strike will not be so effective. On noticing the tug-tug of a fish, which will be plainly felt on the rod, lift the rod steadily, giving a little time, but strike forcibly, not gently, for the lead has to be lifted as well as driving the hook home in the leathery mouth of the fish. In heavy water, the pull of a barbel, added to the rush of the current on the lead, is tremendous, and the fish fights stubbornly to the very last. A winch, with a good strong check to prevent any over-running, is best for legering. In quiet runs, if the barbel are not feeding, the rod may rest on the side of the punt, and the check on the winch be put on when the line is adjusted, until a twitch on the rod-top shows the fish have drawn into the swim and commenced to feed. In deep holes, where there is little current, a single tiny bullet and a finer running line can be used, and it is only in very exceptional cases that two large bullets are required. In or under the

main weir runs, however, you cannot do without really heavy weight. As in chubbing, I use a plaited line. In legering from the bank, or from a weir head, the rod can be held very steadily; the sitting position is the best, the angler drawing a little line off the reel and holding the line in the fingers of the left hand, or holding the winch firmly and striking from that. In the latter case, the line is wound taut on the winch, and the left hand is pressed on the revolving part of the winch (winding with the left hand, the handles of the winch being to the left), holding it tightly. (For directions as to casting from the winch, see p. 230.)

Floating for barbel is, in my opinion, far better than legering, as there is so much Floating more change and variety of scene and movement. Greater care is compulsory in the management of the tackle, the attention is kept up, and altogether it is better sporting work.

Of floats there is a great variety, both fixed and sliding, or traveller. A float for weir fishing, Floats queer to look at, but excellent in use, may be constructed as follows:—

Procure a large swan or pelican quill, ten inches in length; in the middle of this quill fix a cone of cork, tapered at each end. The circumference of the cone on one of my favourite floats is four inches at its broadest part, its length nearly two inches. Cork-piercers of different sizes can be obtained from Messrs. Townson and Mercer, 89, Bishopsgate Street, Within: these piercers are very handy for float-making; the tube cuts the hole through the cork very neatly, and removes the loose core at the same time. Pierce the hole through the cork before the tapering is commenced; cut this hole of

such a size that the quill will fit tightly on the cork when fixed,—the top of the cork should be four inches below the top of the quill; taper the cork carefully (I use an old razor and then sandpaper), and give the float a coat of green paint or enamel, leaving the topmost three inches white, or give the top a coating of bright red. This float is for deep water, so a little gaudiness does not matter; it has to be seen at long distances. In foamy runs a red-topped float is the best, the red stands out distinctly from the white foam, and, even in the glitter of the sun, is much better than a white-topped one. It will carry a small bullet or corking lead and shots; should greater weight be required to take the bait down very quickly, a heavier float still and corresponding weight must be employed. To finish your float, two stiff rings, of different sizes, are required. The larger is whipped to the cork, the other to the lower end of the float, the upper ring acting as a guide to the lower, this to allow the float to travel on the line, hence called a "traveller," or "slider" float. These rings must be strong, or the lower one will soon get bent upwards and will spoil the working of the line. I get some very handy upper rings by cutting off the ends of safety pins, and turning the loops into position with pliers. Each ring must be at right angles to the float when whipped on; and the action of the float is this—on striking a fish, the line runs through the float-rings, and your chance of hooking a fish is greatly increased, as there is practically no pull of the float against the water. I am certain many fish are lost by using a heavy fixed float on the line. The adjustment of the depth from float to hook may seem puzzling, but it is as easy as A, B, C. Pass the running line

through both rings, the upper one first, and affix the tackle in the ordinary way. Then, at the precise depth you wish your float to remain, insert a "stop" in a knot in your running line. The knot may be made by two half hitches. The "stop," as its name suggests, then stops at the lower ring (it cannot get below this ring), and thus compels the float to carry the bait at any depth you may fix, notwithstanding the fact that the float is loose on the line. With a ten-foot rod, fishing swims of not greater depth, the "stop" may be made of a piece of match a little less than half an inch in length, nor does it matter whether the match be of wood or wax. This stop will lodge across your top float-ring, but you must remember it will not come through the rod-rings unless it slips somewhat askew on the line, even then it will not come through the rings easily and comfortably. A stop made of this material is easily detached on changing the depth; but in fishing deep swims, the stop must be made of some smaller substance, and of a softish one, for in a twenty-foot swim the stop will be down on your reel when the hooked fish is near the landing net. Handy materials for stops in deep swims are a strand of single salmon-gut, double gut, a piece of soft twine or string, or a bit of Manila hemp fibre. This last can be snipped off the end of the ropes that carry the punt-weights, if you are punt-fishing; none of them need be more than about an eighth of an inch in length, provided your lower float-ring will not allow the stop to slip through. A swim twenty feet in depth is easily fished with a ten-foot rod, and the fish can be wound in to a very short distance of the rod-top, say three or four feet, according to the position of your top shot on

which the float rests when the line is fully reeled in. Many excellent swims can be fished in this way, from punt or bank, that are utterly useless to the angler who uses fixed float tackle.

For slower runs (*i.e.* compared with weir runs), up to about eight or ten feet in depth, I have a little float that works admirably. A small porcupine quill, three and a half inches in length, has the rings and cork cone affixed as before, the cork being much thinner than that on the larger float. I find the cone, by offering a slight resistance to the water, greatly helps to keep a straight line; the benefit of this will be explained later on. For very shallow swims I use a plain quill, but it is more difficult to get it to act properly. This float, being thin, makes little resistance when a fish is struck, and can be fixed by quill or rubber caps.

The tackle and floats for barbel must have the shots a trifle heavier throughout than those for chub, sufficient to keep the bait as near the bottom as possible, tripping on it whenever this can be done. Floating from the punt is far easier work than floating from the bank; in the former the angler can generally command a straight run down, and can keep his float well over his ground bait. For obvious reasons I like fishing very long swims; I send the bait to the fish instead of bringing the fish to the bait, and the fish get a tempting mouthful presented to them at such a great distance from anything alarming that the chances of success are much greater, unless the fish are madly on the feed, when they may sometimes be hooked close under the rod-top. As another advantage, a travelling bait works the water more thoroughly, as compared with a stationary, or

nearly stationary, bait on a leger-line. The travelling bait may run straight down to a feeding fish, or fish on either side may see it; a fish coming from some distance on either side, and travelling fast, will take the float down a little sideways in the way he is travelling,—that is my idea; though the fish will be likely to stop almost dead when he has seized the bait, in order to turn and seek another. Again, I am certain fish occasionally follow the bait down stream before taking it: there is something about it that excites suspicion; it is either left alone or taken after examination; all these chances are more or less lost with a still bait. If fish follow the bait and then take it, the float goes under down stream; and by striking too hard the tackle is easily broken, as you are striking against the whole weight and length of the fish. I freely confess to sometimes breaking tackle in barbel, but I notice that this happens more frequently when the float is pulled down in a straight line with the running stream; from this I conclude that I have struck against a fish moving straight from me. I shall never forget hooking my first barbel, some twenty years ago, and the occurrence is as fresh in my memory as if it had only happened yesterday. I was roach-fishing at Molesey, from a punt; the swim was just above the lower effluent of the Mole. We caught roach fast; noticing the float quiver, I struck, and the rod was nearly dragged out of my hands. “Barbel!” quoth the fisherman; “hold him, sir.” This I did not do, as I lost my wits with the shock, and the fish tore down stream at his own sweet will. Suddenly he stopped, and on putting on a severe strain, I could not move him. Our puntsman took

the rod from my hands, the fish was foul of something, and he had to break, the line coming back minus hook and shot. Barbel are occasionally hooked when roaching with gentles, and this is what happened with my first barbel. I returned home sad and sorry at the loss of a big fish, for it is *always* the big fish we lose !

The object of ground-baiting is to draw your fish together ; this must be remembered when your bait travels down stream, you must guide your float along the line of the bait, or to the spot where you suppose the bait will rest. This is simple from a punt compared to bank-fishing, for the punt can generally be placed in such a position that the mere flow of water will guide the float in the line of the bait ; and the same remark applies to fishing from a weir head or a bridge. In fishing from the bank, the stream is, more or less, at an angle to the rod unless some jutting point or stump can be found which makes an available swim. When the stream runs between straight banks, and you are fishing a swim, say ten yards away from the edge, there must be an angle between rod top and float, hence fishing, and striking, is more difficult, and the working of both line and winch requires greater care and skill. If you throw up stream, to reach some particular spot, you must wind in as the float comes down, slackening the line again when the float passes you, taking care not to have a slack line between rod-top and float. It is not always the rule to throw up stream ; but sometimes, from the impossibility of finding a favourable standpoint from which you can reach a choice swim, it is compulsory to do so. A slight elevation in the bank greatly assists in fishing a long swim, the angler being

further above the water. In bank-fishing, as in punting, attention must be paid to the run of the groundbait; the float must not be pitched too far out, or kept too close in. An eddy is of great assistance, as the bait and groundbait are washed round and round together.

In the Thames, we catch barbel both in some of the very swiftest runs and in some of the most sluggish pools. I fish the swift runs in the early season, chiefly at the tails of weirs; then, by legering and floating, search all sorts of water until I get a good idea of where the fish congregate. I give preference to the deep runs and pools, owing to incessant disturbance as previously mentioned. The very edges of weir-falls, when the bottom will permit of leger-tackle being used, frequently produce fish. In May, when the water is clear, and the weir paddles are shut down, shoals of great barbel may sometimes be seen, slowly wending their way among the stones, not apparently seeking for anything, but roaming about in a lazy, aimless manner. I have seen a shoal of enormous fish thus pass over the boulders and amongst the girders of a Thames weir, and the sight is not soon forgotten. Where these great fish get to in the fishing season I cannot tell, for even if we fish amongst them they are very seldom caught. When I last fished Goring Weir for trout, I was informed that the weir was full of barbel; but, try as they would for barbel, anglers were not successful in Goring Weirpool. I know you can get (and have myself taken) plenty of barbel at Pangbourne, which is the next weir down stream. I mention this to show what strange fish barbel are, and how necessary it

Selection of swims

is to seek for them everywhere. The upper ends of very deep eddies sometimes produce fish ; and these situations require legering, as the bottom is uneven. Again, I have taken barbel out of the lowest depths of a pool, in twenty-five feet or more of water ; I have also had sport in water not more than three feet in depth, and even in less than that. My advice then is to search everywhere for barbel, remembering the spots in which you get sport for future operations ; though it is by no means uncommon to get first-rate sport in a certain swim, and on fishing it again to leave without taking a single barbel. It is a question of hitting upon a shoal, and whether they are on the feed. They can be drawn together by groundbaiting ; but there are occasions when this fails entirely : the numbers of lobworms and gentles that have been wasted in barbel-swims are incalculable.

The barbel bait-list is a small one. The lobworm is the chief ; after that come gentles, greaves
Baits and cheese-paste. Lampern is often spoken of as a killing bait, but I cannot speak from experience of this. I have tried cold mutton fat with success when other baits have failed. A friend fishing with me in September for perch, paternostering round some wooden piles, caught a three-pound barbel with a live minnow. This is very late in the year to take a barbel with live bait. A nine-pound barbel was caught at Teddington, some little time ago, with a black beetle. I should think that pieces of fresh-water mussels would make an excellent bait. I have sometimes amused myself "angling" for these with a willow twig. On looking over the side of the punt in shallow water, when the sun is bright and the weather calm, these mussels can be

seen half buried in the sand, with the shells slightly apart. The twig is cautiously inserted between the shells, and the mussel immediately grips it tightly, and is lifted out. I like a No. 10, 11 or 12 hook (see p. 77) for barbel-fishing with lobworm, as a lobworm is a big bait, and a small hook is smothered in it (instructions for baiting with lobworm will be found on p. 233). Barbel hooks can be obtained with a small hook tied on the gut some little distance above the shank of the large hook; in very swift water, this serves to keep the worm straight, and well up the gut, for if the worm be forced into a lump on the bend of the hook the barb is, to some extent, choked with the bait; and, in consequence, fish may be missed. The late J. P. Wheeldon, who was one of the most successful barbel-fishers I ever knew, gave me a hint about baiting with a lobworm that is well worth relating. Instead of threading the worm entirely on the hook, just nick the worm through the skin in two places, and instead of holding the line quite taut on the winch or in the hand, gently grasp it between the first finger and thumb of the left hand, leaving about three inches of line loose behind the grasp. On feeling the tug-tug, let the little slack line slip, then strike almost instantly. This method is certainly to be commended; when the barbel first takes the bait, if not greedily feeding, he is just picking it up, the slack line allows him to suck it well in, and he will be better hooked. For legering in quiet swims, this style of baiting and hooking should meet with success, though I am inclined to think the worm, or part of it, would frequently be sucked or nipped off and the hook missed by the fish. In very swift water the force of the stream would tear the worm

off. I always take the greatest care to keep the hook point just in the flat tail of the lob, and even then miss fish. I have tried Stewart tackles, but a lobworm is strong enough to loop himself about unless on a long-shanked hook, and thus throws the hooks out of their proper position (for Stewart tackle, see p. 243). I do best with brown-stained gut when legering, and hold with stained gut, notwithstanding all that has been said against it. I find I kill more fish with stained gut than I do with the natural gut, and simply state what is my own actual experience. I vary the shades according to colour of the water, and only use perfectly plain gut when trouting in the white water of weirs, and fishing near the surface. This question will always be a disputed one. A rather small triangle should be used for fishing with a bunch of gentles, No. 10 being a good size (see p. 77). The gut can be varied in strength according to the style of swim fished; and it is useless, or next to useless, to use gut like gossamer in a heavy weir run or with a stiff rod. As previously mentioned, Thames anglers usually keep the bullet a long way from the hook when legering in straight runs, simply passing the running line through the bullet and knotting on a swivel in the gut loop. In strong curling, eddying water, the weight is best at eighteen inches, or a foot, from the hook, as the worm may be swept to one side or other of the bullet, and the tackle does not fish so well. The bullet, in this case, should run on stout gut, stopped by a shot or small piece of stick from getting down to the hook, the gut above the bullet being at least two feet in length. A greater length of gut above the bullet is sometimes a help, for it does not hold the water so much as

the running line. If the bullet runs on gut examine the latter now and then, as when chafing shows, it must be renewed. Some anglers prefer a length, say six inches, of gimp, for the bullet to work upon ; but I always avoid gimp when possible.

When ground-baiting for barbel with clay, gentles, and bran, "clayballing," as the style is called, is sometimes very successful. Working up clean (not earthy) clay and plenty of bran into a stiffish paste, kneading the bran well into the clay. This is best done in a small tub or bucket, a tub for preference, as there is more room for the hands to work, and the mixing is more easily effected. When the mixture is ready, knead in a few gentles and stick a lump of the "pudding" on your tackle, so that the hook or triangle shall just stick well out. To keep the clay on the line, knot on a piece of stick crosswise, which prevents the clay from slipping further down the hook. A better plan is to work the lump of clay around a leger-bullet, which is stopped on the line in the usual way, but closer to the hook. This keeps the clay and bait steadier, for the clay presents a large surface to the action of the water, and the weight of the bullet tends to keep it down better. Strong rods and tackle must be used when clayballing, and the strike must be a slow, steady lift. Only certain spots are suitable for this method ; slow eddies, or places where the bait will rest quietly, should be selected, as these can be fished rather close to the rod-top. Lower the line carefully and quietly till the clay reaches the bottom ; keep it as steady as possible ; and if you do not get a fish in a few minutes, raise the

rod-top very slightly and let the clay slide a foot or two further away. It is no good throwing far out into the stream and letting the clay lump roll over and over. There is an excellent spot for clayballing from the bank at Bell Weir, near Staines, and some of the swims in Penton Hook are suitable for this kind of work. Many years ago I saw a fine catch of barbel at Kingston; the fish were taken by legering from the bank, just over the edges of weeds, so that it is useless to say that barbel can only be taken by punt-fishers, though I have often heard the remark. A triangle is better than a hook for clayballing, it holds more gentles, and the fish see the bait better. The gentles should be hooked on by the skin of the blunt end (of the gentle), and not threaded on.

Walton says that "none did ever over-bait the Ground-place for a barbel." Though it may ^{baiting} be rank heresy to contradict this, I am not of that opinion. I think judicious baiting always produces the best sport. I have known anglers to bait a pool or weir with 5,000 or more lobworms, all thrown in during a few minutes, loose or enclosed in clay balls, in places where, by the action of the stream, nearly all the worms remain in the pool; then to fish some ten or twelve hours afterwards and catch nothing but a few miserably small barbel. The only conclusion I can draw is that the fish were thoroughly sickened and glutted. In places where the lobbs can spread and draw the fish up from very long distances, a heavy baiting does good, and sport is almost certain to follow; but before baiting a swim a little consideration is advisable as to the amount of bait that swim will reasonably take. Special care should be observed

when ground-baiting with greaves, of which barbel are excessively fond, though they soon sicken of it. In medium-sized pools and weirs, I have had excellent sport after a mild baiting with 500 to 1,000 lobworms; pitched in loose, broken up, the afternoon or evening before fishing, just scattering a handful or two more of worms when commencing to fish. In straight runs, or places where the groundbait is carried directly away, the worms should be enclosed in clay. Knead the clay with bran, make a cavity in a lump, put in a handful of worms and close the clay over and around them; the weight of clay keeps the worms well down and in the swim. This clay and worm baiting is troublesome if the clay is difficult to procure or has to be carried some distance. I would emphasise the importance of clean, smooth clay. It should have bran mixed with it, as some of the bran scatters in the water, helping to attract the fish.

The question of baiting swims and retaining these swims is a very vexed one on the Thames, and rather bitter feelings prevail on the subject. Should one man bait a swim, it is arrant poaching on the part of another to take advantage of that baiting for his own sport. The professional who deliberately allows, or takes a customer to fish a swim baited by some one else would never, after such a flagrant breach of etiquette, be employed by me. There are two sides to the question, however, as I cannot consider any one has a right to bait a swim and say that he only shall fish that swim for perhaps a week straight off; this may mean the monopoly of the best barbel-swim in a mile or more of water. Again, rypecks are

left to mark some of the baited swims (or those supposed to be baited) for days and days together and the swims are not fished; meanwhile, the angler who is a sportsman leaves that particular spot alone, being perhaps debarred from trying a really good pitch. It would be far more sportsmanlike in some cases were a give and take principle acted upon, all parties endeavouring to avoid offence, instead of, as in cases I have known, deliberately giving it. To bait a swim one evening, get up early next morning, and then find a punt with one or more anglers fishing it, who, on being told they are fishing a baited swim, refuse to move, and use bad language, forms one of the unpleasant incidents of Thames fishing. Leaving rypecks in the navigable part of the river is illegal, but they are often left in weir corners and backwaters.

Barbel run to a large size, but a twelve-pound Size of fish is nowadays rare. A barbel of 12 lbs. barbel 7 oz. was taken in 1895 by Mr. Woolley Kelsey; another, 12 lbs. 1 oz., in the same year, by Mr. Blundell; both the fish came from the Piscatorial Society's private water at Newbury, and the weights of the fish are duly authenticated.¹ If you land barbel up to six or seven pounds in weight, you may consider you are doing very well, while a ten or twelve pound fish is well worthy of preservation. It is rare to take a barbel of much under a pound in weight. Once barbel come on the feed, the sport is most exciting; and I have often had my hands trembling so much with the excitement that I have hardly been able to put the worm on the hook properly.

¹ The fish are now in the Piscatorial Society's collection.

As food, I can only consider barbel worthless ; I have twice *tried* to eat them, but have abandoned the attempt ; the flavour is what one may imagine mud would produce,—perhaps my barbel were not properly cooked. As food

Many die in the spawning season. I have picked up several fine fish during the months of May ; I found five one morning between Penton Hook and Staines railway bridge. After spawning

The time to see barbel is on a bright, warm May morning ; when they are routing and cleaning themselves on the gravel. The shallows of the weirs might be full of young porpoises for all the splashing and disturbance that goes on ; the whole water is alive with fish, barbel and chub. A great fellow, wriggling against the stream, suddenly gets broadside on, he sticks against a big stone for a moment, churning and lashing the water with his great tail, then he slides away, his place being soon taken by another fish. A sight like this I have enjoyed many a time ; and when I am told there are no barbel to speak of in the Thames, I remember what I have seen with much complacency.

I have found an east wind will put the barbel off the feed ; so if the wind suddenly changes to this quarter, the angler will know what to expect. Baiting a Kennet pool over night, we started fishing early next morning. The barbel were well on, but the undertow made legering difficult, so I changed my tackle, and started “corking,” getting very good sport. The weather was warm, misty with rain, and as we found the fish biting well we had visions of catching hundredweights of them. Suddenly, about nine A.M. they ceased feeding entirely, and we could not divine the cause for some time ; on Effect of east wind

seeing the direction of the wind, we noticed it had changed to the east, and I have not the slightest doubt that is what spoiled our sport. How anxiously we anglers watch the direction of the wind, and how seldom we experience much sport when it is easterly ! I say seldom, for I have caught fish when the wind was in that quarter, particularly Thames trout ; but my recollections of sport in an easterly wind are nearly all depressing. I have lately read that, in New Zealand, an easterly wind is the most favourable for sport ; the southerly wind there is cold, coming from the Pole.

In playing barbel, the fish's tail can frequently plainly be felt to hit the line ; I do not for
 "Bor- ing" of one moment consider this intentional. As
 barbel the barbel "bores" so much in play, ramming his head down and fighting towards the bottom, the tail strikes the line in his struggles, and the idea is perhaps entertained that it is purposely done, but it is only owing to the peculiar position of the fish. A large diseased barbel in the Colne once attracted my attention, and though the position may seem impossible, the fish was almost upright, as if he were trying to stand on his head. He was in a very bad way, a great patch of "fur" extending down his side towards the tail ; and had I been able to reach the fish I would have tried to get him out and killed him, as it is no good letting these diseased fish remain in the water.

The angler should remember to try changes of
 Change of baits baits when barbel-fishing, not in the same pitches, but if he cannot get fish with lobs, let him bait another swim with gentles or greaves, and let the second swim be far from the first, so

that cross-baiting cannot happen. Try also fine tackle and a small hook baited with a red worm. I have done well with cheese-paste, fishing long swims with float-tackle, and baiting very sparingly. Perhaps, after much patience and care, you will get the fish thoroughly "on," when the sport will not quickly be forgotten. A punt-well is soon filled when barbel mean business, six-pound fish take up a lot of room. 'Not the least exciting part of the sport is getting the fish out of the well again, the mighty bangings of tails when they are freshly alarmed by the endeavour to lift one out will fill you with delight, and, very likely, your sleeves with water.

I caught my first barbel in the river Wey, in a spot where they have free access to the Thames : I was roach-fishing at the time with gentles. The place is now almost unrecognisable, the lower Wey being so encroached upon by building. A summer-house now stands on the spot I fished from. Halliday's Hole, and Ham Haw, or Hard, Deeps and the Chalk Hole, at Shepperton, were once famous places for barbel ; they are now silting up somewhat, the new weirs having altered the character of the river.

Tight corking, *i.e.*, fishing with a fixed float, is sometimes practised with success in barbel- Tight fishing, especially in bank-swims. A long corking rod is best, as it is advisable to strike as directly as possible in a line with the float. Let the shot be well apart on the tackle, and the last two or three rest on the ground, the bait being thus held steadily in one place, and strike sharply on seeing a bite. Deep swims are not suitable for tight corking ; the float, being fixed on the line, draws up

into the top ring of the rod, stopping the winch and preventing any further winding in. It is also difficult to throw out when the float is fixed far from the hook, for the weight of float and shot do

Photo by H. P. Bassett, Weybridge.

BARBEL AND CHUB FLOATS.

not work together in assisting the throw, as they do when a slider float is used. This float slips down the line to the top shot ; all the weight is then at the lower end of the tackle. If you try to fish

a twelve-foot swim with a ten-foot rod, and fix your float, you will most likely meet with difficulties before the line is in the water, the depth being greater than the length of the rod ; and when a fish is being landed, you will find it more difficult still.

In legering, especially in very fast water, I much prefer a bullet, or a rounded lead, to **Bullet in** flat leads. Although a bullet may roll a **legering** little, which may be a slight disadvantage, the flat leads give more trouble, as they catch the water in sinking or in being drawn up, so much so that it is sometimes difficult to get the lead down to its proper place, especially in the top ends of weir runs. As in the case of chub, the corner back eddies in weirs are often excellent for barbel ; but obstructions and undertow must be learnt, and that generally means lost tackle at first. The stumps in some weirs must be simply festooned with tackles of all sorts.

I once caught a few barbel in a peculiar way. After baiting a pool, I had a throw or two with leger-tackle on the shallows below, throwing far out at right angles to the bank and letting the bullet roll along in the quick stream. In this way, I soon got four or five fish of about three pounds apiece, and the method is well worth trying where the bottom is of fine gravel and without obstructions.

THE BLEAK.

THIS fish, which grows to the size of a large sprat or small smelt, is a silvery, lively, delicate fish, being perhaps the best bait for Thames trout. The Thames swarms with bleak, and it is partly owing to this supply of suitable food that trout grow to such a size when introduced into the river. Bleak delight in bright sunshine ; the hotter the sun, the less trouble it is to catch them ; on a dull, cold, windy day, on the other hand, it may take hours to get a single one. They seldom show themselves much in the winter, but when spring begins, they flock into the weirs and around the lock gates, and into the lock itself, where they find a good living among all the stray pieces of bread thrown from launches and other craft. Bleak like playing about in the trickles of water that spurt into the locks when the water is lowered, and pay little heed to the boats and punts that pass through. They are exasperating little fish to the angler ; when particularly wanted for trout-baits you may not succeed in catching one. In cold weather they disappear from the surface and seek the deep water, while, when the sun shines, a dozen may be caught in as many casts of the line. They

like any white bait ; and gentles or bread-paste will take them freely , a caddis is irresistible ; any live fly that is showing on the surface is greedily taken, while they seemingly cannot reject bluebottles hatched out of the chrysalis of the gentle. To procure these I keep gentles in a glass jar with muslin tied over the top of it, placing the jar in the sun or keeping it in a warm situation. The gentles soon assume the chrysalis state, and then the perfect fly hatches out

When numbers of bluebottles have hatched out, I pour boiling water over the muslin, killing the flies ; for if you take a box of these live flies about with you they sleepily crawl out when you want one for the hook, and by the time one is flicked back others are crawling over the sides of the box. This may seem a lot of trouble about so insignificant a fish as the bleak, but sometimes they will utterly refuse gentles, and take the fly freely ; and I know how important it is to have something that will catch them. Moreover, a bleak in the puntwell sometimes means a trout in the basket. Impale your bluebottle on a tiny hook, and dabble it on the water ; perhaps half-a-dozen bleak will dart for the fly directly it touches the surface.

To get sport out of bleak-fishing, I use a little nine-foot greenheart rod, one that I am not afraid of taking out in the punt on the score of a chance break ; light fly-line, dressed, a two-yard gut cast, the finest procurable, with three hair hooks, a leader and two droppers (the leader is the hook or fly at the end of the cast, the others are called droppers). Twice as many bleak are caught by using hair instead of gut hooks, for even bleak

know what they are about. Any light winch with a check will do for this style of fishing. I advise using a winch because it is often necessary to make a long throw. Hook on three gentles, each by his blunt or tail end, running the point and barb of the hook right through the skin, to ensure hooking the fish. Bring the bleak to the surface of the water by throwing in a few pieces of bread; and directly they are seen around the bread, cast the gentles where the bleak are thickest; many a time have I caught one on each hook, and it is common to take two at once. The leading hook should have the hair length as long as possible; the droppers should be about three inches in length, the three hooks being about ten inches apart. If the droppers are longer they tangle considerably, and knot in each other, while the three baits should fall pretty close together amongst the little knot of bleak fighting over the floating bread. Here is a wrinkle for catching bleak in a stream when fishing from a punt; if you throw the bread in a stream

In a sunny weather they will come up to it, stream. but the bread is swept away and they follow it; you are thus taking your bleak away from the swim, instead of attracting them to the surface and keeping them there. The remedy is simple: tie your bread to thread or a bit of line and let it drift but a little way from the punt, not too far away, for you should cast just beyond it, or the hooks will entangle in the thread almost every time you cast. A tough piece of crust, with crumb on the edges, will last on the thread a long while, but the action of the water and the struggling bleak will sooner or later cause the thread to cut the bread: by this time, however, you should have

caught at least half-a-dozen bleak. This "bread and thread" dodge is a really good one.

Fishing with gentle or fly¹ on the surface in sunny weather is profitable enough; but in **Float-** cold weather, with strong winds, it will **fishing** frequently be found extremely difficult to catch a single bleak. Travelling a long way to a distant weir intent on getting a trout, the angler finds the day slipping away while he is vainly endeavouring to catch baits. Whip the water as he may with gentle or fly, artificial or natural, not a bleak shows himself near the surface; the only plan to adopt is to put up light float-tackle and fish deep in the eddy below lock-gates, or in the lock itself, squeezing a little bread with water for an attractive groundbait. Three hooks may be knotted on the line as before. In very stormy weather, I have taken bleak quite six feet below the surface, fishing as for roach. Strike at the very slightest nibble, get the bleak off the hook as gently as possible, and put him in the bait-kettle or punt-well without any unnecessary delay, as they are very tender and die quickly, and a bleak that bleeds when the hook is extracted seldom lives long afterwards. Although bleak mostly take a single gentle well, there are occasions when they want three on a hook to bite at. For single gentles I use a very small hook, to avoid damaging the fish much; the hook for three gentles must be a little larger. I find bleak prefer a live gentle to a dead one, the wriggling gentle is taken in preference to one just about to assume the chrysalis state, when they become stiff. Another peculiarity

¹ When bleak are on the surface, almost any small artificial fly, gnats, duns, &c., will take them.

is that bleak will now and then refuse gentles, but will take tiny pellets of bread-paste. This bait is difficult to throw far, as it whips off; and bleak also know how to suck it off. There is a gentle nibble, you strike, and see the bait leave the hook, when three or four bleak will fight for it at once.

Even the professional, using the cast-net, may occasionally fail to get a bleak for a customer, for I have offered a man a shilling for a single bleak and he has been unable to get me one. It is good education for a young angler to be taught how to catch bleak, either with fly or float-tackle; quickness in striking is acquired, and great quickness of sight also. When they are feeding freely, bleak may be whipped out with a willow rod and a hook tied on thread, and a child will catch them; but in unfavourable weather, the most experienced angler, who wants a trout bait more than anything under the sun, may find his efforts quite fruitless.

However light any float-tackle may be, bleak caught with this are frequently hooked too deeply to be of use for live-baiting; it is therefore best to fish without float or shot whenever possible. They do not thrive in punt-wells, quickly getting covered in places with "fur," and rubbing their tails badly. They also go off colour, more especially in punt-wells where there is little light or ventilation. Diamond-shaped holes should, therefore, be cut in the top of the punt-well and will be found useful to slip a bleak through into the well, besides affording extra light. See that the punt-well gets as much trickle of water through it as possible; when the punt is left at night, peg

her at an angle to the stream, in order to give a freer run of water through the well.

Bleak are apparently very easily disturbed by noise. I often take long walks in search of Thames trout with my old fox-terrier for company. If I notice a shoal of bleak I stop and watch them for half-an-hour or so, to see if a trout shows himself amongst them. Waiting at any particular spot soon exhausts the old dog's patience, and he gives a sharp bark to intimate that there are such animals as rats to be found if I will only proceed on our ramble. It is then common to see each bleak "start" at the sharp sound, and the shoal immediately drops below the surface, swimming deeper for a minute or two. Their sudden fright is caused by the sound, without doubt, as I keep out of sight of the fish, well away from the edge of the water.

THE BREAM.

THIS fish seems thoroughly to enjoy the society of his fellows, roaming about in great shoals, taking things very easily, and never displaying undue haste in his movements unless alarmed. The only time I have seen him in a hurry on his own account is when he flops himself on the surface of the water ; even this he does in a slipshod sort of manner, making a short splash, as if the effort were too much for him.

Bream are of two sorts, the carp or brown bream, and the white or silver bream. Two species grow to a heavy weight, ten pounds or thereabouts being a very large fish indeed ; you may fish a very long while before getting a six-pounder. The largest silver bream I have taken have been somewhere about a pound in weight. These silver bream are little good for sport ; "tin-plate" is a nickname given to them, and they really do look very much like tin plates in the water when hooked. Carp bream, on the contrary, give good sport for a rush or two, as the tackle used is very fine and light. "Bellows-bream" well defines the shape of the fish. They are very deep and narrow, with deeply forked tails, small heads,

SWAN ELECTRIC ENGRAVING CO.

BREAM.

HENRY STANNARD, DEL.

and large eyes. It is very interesting to watch a shoal of big bream in clear water, where they look grey or bluish-grey; and when they turn, if the sun be shining, their flat sides make them look much larger than they really are. I frequently notice the shoal is led by one big fellow, and that they turn when he turns, coming up one side of a pool or shallow and returning by the other; or they wheel slowly to right or left, and go down stream, the former leader being almost the last in the ranks. If you stand up and alarm the fish there is a grand helter-skelter, and bream then show they can move if they are put to it. One fine day I suddenly came across a vast shoal of bream in the Wey, near Pyrford, and in such shallow water that I could see the fish plainly, and amused myself for a long while watching their slow, steady actions. A few fish in the shoal were quite five pounds in weight; but, do what I would, I could not get them to feed freely, killing only a brace of miserable three-pounders out of the lot, though I tried in several ways and with different baits. On another occasion, when searching for bream, I noticed a single solitary fish wandering about by himself, a very large fish indeed, and I tried hard to prevail upon him, but without success. This is the only time I have seen a solitary bream, and he must have strayed and lost himself, or been scared in some way; it does not seem right for a bream to rove about alone.

When the water is a little thick, and bream cannot be seen, look out for bubbles, or fish priming as it is called, on the surface. I Swims have walked many a mile searching for fish, carefully noting all the likely places and the best way

to fish them ; and this searching of the water has led me on many a delightful and healthy ramble. I much prefer river-fishing to pond-fishing for bream ; the river bream is firm and shapely, well conditioned, and without much of the grey, sticky slime that so much disfigures the pond or lake bream. I have taken bream out of rivers without a particle of slime on them, as clean and hard as a carp. These river fish also give much better play. Many Norfolk bream are excessively slimy, the slime coming off in rags, covering line and tackle, and making everything in a mess. It is better to keep these slimy fish in a keep-net, slung over the side of the boat ; if they are thrown in the boat the mess is abominable. Although bream wander about, you learn the likely spots by searching, and thus have a far better chance of sport. The time is well spent, not, as a rule, wasted ; though you may find bream in a particular spot one day, and not see a fish there on the next. My favourite plan is to select a really good and comfortable spot, and keep it baited. In 1896, I had a lovely little place of this sort on the Wey, where I was hidden from observation and could fish quietly to my heart's content, any one standing even a few feet away being unable to discern me. On visiting the place this (1897) spring, I found, to my disgust, that the floods had washed away the bank, and the eddy is now not fishable from the same spot. Continuous baiting, if not too lavishly exercised, does much good in bream-fishing ; the fish apparently remember where they have picked up plenty of tit-bits, and return, even if they leave the spot for a time.

Bream inhabit deep, sluggish rivers ; thus, the

Wey and Mole may be considered typical bream-rivers. Where deep holes and shallows alternate, fish are more easily found, for they are seen passing from one part to the other when the water is clear. The Thames is an excellent bream-river; but the best places want knowing, and are often difficult to find. The deeps at Walton, until recently, were famous for bream; but I fancy their day is gone, chiefly owing to the launch traffic, but partly from the fact that they are over-fished, fish being taken away to weigh in for gross weight prizes by club anglers.¹ I have had two very good days on Ormesby Broad, near Yarmouth, Norfolk; but the bream there, as in other places, are uncertain in feeding. I have taken large bream in weirs, as will presently be described. These weir-bream are the handsomest race; and generally, when a bream gets into a gravel-bedded stream with a good current running, he soon becomes a different fish, and far more worthy of capture. The bream is a clean feeder, liking a nice, sweet, dainty bait; he generally feeds very gently, and is not a dreadful glutton like the chub. In narrow, much-fished rivers, bream get very shy, and the utmost quietude and stillness should be observed. In the Wey, a passing boat or punt puts them off for a long while, and I take care to keep out of sight and to avoid moving about much when bream-fishing. Whenever possible, I pick out a sandy eddy to fish; this being unavailable, a gravelly swim is next best. I take care to choose a spot where I can find a convenient resting-place for the rod; for unless I find the fish are

¹ Kingston-on-Thames is perhaps nowadays one of the best places for Thames bream; the water is deep, and admirably suits the fish.

about in numbers and feeding freely, I seldom trouble to hold the rod when fishing from the bank, indeed, I consider it a disadvantage to do so when the stream is not powerful enough to shift your tackle. In a strong stream, legering is best, the bites being felt by touch, and not seen by the action of a float.

For bream, I employ very fine, light tackle. It is seldom that they have to be held out of weeds or dangerous stumps, not being in the habit of seeking much cover, except, perhaps, that of depth of water. They do not as a rule lurk behind or under great roots or branches, but are most frequently found in nice open water that is delightful to fish, and in swims that are unencumbered with stumps and stones. Early morning, in the Thames especially, is a favourable time: but I have caught bream at all hours of the day when I can get the water quiet and undisturbed, and, what is sometimes important, not too bright. I like a dull summer or autumn day for bream-fishing, though in mild, open weather they may be taken freely in January and February. September is my favourite month, and I find I get most fish in still, quiet weather; having seldom taken many bream when there is much wind blowing. I have fished the Wey for bream more than any other river, and the fish there are pretty well educated and consequently are very shy. It is rare indeed to get many in the lower Wey; but their quality makes up for it. Nine out of ten of my Wey fish have been three pounds in weight or over, but then I use a large bait in most cases, for reasons hereafter given.

It is occasionally most difficult to find what bait bream will take, though at times they will not be

at all particular in their feeding. I have fished in the midst of a shoal of big bream, in such shallow water that I could see every fish, and Bait for a long while have been unable to tempt them, ringing the changes on redworms, gentles, paste, wheat or lobworms. Suddenly, I have found a bait they like, and have had good sport. A change to brandlings on one occasion produced a very heavy catch indeed ; this was in a well-baited pitch in Ormesby Broad. I could not see my fish, but having baited carefully, was pretty certain they were there. In clear water, I frequently find bread-paste is better than anything, and a little aniseed in the paste sometimes tempts the fish. In a list of baits, paste, brandlings, gentles, redworms, wasp-grub, boiled wheat and caddis may be mentioned, the last named being particularly good. This caddis is really an amusing and interesting little fellow ; before he develops into a sedge, or similar fly (not Mayfly), he clothes his nakedness in a most beautiful suit of tiny sticks or similar substances, and crawls about the bed of the stream with only his head and legs protruding. By stripping off this "case" you find a grub, which is an excellent bait for many fish. It is a most comical sight to see numbers of caddis crawling about ; a small net of coarse muslin will assist you to get a canful, and they are well worth the trouble. Bleak are ravenous for these caddis, and it is well to remember this when you want a trout-bait. Many years ago I was told by an angler that by dipping a hooked worm in asafœtida he had a grand take of bream. This I have not tried, but give the hint to any one who may like to do so.

I have two rods which I use for bank-fishing for

bream. The first is a long, eighteen-and-a-half foot cane rod, with a long, solid top. I have
Rod had this rod for many years ; it was specially made by Gowland, of Crooked Lane, a firm of tackle-makers no longer in existence. By accident, I broke one of the joints, which had to be shortened in the mending, so the rod looks a queer one, but it is still quite capable of killing fish. I have two sets of winch fittings on it, on the butt and next joint ; The fourteen-and-a-half foot length, given by taking the butt off, is quite long enough for some swims. The rod has large upright rings throughout, to allow the line to run very easily to a biting fish. The top is solid, to give weight in the strike, but pliable enough to avoid breakages of tackle. Bream are tough-mouthed, and a very different strike is required from that suitable for roach-fishing ; besides, the hook is of good size, and, in the tough mouth, requires more force to make it penetrate. This rod is a heavy one, the full length weighing exactly two pounds. To convert it into a still shorter rod, I have another top, the lower part of which is cane, the upper, a piece of whalebone, fourteen inches in length, carefully tapered down by scraping, the combination giving a most excellent strike. This top I made myself, and am proud of it. Whalebone is now very scarce and very expensive, costing something like £2,500 per ton ; I believe this figure is under, rather than over, the mark. If you possess one of the old carriage umbrellas, see if the ribs are whalebone ; if so, you have a treasure indeed, for a whalebone-tipped top is a delight. I scraped the whalebone down with broken glass, and found what a peculiar fibre it contained, admirably suited

to top ends. The second rod is in three pieces, and measures eleven feet; it has upright rings, cane butt and centre-joint, and greenheart top. This is one of Slater's, and I can speak well of it, though it is now pulled about a bit by rough wear and heavy fish, for it only weighs three quarters of a pound. I use this rod for bream, when I can find a swim that can be properly fished with it. When fishing for bream, I always use a ringed rod; the long roach-rods will kill bream, but, sooner or later, you will get "smashed up" by a heavy bream if you do not use running line, breaking either your rod or your line. These long, unringed rods are excellent for roach in certain swims, but I do not like them for bream. In one of my walks I came upon a fisherman in great distress. While roaching with a long, light rod, without running line, he hooked a really large bream, seeing the fish for an instant. Not being able to follow his fish, and the fish plunging down stream, half broadside on, the rod top broke, causing the loss of all the line as well. I cannot, therefore, advise bream-fishing without running line, especially as it is no rare occurrence to pick up a barbel or two, when these fish are found in the same stream. For legering in very deep water, with stronger tackle, the greenheart rod, more often used for chub, does very well.

Particular care about a winch is not absolutely necessary, as it is seldom requisite to throw far. So long as the winch has a good-sized Winch barrel, to wind in fast, and a check, you will get on all right.

I use fine, plaited lines for bream, little thicker than roach line, or the thickness of stout packing-

thread. For legering in deep waters with much stream, with a fairly heavy lead, the
Line line must be thicker, to stand the strain of lifting the lead.

A sneck bent hook, or a crystal hook, rather
Hooks long in the shank, intermediate in size between a roach-hook and a barbel-hook, should be used for bream, No. 9 being a very good size. A Kirby bent is, if not too short in the shank, an excellent hook. The baits for bream are larger than those for roach ; the mouth of the

SNECK BENT HOOKS.

fish is larger, and more metal in the hook is required for heavy fish, so that a hook a trifle larger than that used for roach should be selected. For gentles, wheat or caddis, No. 6 or 7 will be better,

so long as they are not weak in the wire ; but for paste and worm, I do not think a No. 9 hook can be beaten.

I prefer a blue or brown cast, six feet in length.
Gut In shallow waters this may be very fine,
length but avoid drawn gut. Bream are too heavy for this ; and you will get good sport without such extra fine gear, which only means loss of time in playing a fish.

The float list is not very varied. I seldom use
Floats a slider float, as I find I get the most and best bream with a still bait, having taken very few bream in the Wey with anything else. Indeed, I may say I confine my floats to two sorts only, both quills, the one a porcupine, the other a goose- or swan-quill. Either float offers but little

resistance to the water ; a stout, or even a tapered, cork float will travel about sideways, backwards and forwards, in tight corking, or semi-tight corking, and the line will, in consequence, not rest so steadily ; besides, a heavy float tends to alarm a feeding fish, its weight being more easily felt.

A very favourite float is a thin, five-inch porcupine quill, with white or yellow top, ringed at the lower end, and used without any cap in slow eddies or nearly still waters. This float is one of the best

BREAM FLOATS IN USE.

for pond-fishing. A six-inch porcupine, goose, or small swan quill for straight runs, ringed and capped, is better than the smaller one ; but use the thinnest quills possible. Any feathers I find when sculling or punting I cheerfully annex ; and I get plenty of swan quills at times from the Thames, painting these quills dark green to within about an inch of the top, when they make excellent floats for many styles of fishing, rough but useful. White-topped floats can be seen best in the dusk or early morning.

Soaked bread, kneaded up with plenty of bran, makes a very good groundbait, perhaps the best,

though I have found a regular mixture of bread, Ground-
 bait bran, clay, gentles, grains and worms will
 bring the fish on the feed. A simple
 groundbait is boiled wheat, and plenty of it, particularly in weirs and very deep swims. Bream will sometimes keep in such deep water in the weirs that it is almost impossible to fish for them, especially if the surface current be very swift. They want tempting out of this deep water, and literally bushels of boiled wheat are required to do it. I have never caught bream in a weir except after tremendous baiting. A baiting of small worms will also produce sport. I am particular about a sweet, clean groundbait for bream, and have done best in the Wey with bread and bran only. I have seen men go out with large bags of sour grains for groundbait; but this, I should think, would tend to sicken fish, rather than make them feed. I have been told that ground-baiting with crushed cotton or linseed cake, mixed with bread and bran, will produce good catches of bream, but have not tried this. If you want to get out a very long way when bream-fishing, employ a pellet of groundbait for weight, squeezed round three shots.

The first method of bream-fishing here described
 Methods may be called semi-tight floating. This is
 of eminently suitable in very slow runs, eddies
 fishing and still waters. In my favourite Wey
 swim, the stream, when in flood, had formed a sort
 of double, or upper and lower bank, the main stream
 being directed by a jutting point to the
 Floating opposite side of the river. The side on which
 I fished formed a perfect bream eddy, about seven
 feet in depth. A few rushes grew at the edge of
 the bank, and I could sit on my camp stool behind

these rushes and below the upper bank, almost invisible to the fish, although close to the water, and quite out of sight of passers by, unless they walked on the very edge of the river. The eleven-foot rod fished this swim perfectly, being quite long enough to reach the central curl of the eddy, which was a very slow one. Driving a long, forked stick into the bank, I had a steady rod rest; while the butt of the rod, with the winch handles uppermost, rested close beside me in easy position for grasping and striking. The rod-top is kept at right angles to the main stream, and after throwing in, the line is wound in until the float is in its proper position. Instead of putting the check on the winch, I placed a light stick on the winch-rim, just heavy enough to keep the winch from revolving from the slight drag of the water on float and tackle, but taking care to place the stick in such position that a feeding fish would slip it off the winch by the pull on the line. All this acted splendidly in calm weather, but in windy weather it was necessary to hold the rod. Using a six-foot cast, I put one shot about two feet from the hook, then slipped on a small pear-shape lead above the shot. Passing the running line through the float-ring I knotted on the tackle, making the float fast with two half hitches just above its ring. This float was a five-inch porcupine-quill. The line thus grips the float at the lower end of the float only, and the float hangs loose when the line is thrown out. In a seven-foot swim, with very gentle current, the lead should be about eight feet, or a little more, from the float; in swifter swims the distance must be increased. When the bait is in position, it is considerably down stream of the float; but the float sticks up straight in the

water ; that is, in dead water or very gentle swims. In the quicker runs the float must be capped in the ordinary way, or it will not show bites correctly. The float will perhaps stick up some two inches out of the water ; this being the case, the line must be tightened a little, which pulls the float down. The lead will sink the float if you are too shallow, so you must keep on adjusting the tackle till you get it right. When fishing in the evening the line should be kept slacker ; the float then rises, and is more easily seen in the dusk. Never be in a hurry to strike bream, as they usually take time in sucking in a bait, though sometimes the float sails steadily under at once ; even then, give a little time before striking. There is no doubt about a real bream bite ; the float gives a quick, very gentle quiver, not a "bob," like a roach-bite, but more of a shake. Do not attempt to strike yet ; it is only the fish just lifting or touching the bait. Perhaps the float will rise (in nearly every case, if you are fishing with fixed shots on the line), then it will disappear slowly and steadily in a slanting direction. This is the best time to strike, with a long, sweeping stroke ; not a light gentle upstroke, but with rather a long pull of the rod.

When the quiver is first noticed, take firm hold of the rod, taking the greatest care not to shake it or disturb the float, lift the rod out of the fork and make the strike in one action. Leaning forward to grasp the rod and watching the float at the same time may seem difficult, but it becomes almost mechanical. When adjusting your line, see that it is placed outside the fork of the stick, or the rod will probably rest on it, and prevent the line running without check to a feeding fish. By fishing a swim

constantly, and keeping the rod in the same place, and at the same angle, the hands get so accustomed to the touch that bungling becomes almost impossible in striking ; and as the position of every little weed or rush-top gets to be known, you can frequently tell if any one has interfered with the swim in the least degree. Where bream are shy, or not very plentiful, it may be some time before you get a second fish, particularly with the larger ones. When very large shoals are passing, or are in the hole, they may be caught more freely ; but my experience in the Wey is that you will have to wait a while. In the Norfolk Broads, where the shoals are vast, and the waters extensive, I have caught bream almost as fast as roach ; and I have caught them fairly quickly in the Thames, but it depends chiefly on the number of fish about. I find I get more fish by the waiting plan than by moving about. While moving about, your line is out of the water, and while it is so, you certainly cannot catch fish ; and moving about creates a certain disturbance, all prejudicial to fishing, and worse in narrow than in broad streams. It is a question of a passing shoal, unless they happen to harbour for some time in one spot, which is rare ; you get one, and the rest go away, as the old catch has it ; it is no good walking about after them, you may be going from your fish, while the angler who sits still and occupies all his time in fishing will generally show the best bag of bream at the end of the day. Where you have to reach out to some distance, where the water is very deep, or where no shelter can be obtained and you have to sit further back, the longer rod must be employed ; but the forked stick arrangement is a good one, though it

is not always necessary, as the rod can frequently be laid on the bank, particularly where the banks are high and level.

In fastening the float by the lower end only, I find it will show the faintest bite ; even minnows will disturb it. Small fish of all kinds are a nuisance to the bream-fisher ; gudgeon and perch, roach, dace and small chub take the worm, and most of them nibble at gentles or paste. I put a piece of paste as large as a filbert on the hook, and get all my best bream with a big bait. I take care not to let the line be in the water too long, as the small fish take so much off the paste ; they spoil the worms and suck the gentles ; and the annoying part of it is that you can tell by the float what they are doing. I have caught a few very good roach, when breaming ; the difference of bite is seen instantly, and the strike is made as quickly as possible. Roach, with their quick, sharp bite, cause the float to bob.

Another excellent way of bream-fishing from the ^{Without} bank, in dead or almost dead water, is to ^{float} fish without float or lead, or just one shot to sink the bait. Let the winch and rod be arranged as before directed, and strike when the line runs out, after it has travelled a short distance. Very still weather or sheltered swims are requisite for this, as it is little good if the bait is disturbed and shifted by the action of the wind on the line. This is the lightest system possible, and pays well in suitable waters.

Where it is necessary to throw out a long way to reach fish or to get into very deep water, ^{Leger-}ing leger-tackle should be employed, using as light tackle as possible, and keeping the hook well

away from the bullet. A ten- or eleven-foot rod is quite long enough for this work, and a swim should be chosen where the lead and bait can rest quietly. The same way of resting the rod and stopping the winch, as described for floating, may be observed, taking care not to strike too quickly. If the rod be held in the hand the touch of the bite will be found very gentle, nothing like a barbel bite. I like the brown-stained gut length for legering; and as this should be fine, it is better to fish with only a yard of it, and let the bullet run on the running-line.

Weir-fishing generally requires a punt to enable the angler to get at the best spots. A great Weir-quantity of groundbait should be put in; fishing and if there be much current, more clay than usual must be mixed with it, and two or three stones enclosed in each lump. In very deep weirs, where the gravel shelves up suddenly at the end of the runs, I have had capital sport with bream, ground-baiting with boiled wheat, thrown in by handfuls, and fishing with the worm. In Chertsey Weir, I once got hold of an enormous fish when breaming, which, I think, was a carp, for nothing would move it off the bottom. After playing the fish some time, the hook-hold gave, and the hook was partially straightened by the strain. The bait taken was a small red worm, and I felt the bite of the fish distinctly, so I am sure it was not a water-logged stick or other obstruction being washed round and round the eddy and tangling in the line. This sometimes occurs; it is impossible to know what *débris* there is in a weir from one day to another; a swim or eddy that fishes perfectly one day may have some heavy obstruction in it

the next, having either come down the run or been shifted out of some eddy through the closing or opening of some of the weir-gates altering the runs of stream. It is next to impossible to get out a heavy obstruction ; and the disturbance caused by trying to do so, or by actually dragging it out, effectually spoils a bream-swim for some time to come. When it gets dusk, eels are a great nuisance when baiting with worms ; they bite at the bait very sharply, and nearly always spoil the fine tackle. I usually cut the hook off without further ado, if possible without getting the eel into the punt, as this not only saves much time, but eel-slime on the boards or treads of a punt may easily put you overboard if you slip on it when punting. Besides frequenting the lower, bream will come into the upper eddies, so all possible places should be tried, as the fish wander about considerably. I once gave a weir a thorough baiting, tried the best spot for some hours, then moved to another at the other side of the weir, fishing both places without success. Trying the first pitch again, I got half a dozen or more bream of three pounds or so apiece ; then the shoal moved again, and I got no more that day. Almost the only way to fish a weir with success is to leger ; the bottom alters so quickly that float-tackle, in the majority of places, cannot be properly used. The holes are mostly too deep for rypecks to hold a punt, so I employ two weights, either mooring the punt in the runs and fishing down, or throwing towards the weir and fishing up, according to the eddies. The punt must be kept as steady as possible, leaving little slack on the weight-lines, just tying the punt down so that she will not lift the weights. If the weights

are not very heavy, she will lift one or other if tied down too tightly, and you find to your disgust that you have drifted out of the proper swim, which compels you to lift both weights, drift away, and work back by the shallows to your original place. It is no good trying to push the punt back with pole or rypeck; the jamming and rattling of the iron will scare the bream. Get the leger to the bottom as quietly as possible; if the lead travels much, a heavier one must be put on till the bait rests steadily and comfortably. After baiting a swim, try for a short while without further ground-baiting; should there be no sport, drop in a ball or two of groundbait with a few worms squeezed up in it. It is a common occurrence to take perch in a bream swim when worm-baiting if the bream are not there, and dace are most exasperating in taking the bait. I do well with large lumps of bread-paste in weirs, as eels and perch let this alone, and the water is generally too deep for minnows and gudgeon to give any trouble. Bream may sometimes be tempted by a ragged bait; this is arranged by breaking a fair-sized worm into three pieces. Run the hook through the head piece lengthways; then put the hook through the middle piece crosswise; then thread on the tail of the worm, and draw the three pieces together.

I like the very early morning best for bream-fishing in the Thames; indeed, it is nearly always the best time in all rivers. Fish when the mist is on the water, curling about in great grey wreaths in the early morning. A stout macintosh is not to be despised, even on a June morning. When trouting, late in April, I have had ice in the rod rings when fishing in the early mornings, while

mid-day has been like summer for its heat. As previously mentioned, September is the best month for bream.

Good sport may be had in ponds or lakes, particularly in the Norfolk Broads, but a pond-fishing bream does not give such play and is not such a clean, shapely fish as a river-bream. When pond-fishing, if the weather be still, I like very fine light tackle indeed, that is, if it is not important to get far out. With a tiny porcupine quill, a single shot on the gut, light rod and fine line, I get on very well if the water can be fished close to the bank, punt or boat. There is more sediment in most ponds than in rivers, and I find this style of tackle suits a very muddy pond in which I frequently fish. A leger-bullet would be deeply buried in the mud, and in descending, would partially drag the bait with it. When legering in ponds, do not pull the bullet along the bottom; it only buries the bait; rather let the line rest where it falls, tightening up very gently. In windy weather, or for getting out far, heavier floats cannot be dispensed with; but, instead of a corking lead or bullet, I put shot on the line, fixing them far apart so that only one or two touch the bottom. In a very shallow water, which I sometimes fish, I use a leaded float, wrapping a piece of lead, cut from a roll plummet, round the lower end of the float. This gives weight for the throw, but the bait is not carried down into the mud, and as a long throw has to be made (in this particular water) to get into even two feet of water, the weight is necessary somewhere. In this pond, which is private, the bream run small, they feed ravenously, if at all, and do not mind the weight of

the float, dragging it along steadily when biting. I keep the running line well greased, so it floats and runs off the water easily to the strike. Two or three gentles on a small hook catch these little bream freely, and I have taken a tench or two amongst them. In deep water in ponds, I have seen a sort of paternoster tackle employed with success. The plummet is looped on the gut, at the lower end of the line; some six inches above this the hook is placed; the depth is altered until the float just stands straight up in the water, the bait thus dangling a little off the bottom. It is a strange tackle for bream, but I have seen fine fish taken with it. In Penn Ponds, Richmond Park, the anglers throw out a very long way, coil- Penn ing or spreading the line on the gravel Ponds path between the two ponds, and fishing with heavy floats. The water here is very shallow and weedy, with a lot of flannel-weed on the bottom. Others wade, and get out a long way, but the bream-fishing is very poor, and I have never seen a large bream taken. The carp, it is true, are huge, but perhaps the shyest in the kingdom. To catch a Penn Pond carp is a feather in your cap.

A carp-bream, from a river, is not at all bad eating. I have eaten many a bream from the Thames and Wey; the flesh is delicate, and not to be despised. In the autumn, if you leave the bream on the grass, wasps come from all quarters and settle on the fish, and it is easy to get stung, if you are not careful in lifting up a dead fish. Onion juice or "blue bag" is a remedy for stings, an onion being frequently handy, while "blue bag" is not. Bream soon lose their colour after death, turning reddish around the scales, particularly

towards the tail. Any bag or basket that has carried bream should be soaked and washed directly the fish are turned out of it, as the slime is most difficult to get rid of. Thorough soaking and scrubbing are required to get the slime out of the interstices of a basket, and it is even worse with canvas or cloth. A rubber-lined bag gives far less trouble; these bags can be bought with the receptacle for fish to take right off for cleansing; the fish being, moreover, kept separate from the tackle.

I have spoken of the bream-fishing in the Wey; a **The** ticket, which is available for some miles of **Wey** fishing, may be obtained from Mr. Synge, Eastlands, Weybridge. This costs 3s. 6d. per annum, or 1s. monthly. It includes both pond- and river-fishing; and though the water is much fished, the bream run large. The lovely scenery amply makes up for any disappointment if sport is poor, for even in Devonshire one might not find a prettier walk than that from Weybridge Station to the Seven Arches. This is one reason why I am so partial to the Wey fishing; bream being slow biters, there is time to look around now and then, and to enjoy watching animal and bird life, over and above to the mere enjoyment of fishing.

It is some years since I fished Ormesby Broad, **Ormesby** a few miles from Great Yarmouth (Beach **Broad** Station). I used to get a boat at a little inn called the "Eel's Foot," a peculiar and uncommon name indeed. Wagonettes meet the trains at Ormesby, and there is a pleasant drive to the "Eel's Foot" or the "Sportsman's Arms." I think I was charged 3s. a day for a boat, while a very good cold lunch was sent out if required. I do not advise fishing the Broads till mid-September

at earliest, when excursionists are leaving, or have nearly all left. At that time of year, I found little or no annoyance of any sort on Ormesby Broad, and occasionally made very good bags of bream. Like other places, it was a question of not only finding a shoal but finding the fish on the feed, or something they would take. The fishing may have altered of late years, but my two best takes of bream were at Ormesby Broad. Norfolk air is wonderfully keen and bracing ; I know of no more healthful resort than Norfolk and its Broads, but they are to be avoided earlier than September, that one may miss the crowds of excursionists.

In playing bream, it will be noticed that they fight well for a few heavy plunges, especially in rivers ; only get your fish on the surface of the water and give him a good mouthful of air, and he will soon collapse. Bream are not tender-mouthed, and the hook-hold rarely gives unless the fish has been struck too quickly, in which case he is not properly hooked. My experience is that large bream take more time over the bait than small ones, though they will sometimes drag the float down boldly without the preliminary quiver being noticed. Before I got into the knack of it, I lost many fish through striking too quickly ; while, if light tackle and light thin floats be used and time allowed, hardly a fish will be missed. A good big landing-net should be taken when bream-fishing, the fish are so deep that a net with a small hoop is useless. Do not give up fishing if you have no sport for some little time ; being such wandering fish, the shoal may have left your immediate neighbourhood ; it may return at any moment, and the last hour or

two of a previously blank day may result in a full basket.

When roaching, bream will sometimes draw into your swim, and give good sport; directly this is noticed, change the tackle to bream-tackle, and fish accordingly. There is a good autumn roach-swim at Sunbury Weir, where the back-water joins the main weir; the water is deep, and if you catch it right, unencumbered by floating *débris*, a large take of roach may be had. In this particular swim, the bream frequently come on the feed, being attracted from the deeper water by the groundbait.

The Huntingdonshire Ouse is famous for its bream. I often hear St. Neot's mentioned as a favourite station, but I have not fished there. When travelling to Norfolk, I always like the look of the water near Ely and Cambridge; indeed, any of the water in that neighbourhood looks "breamy." Near Yarmouth, Brundall, Cantley, Ormesby, and adjacent waters, particularly Fritton Decoy, afford plenty of bream-fishing. Amongst the many favourable places on the Lower Thames, I may mention the Old River, Windsor, Chertsey Weir, Halliday's Hole and Ham Haw Deeps (Shepperton), Walton Deeps, Sunbury Weir, Hampton Deeps, where the intake of the waterworks leaves the river, Kingston and Teddington. It is best to employ a professional fisherman at all the Thames "pitches." I have already spoken about the river Wey, at Weybridge. The Wey and Mole are splendid bream-rivers, their deep holes and slow currents suiting the fish admirably. Oulton Broad, near Lowestoft, is good bream water, but I hear it is uncertain.

HENRY STANNARD, DEL.

CARP.

SWAN ELECTRIC ENGRAVING CO.

THE CARP.

THIS fish, when it grows to a large size, is one of the most difficult, if not the most difficult to capture ; that is, in waters that are much fished or disturbed. For caution in feeding, the carp has no equal ; he sucks and nibbles most guardedly at any bait before swallowing it, while the sight of anything suspicious in the way of tackle or angler will completely deter him from feeding at all. Although generally very sluggish in his movements, he gives fine sport when hooked, being tremendously strong, and fighting till the very last, exerting all his strength and ingenuity to gain the shelter of the thickest weed-beds or other cover into which he can plunge. In consequence of this, it is useless to employ very fine tackle when fishing for carp in water that is encumbered with weed and water-lilies, the thick stems of the latter being terrible tackle-breakers.

Carp live to a very great age, and the older they are the shyer they get. In shallow ponds their caution is excessive, the largest fish hardly ever moving from the centre, or deepest water, in the day time, but coming quietly to the sides to feed in the late dusk of the evening, and

losing much of their shyness as the night draws on. I have watched them routing amongst grass and rushes in such shallow water that the fish would show their back fins and shoulders above the surface, great fellows of ten to fifteen pounds apiece. The noise of the "suck" can be heard at a long distance on calm nights; indeed, it is only on the very calmest nights that the fish will venture on the shallows in any numbers. The slightest tremor of the ground, occasioned by a footfall, sends them wallowing back to the deep water with a rush like that of a dog. I have often been startled by the sudden flight of a carp within a rod's length of me, though so very quietly and cautiously do they usually approach the shore that the mere stirring of a lily-leaf will be all the indication given. By carefully watching any moving or trembling weed, the water around it will be noticed to be the centre of tiny waves, caused by the grubbing of a fish; this presently ceases, and the fish perhaps moves off with a steady roll in the water, edging his way through the weeds and leaving a plain track on the surface. When he stops near your bait, and begins to rout for food, it becomes exciting, not the slightest movement must disturb the fish, either footstep or the shaking of rod or line. After a seemingly interminable interval, the line is slowly drawn off the winch, perhaps an inch at a time only; then it steadily moves off, suddenly the fish bolts, finding something wrong, and the check whirrs; strike, and you are fast in a mighty carp, a fish that can, and will, pull. Many times have I seen the artful old fish grub apparently all round and over the spot where the bait is lying, and how seldom the great patience and quietude is rewarded!

There are plenty of ten-pound carp in many ponds and lakes, but how few anglers have caught one of that size !

Small carp are generally easy to take, but there are exceptions even to this, as in a pond, full of carp of about two pounds in weight, where I was asked particularly to try to get one, no carp had ever been known to be taken with any bait. The fish were there in plenty, so that by keeping perfectly quiet under bushes I could plainly see them cruising about, close to the bank, and at first sight I was confident of taking fish. My kind host appreciated my efforts, and then said he would show me how they were to be caught ; I anxiously awaited sight of the tackle, for he informed me he used a rod, but no bait ! I expected foul-hooking ; but no, it was a far kinder and more certain plan. Producing a hop-pole, with a large minnow-net slung from the end of it, he ensconced himself in a convenient place where high bushes sheltered the water. Dropping the net quietly to the bottom, he tightened the line ; after a short interval a carp came wandering by, disregarding the net entirely. Directly the carp got over the centre of the net, he was lifted up in it, and slung out on the grass, being soon returned to the water. Knowing the shyness of carp, I should have deemed this impossible, but it is what I actually witnessed. The carp were never kept, but were always returned to the water. I was assured that they could not be caught with a bait of any sort, not even by laying night-lines.

Carp prefer soft, luscious baits, though the capture of a very large carp has recently been reported by an angler who was fishing for Baits pike, and using a live bait. I am told that small

frogs are an excellent bait, but have not tried them. The baits I have done best with are potato-paste and bread-paste, the latter with a little aniseed in it. In a pond, full of carp, where I used to fish regularly, I could never get a single fish without aniseed in the bait, plain bread-paste or plain bread being apparently useless. A friend, who has had excellent carp-fishing, recommends boiled broad beans. I have tried these once or twice without success, and have taken nearly all my carp with potato-paste, potato, and bread-paste. Honey-paste (bread and honey) kills well in some waters, while carp are frequently killed with a worm ; indeed, I think the worm would be one of the best baits possible, were it not for eels. Eels are an abominable nuisance when carp-fishing, especially at night ; I have had my sport spoiled so many times by eels when using the worm for bait, that I have quite given this bait up, except now and then in the day time, and even then the carp-fisher will do better to leave worms out of his bait list and stick to pastes. The following is a good recipe for potato-paste : grate a sufficient quantity of bread through a coarse grater, taking care that the crust is not grated through ; mix this in a mortar with boiled potato, using sufficient bread to make a bait that will bind well together. Honey-paste can be made in the same way. With potato, a very little water may be required to make a good paste. Baiting with whole potatoes is best done with a baiting needle ; the potato must be boiled till it is just soft enough to let the triangle be pulled into it ; if too soft, it will crack off the triangle too easily. A carp will easily crush up a parboiled potato once he gets it well down. Although carp have

very small mouths for their size, the most successful carp-fisher I know uses a very large bait, larger than a pigeon's egg ; and I have taken my best carp with a bait of this size. There is something in such a bait that a fish can see, and a preliminary taste is given before the hook or triangle is boldly sucked in. Carp are such suckers that anything suspicious in the shape of a hook will cause them to leave the bait alone ; and after a morsel or two is swallowed, the remainder is taken with a gulp and the hook goes home. Again, in most places suitable for carp, we are obliged to fish at a great disadvantage, as the bait cannot be seen easily owing to mud or weeds, and the difficulty of placing a bait before a carp in a place where he can see it plainly is a hard one to contend with. I am certain many carp-baits are resting quite out of sight in very thin mud, particularly if the angler be legering with a heavy bullet to get out a long way. It is a mistake to draw the line and bullet towards you when fishing in a muddy pond or amongst weeds ; let the line rest exactly where it has fallen, pulling in only buries it deeper than ever. I have never found carp-fishing with a float much good ; legering pays much better, particularly in shallow water. In deep water, which can be fished close in, a float is perhaps of service, but a good length of line should rest on the bottom, and the float must travel well under before striking. I have killed more carp with brandlings than any other worm ; this worm has a very strong smell, and certainly may be very tasty to a carp. I have caught small carp freely with gentles, but have never had the luck to land a good one with this bait. Perhaps a good bunch of wasp-grubs on a triangle would prove successful.

Carp can frequently be seen sucking round the edges of lilies and other water-weeds; when they do this, hook a piece of bread and crust on a small triangle and let it rest over the edge of a weed; this can only be done fairly close in. Presently a carp will come across the floating bread, and will be nearly certain to suck it in; let the line run for just an instant, then strike, and take your chance of pulling the fish through the weeds.

To get sport, it is almost always necessary to **Ground-** ground-bait a spot for some time before **bait** fishing. Bread and bran, with boiled pearl-barley, make an attractive ground bait; potato and bread in small lumps are also good. Unless you are fishing in deep water, I do not advise baiting more than one spot, as moving about is so fatal to sport. In muddy ponds, where the bottom varies, select, if possible, the sandiest or most gravelly pitch you can find; and a hole between two weed beds that can be conveniently fished is an excellent spot to choose. If you are using a float, you must have the depth plumbed and adjusted long before fishing, for the use of the plummet will scare a wily old carp for hours.

There is no special rod built for carp-fishing, but **Rod** almost any rod that is strong and has good-sized rings will do for legering. For dropping a line very quietly into holes alongside or near the bank, a long rod is of service, and as the carp-rod is seldom or never held while fishing, the weight does not matter. It is essential to use a rod that will really hold a very strong fish, for a roach-rod with a stiff cane top would almost certainly be smashed directly. The rod should be laid on the bank, or supported in a forked stick, in such position that

the running line can go through the rings to the pull of a biting fish with the utmost freedom. For large carp, use solid wood rods, not too stiff, and strike hard. Carp are tough-mouthed, and the hook rarely breaks out; in the majority of cases, indeed, the fish is hooked well down in the gullet. In nearly every case you *must* hold your fish hard, so do not use a weak rod.

The winch should be free-running, in order to throw out a long way. It should hold plenty of line, and be fitted with a check, ^{Winch} as in night-fishing the check announces when a fish is on. When the line is thrown in, the rod should be placed on the ground with the winch-handles uppermost; a yard or so of line is drawn off the winch and left loose on the ground (this, of course, in pond- or lake-fishing) and the check is slipped on. Should there be wind enough to blow the line about, a piece of stick or lump of clay or ground bait should be laid on the line just below the ring next the winch; place this stick or lump in such position that the line will run easily to a feeding fish. When fishing in shallow water, I go far away from my rod, as the fish will not usually draw in round the edges even at night unless you are very still and quiet. The fish, on taking the bait, swallows it after a time, he then goes off a yard before the winch sounds, and has got the bait well down. A big carp *does* make the winch scream, and you dash frantically for your rod at the sound, clutch it, strike, and then stop your carp with all your might. It is only by leaving the rod like this that you may expect to kill big carp where they are shy. A rug and waterproof sheet are not to be despised in

night-fishing, even in the height of summer ; and still, muggy nights, with very gentle rain, suit carp fishing above all other weather. When legering for big carp, a strong line must be used. As the line rests on the bottom it is not much, if at all, noticed by the fish. I use a dark green undressed silk plait line in preference to any other, and test it well for a yard or two before fishing, as the line is continually in the water, and it is no good to have the last yard or two rotten, however strong the other portion may be.

Except when baiting with worm, I always employ a triangle for carp-fishing. This
Hooks and tri-angles holds a paste or potato bait much better than a single hook, the bait is not so easily thrown, or sucked off, and there are three hooks to hold the fish instead of one. It is seldom the three hooks of a triangle are driven into a fish (unless hooked in the gullet), but two out of the three generally get a good hold in a carp's mouth. No. 9 or 10 is a good size for a triangle, 7, 8, or 9 for worm-baiting (see p. 233). Be particularly careful to test the metal in either hook or triangle, as the strain will be severe with a heavy fish.

Thin quills should be used for floats, they offer
Float less resistance to a bite ; and in shotting the line, keep the lowest shot well away, even two feet, from the hook. The lower part of the float should be painted a dull green, the upper, for about an inch, left white or painted red, which is seen for a long distance.

The gut length need not exceed a yard in
Gut length legering, but should be at least two yards long for float-fishing. I am quite against the use of fine gut in places where large carp

abound, as the use of fine gut, except perhaps in very open, unobstructed water, such as a reservoir, will only result in much disappointment and lost fish. I prefer to hook fewer fish and have a reasonable chance of landing them. Select the very best round gut that you can procure, fine salmon gut being none too thick. Stain it a very dark blue, green, or a dark brown (see page 239). I have caught carp without using a gut length at all, simply tying the hook length to the green running line, and using a triangle on twisted wire to stand the holding of the fish. I do not use this tackle by daylight, but at night coarse tackle matters but little, and you must have something that will absolutely hold a fish. If you let him run he will bury himself yards deep in great bunches of weed, and you may just as well not fish at all as employ fine tackle in some of the very weedy ponds that carp inhabit.

You must judge by surroundings. In fine open water, where a fish may run where he pleases, better sport will result from the use of fine tackle; but if you are obliged to fish, as is often the case, right amongst or near dense beds of weeds, you must employ tackle that you can depend upon. Many years ago, I spent a long while in pursuit of a moving float in Wimbledon Lake—this was doubtless lost by some unlucky carp fisher; the line had broken above the float, and the wretched fish was dragging the tackle about with him. When he got into shallower water the float appeared, but I could not succeed in getting hold of it; I had no tackle with me, or would have thrown a bullet round it and played the fish to the best of my ability. The hooked fish was a

Need of
strong
tackle

very large one indeed, judging by the disturbance he made whenever the boat came near him in shallow water; at last, however, he went off into deeper water and we quite lost sight of him, and I daresay the broken tackle proved a very pretty object lesson to many of his brethren. Some time afterwards I picked up a dead carp in the lake, over nine pounds in weight, though, of course, I do not suggest this was the same fish. I only want to impress the importance of using strong tackle in obstructed waters, as the idea is so natural that, because carp are so shy, fine tackle must be used in all situations to get fish. This, however, is not the case, as I have actually proved to my satisfaction.

Carp, although they inhabit stagnant water, have little or no slime about them, while bream out of the same water will be covered with it. Hot, still weather is the best for carp-fishing, I have hardly ever taken carp in windy weather; and I look upon night fishing as almost the only time you have any real chance of success with big carp, unless you can fish water that is seldom, if ever, disturbed in any way. Late evening is a good time; the fish are then leaving the deep for the shallow water, searching for food; and in moving in, come across your bait. I have seen a novel plan employed to reach a deep hole in the midst of weeds at a long distance out. Two rods are **Cross-**
lining required, each rod may be held by an angler, or one may be lashed to a branch or other support if only one man is fishing; in this case, the winch wants a strong check. The lines from both rods are joined, and one angler, holding one rod, walks away from the other, slackening out line as he proceeds, and keeping the bait, which hangs

from the line on a foot or so of gut, dangling above the ground or water. The two lines must be so long that each can reach across the water, or angle of water, fished ; on reaching the other side of the pond, the angler continues his way until the bait hangs over the spot in which it is to be dropped, it is then lowered, and thus both rods are really fishing. Arrangements are made as to which angler shall play a hooked fish, the other simply slackening line as required, or running round, so that both can haul on the fish the same way. This is a very clumsy and peculiar way of fishing, but I have seen it practised with success in the day-time when carp are in inaccessible places in the middle of a pond, in places where a bait cannot be thrown with any certainty. Soft baits cannot easily be thrown out any very great distance, as a very slight check will flip them off the hook or triangle, while in narrow ponds or arms of a lake the bait can be dropped quietly within a foot or two of any required spot. I have also seen men wade ^{Wading} out to an open piece of water and carry the line in their hands from the shore, depositing the bait in a perfectly clear spot, and trusting to their tackle to drag the fish through weeds, &c. This I have also seen meet with success, but the wading scares fish for a very long while, the "two-rod, one bait" system being quieter. Both these methods are extraordinary, but it shows what lengths men will go to in their endeavours to secure a carp, and I relate what I have seen for any one who may wish to try new and strange methods, without counting the trouble.

Whenever and wherever you fish for carp, throw in with the utmost care and quietude, and keep

still on the banks. In night-fishing, put a piece of white paper on your winch-handles, pushing the paper on the handles ; you will then see exactly where to grasp your rod, and will perhaps avoid treading on it. As a general rule, carp are little fished for in rivers ; the fish taken there are usually chance fish, hooked when legering for bream or barbel. Two fine carp were taken in 1896 just above Shepperton Lock ; one of these I saw, a fine, thick, handsome fish, between six and seven pounds in weight, not a large one by any means, but very deep. His captor showed him to me with much pride, and the fish, resting on a cabbage leaf, certainly looked beautiful. The second fish was a larger one, but I do not recollect its weight. Two or three years ago, a carp of eight pounds was taken from Halliday's Hole, Shepperton, by a bream-fisher, I believe on very fine tackle indeed.

Weir fishing Teddington Weir generally produces a big carp or two every year, while Boveney Weir is excellent for carp-fishing when the water is low and warm. To fish a place of this sort, a thorough baiting of lumps of bread-paste should be given some two or three times before fishing, and I have no doubt this would do good in some of the Sussex rivers, where I hear there are large carp.

To see, and hear, what big carp are, let anyone visit Penn Ponds, Richmond Park, some still summer's night, and sit quietly by the margin of the water for an hour or two. I warrant he will be astonished, if the carp are on the move. However carefully you may step, a walk round the pond will scare some great fish feeding at the very edge, perhaps with his back half out of water, and off he will go with

a startling plunge. A permit for a day's fishing in the Large Waters of Richmond Park can be obtained by writing to Mr Sawyer, Richmond Park. The fishing-season is closed on the 31st March until the 1st July, and no fishing is allowed on Sundays, or after nine p.m. Wimbledon Park Lake is an excellent place for carp-fishing, ~~Wimble-~~^{don} though it is now considerably fished. Tickets are obtainable from Mr. Garlick, Wimbledon Lake, and the lake is easily reached from Waterloo or stations on the underground railway. I hear the ground bait has altered the depth of "Carp corner" of late years! Some years ago, I got several carp out of the Rushmere Pond, on Wimbledon Common, a place that does not look at all "carpy," but I never had one there after seven o'clock in the morning or before three a.m., or over three pounds in weight.

Carp can be kept alive for a long while in damp moss, or if the gills be occasionally wetted; they can thus be conveyed alive for long distances without much trouble. I advise anyone who can fish in water known to hold carp to give the water a good trial at night, fishing close to the edge, and keeping away from the rod. Bait a place some little time beforehand, and be prepared to exert considerable patience, and your pains will most probably be rewarded with a splendid fish. A carp of seven pounds or over is very handsome when set up, and to get one nowadays of that size is worth trouble. Leger, whenever possible, without a bullet or weight of any sort on the line, letting the weight of the bait carry the line out. Where the water is fairly free of weeds, two hooks may be used, and the extra weight will help a great deal in the

throw. For legering in swift waters, deep eddies, or weirs, a bullet must be used, and the rod ought to be held, giving time before striking; but river carp bite much more boldly than those in ponds. With two hooks you run a chance of the second hook fouling a weed, especially if the bait be pulled off. When it is requisite to get out a long distance, and you dare not use two hooks owing to obstructions, additional weight may be given by squeezing a bit of stiff groundbait (bread and bran) around three shots, placed an inch apart from each other and about eighteen inches from the hook

HENRY STANNARD, DEL.

CHUB.

SWAN ELECTRIC ENGRAVING CO.

THE CHUB.

SOME of the best and most varied sport obtainable in the Thames is to be had by angling for this bold-biting fish ; yet strange to say, the chub is let severely alone by the majority of Thames anglers. Only the lucky few who have, during recent years, regularly and scientifically followed up this branch of sport know what a vast number of chub the Thames contains, the miles and miles of river over which they are scattered, and the infinite variety of swims in which they are to be found.

As a general rule, wherever the river has a gravelly bed, there you may try successfully for chub, whether in the open stream Swims or elsewhere, in all depths of water, remembering that your chevin prefers the shelter of overhanging banks, willows, roots, stumps or whatnot ; even mere depth of water will sometimes suffice to provide a congenial haunt. When the water is disturbed by boats, heavy chub are frequently secured by changing to really deep swims, with fifteen to twenty feet of water in the river bed. In the early season of the year they chiefly resort to the shallows below the weirs ; in May, if the

weather be fine and warm, they are to be seen, literally in hundreds, on the gravel beds, the largest numbers in some two feet of water. The sight must be seen in the very early morning to be realised, for the whole shallow seems alive with fish. To the trout-fisher, the chub is a great nuisance, greedily taking his spinning or live bait, and repeatedly awaking false hopes. To a great extent, as the season advances, chub leave the weirs, though sport is to be had with the fly on the weir shallows well into July; but chub are not in good condition until about September. July and August are the best months for fly-fishing under the boughs.

A winter or spring chub is a different creature from a summer chub, firm and strong, and affording far better sport, though I can say but little in favour of his edible qualities. To catch many chub, special tackle is requisite, and a full knowledge of the water will add many a big fellow to your bag. After trying different swims, the angler in time discovers those that reward him best, and he knows, almost to a few inches, the spot in which he will get his fish.

Preference may be given to a greenheart rod for
 Rods punt-fishing, and a cane rod, with greenheart top, for bank swims. A punt-rod should measure about ten feet, while a length of twelve to fourteen feet will be found serviceable for fishing from the bank. Holroyd, of Gracechurch Street, worked out a pattern punt-rod from my directions with which I have killed hundreds of chub. There is plenty of power in it; it will hook a chub, *and hold him*, at times most important; for I have a most vivid recollection of some of the

awful stumps in the Hampshire Stour, from the shelter of which the little greenheart has induced many a chub to emerge entirely against his will.

Length of rod ten feet two inches, made entirely of greenheart, and in three joints. The butt tapers off thirteen inches from the end of the rod, and the winch fittings are well down towards the end of the butt. I am describing a punt-rod, and in punt-fishing for chub there is little throwing to be done; having the winch well down on the end of the butt helps to throw the rod-top up in the strike, and the weight being lower on the rod adds to the leverage. I have seen fly-rods with the winch below the extreme end of the rod, and am told that the extra-low weight is a great advantage. There are twelve rings on the rod, including the uppermost top-ring; the lowest ring is twenty-five inches from the end of the butt, which gives freedom in handling the line. Each ring is three-eighths of an inch in diameter, inside measurement. The rod is of a dull green colour, so that there is no "flash" to alarm a fish. These large rings allow the line to run beautifully, and the rod is fairly springy, just sufficiently supple to whip up the line cleanly in striking without being weak. The rod weighs just under $1\frac{1}{4}$ lbs. Another punt-rod, by Slater, of Newark, cane with greenheart top, 11 feet 2 inches in length, weighs only $\frac{3}{4}$ lb., and is an excellent rod for unobstructed swims, but not so powerful as the greenheart. The length of the top, point to point, is forty-five inches. Longer rods are better for bank-fishing, as the striking is altogether different; instead of the rod being held parallel with the stream, it is mostly at right angles to it, and the longer "throw-back"

given by the longer rod in striking is of great service. Besides, in bank-fishing, the extra length is useful when fishing over bushes or branches, whereas when fishing from a punt the swims are generally perfectly free and open to the rod.

The winch I can recommend for chubbing is Slater's "Wellington," of mahogany, with the usual "cage" bars and rims, with centre-pin action, very free and light running, without a check, and the one I prefer is four inches in diameter. This is a large but light winch, and its big barrel saves much time in winding in, for chub-swims are fished very long, especially from a punt. Slater has a new winch this year (1897), the "Zephyr," with aluminium back and mahogany barrel. I have not tried this winch, but it certainly looks workmanlike. The only objection I can make is that the aluminium shines brightly; but a little wear would soon alter this, or a coat of paint would take the shine out of it. Perhaps I am too particular about this, perhaps not. It may be thought that the "Wellington" winch, being all wood (barrel and sides), would warp in wet weather; I can only say that my winch has been through some terribly wet weather, and has not warped in the slightest. A test for a good winch, one that runs smoothly, is to give it a good spin and place the back of the winch flat on the hand; if the slightest vibration is felt, the mechanism is not exactly true. An accurately constructed winch will spin for a long while. There is a small catch on the face plate of the best Nottingham winches. By pressing this the winch is thrown out of gear and the revolving portion can be lifted off and the axle oiled and cleaned; and this should occasion-

ally be attended to, especially if much spinning be done. This four-inch winch barely weighs, with the line on it, eight ounces, and the big barrel assists in pulling a fish out of a dangerous spot.

I have always used plaited silk lines for long corking for chub, and am quite content with the way they do their work. In these lines, Line the chance of kinking is reduced to the minimum. I hear that twisted lines are now being used again to some extent, and I fancy they would be more elastic than the plaited, and would run easier. One of the most important features about a chub-line is that it should float; to ensure this, I grease my lines with a mixture of green enamel (Aspinall's) and vaseline. This gives a lovely, flexible surface to the line, and once the line is well saturated one greasing is sufficient for a long day's work. The greasing is very easily done by thoroughly saturating a piece of thick flannel, some three inches square, with vaseline, rubbing the vaseline well into the flannel; then take a little enamel on the finger tip, place the flannel on a flat, clean surface and rub the enamel into the grease. Stretch the line loosely between two trees, taking care it does not touch the ground anywhere, otherwise dust or grit will be picked up, run the flannel along the line backwards and forwards, dressing the line three or four times before use, and letting it soak up all the mixture it will take without undue clogging. The colour will darken after use, and the line is nothing like so conspicuous on the surface as a plain white line or one dressed with vaseline only. To take all stray kinks out of the line, I make the end fast to a double swivel and rub towards the swivel. After

a day's fishing, the swivel will spin round and round when one gets close to it, showing there are twists in the line. These are frequently caused by the rotation of the bait against the water when winding in, especially if the bait has a flat surface. A "dollop" of cheese paste, flattened on the top, will soon make turns in a line if it be drawn against the stream for any distance. After fishing, run the flannel over the line, and you are ready for the next day's work. You cannot be too careful to have a properly floating line. For deep swims and swift streams or runs, heavier floats and thicker running line must be employed than those suitable for gentle, easily managed water, and the immense length of line out necessitates a hard strike. In weir-fishing, I find the pound-and-a-quarter green-heart rod none too heavy or powerful. It may be considered short for long swims; but at most weirs the angler stands considerably above the surface of the water and this makes a great difference in the lift of the line, and the heavy stream and tackle materially assist in keeping the line off the water.

A full list of chub baits would fill a small dictionary, for surely a greater glutton
Baits never existed in fresh water. Anything that can be scrunched up by his powerful teeth seems palatable to the chavender, as Walton calls him. Your chub enjoys such things as cherries, cheese, beetles, lobworms, shrimps, tripe, macaroni, frogs, grasshoppers, moths, small plums, mutton or beef fat, bread, minnows, bleak, &c., in fact, almost anything that can be eaten he will eat. The late J. P. Wheeldon gave me an account of a huge chub being caught with a gummy

chestnut bud. Quite recently I heard that an unfledged sparrow was one of the best baits for big chub, and I firmly believe my informant was not romancing. Pith, the spinal cord of the bullock, is the standard winter bait for chub, and at that period of the year the fish are in splendid condition. I kill plenty of chub with cherries directly the picnic parties throw their waste fruit into the river. Chub are exceptionally fond of this bait when they have had a taste or two, and it is a bait of exactly the right consistency, sticking well on a triangle (which I prefer to a single hook), yet allowing the barbs to come freely through on striking, and making a good show in the water. A large white-heart cherry seems irresistible, and a chub must take it should he see it, provided you have not alarmed him in any way. That is my experience of Thames fishing, where the fish get plenty of cherries; but I have not found this bait so killing in other rivers. I believe a very fine catch of chub was once made at Pangbourne from under a damson tree; the branches partially overhung the river; the ripe fruit was detached by heavy squalls of wind, and the fish were "madly on" for the fruit as it fell.

The angler must always remember that, although greedy feeders, chub are easily alarmed; ^{Quiet in} stamping on the bank or plunging rypecks ^{chub} or punt-poles into the river bed do not ^{fishing} improve sport. I always make use of weights when punt-fishing in preference to rypecks, lowering the weights as cautiously as possible and tying the punt to the boughs when the swim suits without dropping a weight at all. Let me strongly impress the necessity of the

utmost quietude in the punt when chub-fishing ; do not drop the pole or paddle or other articles, place them quietly without jar in their proper places, and, with reasonable care, far better sport will result.

I like clear water for chubbing, and invariably find I do little good during, or immediately after, a flood, especially if the water has been very thick. The fish seem to get sickened, or perhaps glutted with food, and certainly in thick water they cannot perceive the bait as easily as in clear. I well remember the verdict of a very clever and experienced keeper. I was fishing water new to me, it was up one day and down the next ; the water looked in fair condition, and I remarked that we should get fish ; the keeper was not of my opinion, as a "fresh" had only just subsided—and he was perfectly correct in his surmise, for we only got one chub after trying several very promising swims. We then started roach-fishing, and did well.

With all paste-baits, I prefer using a triangle to a single hook for chub-fishing ; and as the baits are large, the triangle should correspond. No. 6 or 7 is a useful size, and has plenty of metal in the hooks. Test hooks and triangles before use ; a brittle triangle will break easily if pressed between the fingers, and brittle triangles are no good to hold heavy fish out of weeds. Nos. 10, 11, or 12,¹ single hooks, are the sizes for lob-worms, a big mouthful is nothing to a chub. In writing for hooks to any tackle dealer's it is sufficient to say you want roach-hooks, barbel-hooks, &c., and to purchase two or three sizes of each. Tackle-dealers will know almost exactly what is required

¹ Numbers taken from Hardy's list, 1897.

if the style of fishing and the bait to be used is mentioned ; always do this in ordering hooks, it saves endless trouble.

When extracting the hook or triangle from a chub, if it has gone deeply down, do not probe after it with a finger ; a big chub can, and does, hurt badly with his great teeth. This I

TRIANGLES.

SINGLE HOOKS.

know to my cost, as I once tried to extract a triangle, that had gone deeply down, with the tip of my first finger. If the novice wishes to feel how a chub can bite, and what power he can exert in crushing up hard beetles, let him push his finger down the throat of a large chub, freshly caught—he will not forget it for

some time. A disgorger should, therefore, be employed.

An excellent tackle for use with the smaller cork (see p. 24) float is made up as follows: Triangle No. 6 or 7, a yard and a half of gut, two shot fourteen inches, four ditto twenty-four inches, five ditto about thirty-three inches, from the triangle. The shot are BB size. This tackle is easily converted for use with heavy floats by adding more shot or a bullet or corking-lead above the other shot.

Fishing for chub from a weir-head is very good ~~Weir-~~ sport, the strong stream making a hooked fishing fish feel heavier than he really is for the first plunge or two, especially if hooked far away. The most likely spots are found where the deep water ends and the shallow begins. Little difficulty is experienced in keeping the line straight, as the tackle is heavy. The float travels at a tremendous pace at first, but, on arriving at the eddies at the end of the runs, the pace slackens, especially if there be some undertow of current towards the weir, or if the water be held back by the gravel bank. You are likely to get chub in the heart of a quick run if the water be low, but the best spots are in the eddies. In many cases, the depths are learnt by sad experiences of lost tackle, as the bait must be adjusted to fish near the bottom at the spot selected, and the float should be allowed to work round and round in an eddy, or travel in a run between two eddies. Suddenly, the great float will quickly disappear, and if you are fishing properly without slack line, the pull of the fish will be felt simultaneously. Strike hard, throwing the rod well up; and if the fish be large the line will tighten with a

twang that electrifies you. With a great length of line out, perhaps fifty yards, a gentle lift of the rod is useless ; and as strong tackle is best for chubbing, your gut length will bear the strain. One yard of gut is quite sufficient for a weir tackle ; fix two BB shot fifteen inches from the hook or triangle, three or four a foot higher, the same number eight inches from these ; pass the running line through the bullet or corking-lead before knotting on the gut length, and you have a tackle which I have always found will kill fish when they will feed at all. Baits for weir-fishing must be of a tough nature ; cherries are most excellent ; mutton fat, the skinny part, sticks on well, and lobworms prove their value as chub-bait in weirs. With respect to the last mentioned, one of the most killing "dodges" I have ever tried for chub is to put the lobworm on the hook *tail first*. I had so many misses of bites when baiting with lobs that I was quite puzzled ; one afternoon, while examining a bitten worm, the secret came out. I noticed the *head* of the worm showed the bite, while the tail end was untouched. Dipping a big lob in the sandbox, I put him on the hook, tail first, running the barb of the hook close under the head of the worm. I hooked a fine chub almost immediately, and since then I always bait for chub in this way, and meet with far better success. (For baiting with worm, see p. 233.)

To place a cherry on a triangle, I split the fruit by pressure, squeezing the stone out, inserting the triangle in its place, and pulling the fruit together again over the barbs. There is no more excellent bait. The white-heart cherry shows well in the water ; it is tough without clogging the hooks, and being hollow, collapses entirely when seized by a

chub, so that there is nothing to prevent the hooks taking firm hold, and a fish is rarely missed with cherry-bait. It is best to throw in a handful of cherries before fishing, the fish do not sicken of them as they do of cheese or greaves. For a change, I sometimes turn the cherry inside out, or leave the halves hanging loose, a good dodge. I have had success with white gooseberries when I could not get cherries.

If you fish a weir where there is a back eddy near the fall in the corners of the pool that will permit the bait to rest on the bottom without entanglement, good sport may be obtained with a light leger or by tight corking. By "light" leger, I mean a leger with a light bullet. Tight corking is so called to distinguish between a travelling float, on the line or along the stream, and a float held in one position at a certain distance from the angler. I have killed scores of chub by tight corking and legering in these back eddies in weirs, taking care to keep out of sight as much as possible. The

Eddies angler, to fish these corner eddies in proper position, leaves the weir-platform and fishes from bank or punt, throwing in towards the weir itself. In the early season, some of the very largest chub lurk in these eddies, and the angler should not neglect to try these spots. To avoid loss of tackle, a plummet may be dragged across the eddy, simply attached to the running line; this will show obstructions, though it should not be done just before fishing if it can possibly be avoided; the less disturbance, the better. In tight corking, a thin float should be used, as it is not washed about so much by the stream. With a shotted tackle the depth from float to bait requires careful

regulation, depending on the strength of the current and depth of the eddy. The bait must rest well on the bottom ; on reaching its desired place, the line is tightened, and the float kept as steady as possible, with the tip just above the surface. A bite is felt on the line as well as being indicated by the float, and the strike should be sharp and prompt.

Before chub leave the shallows, legering with shrimps is effective ; at the beginning of the season, this bait is sometimes greedily ^{Leger-}^{ing} taken. Two shrimps may be hooked on a triangle, or one large shrimp placed on a hook, running the shrimp on tail first, bringing the hook well out at the head or amongst the legs, or reversing the shrimp, bringing the hook point out at the tail. I am speaking of cooked, edible shrimps. The weir-tackle with the large float is suitable for deep, swift runs in the open stream, though I then prefer to do away with the bullet or corking-lead and substitute plenty of large split shot placed well apart.

Bottom-fishing for chub from a punt alongside willows or in the open stream with the ^{Punt-}^{traveller} float-tackle is really fascinating ^{fishing} sport. To fully enjoy this, a study of the river is necessary. In punting, you soon find out the depths, and the punt-pole tells you accurately whether the river bed is gravel, mud or sand. A gritty touch on the pole tells of gravel or small stones ; sand gives a little friction, plainly felt ; the pole sinks deeply into mud and "sucks" in it ; while a sharp clank of the pole shows you have struck a large stone, and even a hard stone and a lump of chalk can be distinguished. As I have previously stated, gravelly swims are the best, indeed I have done little good with chub in any

others. There is one particular line of willows I well know from constant fishing : let two strangers fish this line of bushes, the one taking the top half, the other the lower. The man at the top will get the fish, for the gravel runs half-way down the willows and then changes to mud. I have so repeatedly noticed this result, that I never trouble now to fish the lower willows at all.

A punt is far better than a boat for this work ; it does not rock so easily as a boat, and each "rock" throws a disturbing wave across or along the water. The punt is also far handier to move about in when weights have to be lowered ; these I use in preference to rypecks. In chubbing, the angler is continually on the move, for it is rare to take more than two fish out of one swim without a great waste of time ; the first swim down almost always produces a fish if they are disposed to feed, and frequently within a very few feet of the punt. Not only are weights better than rypecks for shifting easily about, but the driving down of a heavy iron in the river's bed is done away with, and the weights **Mooring** can be lowered with very little disturbance **the punt** indeed. Pass the rope of the heavier weight through the ring holding the punt's chain, bringing the strain on the rope into the centre, and the punt will swing true to the stream. I use one weight of about forty pounds, the other twenty-eight pounds ; these I have always found sufficient. If there be much wind on either beam, or upstream, the lighter weight should be lowered over the side, near the punt-well ; take a single turn with the rope round a cleat in the side of the punt when she is in position, and she will keep steady, especially if care be taken that the side rope has not much slack on

it. The punt is lengthwise in the stream, not across it as in roach-fishing, except when two are fishing at the same time in open runs, *i.e.*, not hugging the bushes. When two anglers fish a line of willows, they should take swim and swim, or the inside line will get more of the fish. In centre-stream swims (with two rods fishing), the punt is best moored directly across the stream, the anglers sitting as far apart as possible; the floats can then run down simultaneously, and will not interfere with each other. Alongside bushes, the line first run down should be reeled in and taken out of the water before the other gets to work, for if the lines get entangled when one (or both) has a fish on there will be a pretty mess of tackle. Two rods at work close together when chubbing only cause mutual annoyance, and one rod in striking may break the other, or itself be broken. Anglers should avoid touching each other when any tackle is working, a touch on the elbow particularly makes itself felt, and takes one's attention off the tackle and swim, enough to cause the loss of a fish. The depth may be pretty well known; if not, plumb it, and set the float to carry the bait about four inches from the bottom, a little nearer in shallow swims. There are two styles of plummets, the plain roll of lead, and a conical plummet with a wire loop at the top and a strip of cork let into the base of lead to hold the hook; I prefer the roll plummet for triangles, the other for single hooks. To use the roll plummet, unlap a little of the strip of lead, insert the shank of the triangle and roll the lead over it. The depth is found by dropping the plummet to the bottom and tightening the line; you can judge very well what the depth is by this process: fix your depth and

Plumb-
ing the
depth

drop the plummet again, you will then see exactly how the float stands, and whether any alteration is necessary. The hook is passed through the wire loop of a conical plummet and inserted in the cork strip, the depth being found in exactly the same manner. Getting a triangle through this wire loop is sometimes quite puzzling, the roll plummet is therefore better. I buy my plummets by the half-dozen, for they have an extraordinary knack of getting lost ; should the angler find himself without one, a rough plummet may be made by tying a

ROLLED LEAD
PLUMMET.

SQUARE LEAD
PLUMMET.

SUGAR LOAF PLUMMET

bullet tightly on string and inserting the hook under the string. If you have no weight of any description, run your float down at different depths ; when it goes under, you are too deep. In chubbing, it is not of the utmost importance to have the bait precisely four inches from the bottom, but that is a good depth. The bait may sometimes swim shallower with advantage, as chub feed at all distances from the bottom.

Having baited your hook or triangle with pith, cherry, cheese or whatever else you may decide to try, lower it quietly into the water close

alongside the punt. If fishing the edge of willows, try close to the willows first, as close as ever the float will run, then a little further out if you do not get a fish. The rod should point down stream, lower the top until it is quite close to the surface; by so doing you get the full sweep of the rod in striking, which is very important in long swims. Keep your rod in as straight a line with the float as possible; the line runs through the

TACKLE AT WORK.

rings all the easier for this, and careful manipulation of the reel is necessary to prevent over-running or jerking. Do not let the float get beyond the bait; it will do so if allowed, and if it does you are not fishing properly. The float should be checked steadily on its way down the swim, not enough to pull the bait up, but just sufficiently to keep all "waves" or curls out of your line. Each curl of line on the water means slackness when you strike, and it takes but little slackness to cause you to miss a fish. If the line sags about all down the swim, you have but little chance of fishing success-

fully ; and should an eddy produce a curve in the line, you must lift the line to right or left as the case may require. Should you not get a bite after a swim or two, do not waste any further time in that place, but try another. If your bait is one that will strike off, strike it off at the end of each swim, it helps to bait up a little, and does not alarm fish by being dragged back over their heads ; and, in winding in, keep your float as far away as possible from where you intend to make your next run down, unless you decide to shift. The manipulation of the reel is not learnt at once ; it takes some time to learn how to keep a pretty line on the water. The winch must be checked or accelerated by the left hand as required. In winding in, grip the line gently between the first and second fingers of the hand that is not turning the winch, as this takes moisture off the line and also tightens the line on the winch as it comes in. I find winding with the left hand simply invaluable in chubbing (see note, p. 228). Should you get a bite, it will be a vigorous one ; as the chub is a glutton devoid of manners. I find I hook more chub by allowing just an instant's law ; then I strike firmly, with a long, steady sweep of the rod, right back. The line tightens instantly, and in shallow water there is a mighty boil perhaps forty or more yards away. Your fish will fight for the willows, and you must pull him out of these. Turn your rod out, and drag him away ; if he comes to the surface, dip your rod deep down in the water and haul him down again ; if he gets up among the branches, good-bye to both chub and tackle. In shallow swims, with light tackle, a cube of bread and crust, about half an inch square, attached to

the hook without being squeezed up in any way, is a very killing bait ; it floats rather than sinks, and can thus be used in very shallow swims. It is a good natural bait, especially in the Thames, as in summer time much bread is seen floating down the river, frequently surrounded by a grabbing crowd of bleak. Chub know well enough what a tasty morsel is a piece of half-soaked bread, and take it with avidity. Swims of forty yards are easily managed from the punt, the long, straight up-stroke greatly assisting the rod ; and by keeping the rod straight down stream with the top close to the surface, you get a marvellous "pull-back." Boating parties are a great nuisance to the chub-fisher ; they have, as a rule, no idea that a float can travel more than a few feet away from the angler, and scull over your tackle in complete ignorance that anything is amiss. Most of these annoyances are happily lost in winter- and spring-fishing, **Winter-**when chub are gamest. The best winter- fishing bait is pith, and the delights of chubbing on a bright frosty day are hard to beat. A lobworm is frequently taken soon after a flood in winter, but there is nothing to equal pith for general use in cold weather. The method of fishing is called "pith and brains," brains being the groundbait and pith the hook-bait. Bullocks' brains may be obtained from most butchers, or from the slaughter-houses, and they make a beautifully white groundbait. They should be boiled for a few minutes, and are used by cutting them up in a dish or tin and mixing them with water. This "brainy" water is dribbled into the swim, and the white milky line attracts the chub, but does not feed them to any extent. A hook or triangle baited

with a lump of pith is run down in, or just after, the milky stream ; the chub thinks that he has a fine morsel at last, and the temptation is too great to be resisted ; the float disappears with even more vigour than usual, and the strike is responded to with the pull of, mayhap, a four-pounder, and you fish swim after swim with favourable results, the chub apparently fighting to be first at the bait.

Spinning for chub on the shallows in the early Spin- season is productive of excellent sport, ning though this style of fishing for them is unusual. A minnow or small bleak for bait, a light rod with trace and lead to match, fine line, and an easy running winch complete the outfit, though a landing-net should always be included. A most deadly artificial bait for chub is the "Wagtail" (p. 235).

When spinning in fast water, chub, as usual, take the lure greedily.

Fly-fishing for chub is fine sport in quiet, undis- Fly- turbed water, but is little good if there are fishing many boats or launches about. A powerful rod and strong tackle should be employed, for your fly is thrown into very awkward places, and the most skilful angler will sometimes get "hung up ;" a smart snatch will occasionally tear a little impediment away without much disturbance. On the Thames nowadays, at least on the lower Thames, the only really quiet time for fly-fishing is the early morning ; let your attendant row or paddle you down as quietly as possible, and fish all the spots you know hold chub. Drop your fly into every likely place ; never mind throwing it hard ; it is no dry-fly business, and chub take a sunk fly greedily. Almost any fly that is tied will kill

chub, anything gaudy or striking in colour will attract them. I have little preference for any particular fly ; perhaps I have killed most with a Black Palmer, silver twist on the body and a big white leather tag, the fly itself not to be tied too large. Try alongside old barges, sunken boats, and near shelters of similar description ; chub are picked out of curious places with the fly. As a variety in fly-fishing, I may state that I have had Fly-spoon good sport with a light salmon-rod and a spoon little fly-spoon, the spoon either golden or silvery, golden for choice. These spoons are little larger than a sixpence, and spin madly ; they are armed with a single hook, and it is advisable to see that this hook, which should be of good size, is not protected by the spoon. Perch take these spoons well. Yet another variety of fly-fishing for "Frog-chub" is "frogging." Bait with very small "ging" frogs, put a shot above the hook or triangle ; after hooking on the frog, tie his legs up the gut above the shot with silk or fine cotton. Kill your frog with a smart fillip of the finger before baiting. A small frog is a bait that a chub can hardly resist. Cast gently, and let the frog sink ; then work him up and down in little jerks, not too quickly, and strike on feeling a tug. A piece of bacon fat, or a bunch of gentles, on a triangle, flopped in under the bushes, make useful baits. Let your fly-rod have plenty of strength, especially in the top, or the heavy work will soon strain it.

Bank-fishing for chub is much more difficult than punt-fishing, and is very little practised on Bank-the Thames. I have seen some very good fishing fish taken from the towing-path side of the river during the winter season by walking down stream

and following the float, a little groundbait being thrown in here and there. It is best to use a twelve- or fourteen-foot rod, so long as it is not too heavy, as this gives better command of the water from the bank. I get good fish from the tail ends of weirs in the summer, throwing out with heavy tackle from the side and baiting with cherries or lobworms, both of which stick on well in the heavy water. The stream in these places is very rapid ; the float requires the most careful watching, and the depth has to be found out by experience, mostly gained by the loss of tackle. Very long swims can be worked from the bank in favourable places, but it is difficult to play a fish when fishing over boughs, and many a "smash up" may be expected if your tackle be weak. In narrow streams, where the opposite side can be reached in a cast, there is a much better chance, as the fish can be pulled away from the boughs ; whereas, in the other case, he usually comes in underneath them, and has to be pulled out again ;—one good reason for using a long rod from the bank. It is such uncomfortable work fishing over bushes that I seldom try it unless I can find a spot where I can immediately pull my fish out of danger. In trying frogs or beetles on the surface, you cannot be too quiet, and I much prefer to get at a chub from a long distance ; however, as there are places where chub cannot be reached except by daping over bushes, I advise fishing with a long rod, painted dark green, as dull as possible, to avoid glitter. Use strong gut and running line ; twist a little soft lead wire about two feet above the hook, which will steady your bait when lowered, and will help to run the line off the winch. Dabble your bait about on the surface if it be a cockchafer,

beetle, grasshopper or moth, but let a frog sink a little. You will perhaps see your chub sail up quietly ; do not then on any account hurry to strike him, or jump up in your excitement. When he has fairly got the bait, hit hard, allow no law, and stick to him at all costs.

I would strongly advise trying alongside barges when traveller-floating for chub, especially **Barge-**when punt-fishing. An old barge, moored **swims** for a long while in one spot, often harbours chub if there be a good stream underneath to keep mud away. One old barge nearly always yielded me a chub on the first swim down, although she was only about two feet off the bottom when the river was low ; she is now quite sunk, and one of my best and favourite swims is spoilt. I took care to keep the punt well above the barge, and to see that she did not sway about or bump the sides of the barge. Pitching in a few pellets of groundbait, I ran my float down, making it actually rub along the side of the barge, but stopping it before it reached the stern, as there was some broken ironwork projecting. The bait seldom got more than half way down the barge's side when the float disappeared ; striking sideways, I dragged the fish out from his shelter, and he was generally a big one. For some reason or other, macaroni proved exceptionally killing in this swim : why, I cannot say ; the chub there apparently liked it better than anything else. This bait is a fine showy one, three **Macar-**dangling strips of macaroni on a triangle **oni** bait tickle a chub's fancy uncommonly. To make the bait, put some macaroni and cheese in a pie-dish, the cheese in small pieces ; pour on some boiling

water, and do not let the macaroni get too soft. Bait with three pieces, one on each hook of the triangle, each about an inch in length ; this looks a large bait, but it is just what a big chub likes.

Cheese- When baiting with cheese-paste, squeeze the **paste** bait flat on the top ; do not make it into a neat cone—the fish are hooked better with a flat-topped bait—and be careful the pellet is hung low on the triangle, so that it will allow the hook points to come easily through. When long corking, I never cover the shank of the triangle with cheese, but leave it bare, to avoid all possible chance of the bait slipping through the chub's jaws. When legering, I see that the cheese is very thin on the shank, and that the greater thickness of bait is below the hook. Fish have better opportunities of inspecting a bait on a leger than they have when the bait travels, so I cover up the shank when legering. Be very sparing of ground-bait when chubbing, especially if using cheese or greaves. A little cheesy water, made by cutting some cheese small or crumbling it, and stirring it in water, should be introduced to the swim ; this acts in the same manner as the bullocks' brains with the pith.

There is considerable difference of opinion as to which cheese is best for chubbing. I do better with clean, sweet yellow or white cheese, than with dark-coloured, rank, strong-smelling stuff. A pound of cheese will go a very long way ; get it cut in a strip, with as little rind as possible ; break it up in pieces about half an inch square, placing them in a strong cloth, making a "bunch" of cheese in the centre of the cloth. A rotten

cloth will burst when the cheese is squeezed. Gather the sides of the cloth together, and dip cheese and cloth for an instant in the water ; wring the waste water out, and knead the cheese in the cloth until all the lumps disappear. A beautiful white or yellow paste will be the result. After a day's "cheesing," everything reeks of cheese. The ropes seem especially to hold cheese, and I have had mine nibbled all to pieces by the rats in consequence of this. Not content with nibbling the ropes, they made a great hole in the punt-locker, round the ventilator, and dragged the ropes out.

Livebaiting for chub frequently kills the very largest fish. Chub are incessant pests to **Live-**Thames trout-fishermen, and the best chub **baiting** I ever landed was tempted by a large bleak when I was trouting. The tackle is similar to that for long corking ; minnows, small gudgeon or bleak are the best baits, the most likely swims being at the tails of weir pools or alongside willows. Let the bait swim about mid-water, except in very deep swims, where it may be set about two feet from the bottom. Hook the bait by a single hook through the upper lip, and allow a little time in striking. Use a fixed float, not too large, in shallow swims, and let the fish take the bait well.

A four-pound chub is a good fish, though not a rarity in the Thames by any means ; three- **Size of** pounders are quite common, and now and **chub** then a surprise comes to the lucky angler in the shape of a "banger" of six or seven pounds, or, very rarely, a little heavier. A chub of fabulous weight was landed last year at Molesey Weir by a trout-fisherman,—of course, in the close season !

I have stated that a longer rod should be used **General** for bank-fishing. In most bank-swims the **hints** lovely straight pull on your float cannot be obtained with the same facility as in punt-fishing: the rod is more at an angle with the stream. This tends to lessen the force of the strike, so the extra length is extremely useful; it adds to the length of the strike, and considerable force is required to pick up a long line cleanly and neatly. A long rod is also better for legering in side swims under bushes.

In traveller-float-fishing, nip on one shot to the running line just above, or at, the knot where the gut is tied, which keeps the tiny ring on the bottom of the float from jamming or sticking on the knot; if this is attended to, much annoyance will be avoided.

Almost every swim requires special shotting of tackle; do not put the shot on all together in one place for the heavy runs; spread them apart, in twos, threes and fours, the lesser numbers nearer the bait.

Although it is rare to get more than two chub out of one swim in a short while, such luck is not unknown. After a very wet day I tried for chub in some places that were usually disturbed by boats. The wet weather had kept the river quiet, and I got fifteen good chub out of half a dozen short swims. Trying the same swims when the boats are about has proved almost useless. Much to my astonishment, I once caught a large chub in shallow water when three launches were passing at considerable speed, the wash from the three raising quite a little sea on the river. I was baiting with

cherry at the time, and the fish took the bait boldly in spite of all the disturbance.

Chub have a habit of suddenly coming on or going off the feed ; therefore, waste no time if they are "on." Some subtle change in wind, temperature, or water, unappreciable to human beings, may account for this.

In the diagrams of tackle at work (p. 85) the loss of line in striking when the float is allowed to travel in front of the bait is plainly shown.

TIGHT-FLOATING FOR CHUB IN A BACK-EDDY.

THE DACE.

DACE are handsome fish, and delight in fast runs of clear water, affording excellent sport to the fly-fisher, though they are a nuisance when trout-fishing. Small chub are frequently taken for large dace ; but a little examination shows the difference between the two fish, dace being more finely proportioned than chub, the mouth smaller and the fins not so dark. Dace are among the best baits possible for pike ; I have also killed Thames trout with small dace ; as a bait they are much tougher than bleak, and are also much stronger for live-baiting.

The tackle for roach is suitable for dace-fishing, but only light rods should be used. The
Tackle best dace are caught in very swift water ;
and and I may mention that there are splendid
baits dace in the water around Penton Hook, and that many swims there may easily be fished from the bank. It is little good, however, when boats are about, for the dace do not draw into the swims in presence of any disturbance. Always fish as fine as possible ; when hair is used, care must be taken in striking, or the tackle will be broken. Perhaps the best bait is the red worm, or the tail of a lob-

SWAN ELECTRIC ENGRAVING CO.,

DACE.

HENRY STANNARD, DEL.

worm. Barbel-swims that have been well baited frequently swarm with dace, and the tail of a lob-worm will play havoc amongst the little fish. Half-pound dace are uncommon, while anything over that weight quickly approaches a specimen fish, a fourteen-ounce dace being well worth setting up. Besides worms, dace take gentles, caddis, wasp-grub, and pastes, and I have caught several fine dace when whipping for bleak with a gentle in the Thames locks. Dace are very free risers to the fly, particularly in shallow water.

The groundbait recommended hereafter for roach may be used for dace, but should be **Ground-** of a slightly looser nature. I have had good **bait** takes of dace with a baiting of soaked bread only, a little being thrown in loosely now and then. A handful of broken worms, loose gentles, or, in eddies, even dry bread thrown on the surface will bring dace freely on the feed. I have seen twenty or more dace grubbing at floating bread in the eddies below locks; and by casting a hook baited with a couple of gentles amongst them, and keeping out of sight, have pulled them out, in still, hot weather, as fast as possible. In winter, I have taken them with heavy float tackle, twelve or more feet below the surface, baiting with worm. It is not necessary to be so extremely particular about keeping the bait on or very near the bottom, as in roach-fishing; dace rise towards a bait, and take it very sharply and greedily; the float is plucked under with vigour, very quickly, and seldom sinks quietly under as sometimes occurs in roach-fishing. The best advice to dace-fishers is, to pick out swift runs or quick eddies about four feet in depth in the summer time, and to choose very deep eddies in the

winter. A very killing method for sharp-stream fishing in summer is to select a nice straight **Tight-line fishing** run with a gravelly bottom, taking a seat as near the water as possible. Use a tackle with a very *thin* six or seven inch quill float, either a goose or porcupine quill; put the first shot about ten inches from the hook, the others about three inches apart, arranging the depth so that the lowest shot and the hook shall rest on the bottom; and fish with a tight line, striking very sharply when the float is jerked under or pulled down. Groundbait with a few loose gentles or broken worms, according to the hook-bait; commence by fishing close under the rod-top, keeping the rod out at right angles to the stream about two feet from the surface, holding the line taut. The float must be capped, not tied on by its lower end as in bream-fishing; the latter method will not suit in swift streams. If you do not get dace almost directly, lift the tackle, and let the bait rest a couple of feet further down stream, repeating the process till a very long swim is fished. Try two or three very long runs; and if sport does not ensue, seek another swim. In winter, fish deep eddies, either with a moving float or by tight corking; in this case, so long as it is light, a longer rod should be used, but it must be one that is controlled with perfect ease, as the strike must be very sharp and quick. In these deep eddies, a heavier groundbait should be employed; clay and bran and gentles (or broken worms), with a stone in the centre of each lump, will prove serviceable. Worms and gentles are the standard baits for bottom-fishing for dace.

One of the best catches of big dace I ever saw

was made by "daping" a grasshopper from behind the shelter of trees close to the water's edge. The stream was only about two feet in depth, clear and swift; by keeping well concealed, and letting an impaled grasshopper float down stream, a friend of mine had a magnificent lot of dace during a summer's morning, over thirty fish, many of them over half-a-pound in weight. Both dace and roach were well on the feed that morning; my luck took me amongst the big roach; and, strange to say, I also secured thirty fish. The following day, I made a fine basket of dace with the artificial fly, although in those days I had no knowledge of "dry-fly." Whatever may be said to the contrary, the wet as well as the dry fly will kill fish, dace or trout; and the staunch advocates of either system will find a change to one or the other occasionally prove more effective than always sticking to one unvaried method.

Fly-fishing for dace is to me simply fascinating. I have had good sport at Richmond at low tide, but have not fished there since the lock below Teddington was opened; so things may have changed, either for better or worse. I used to wade out between the deep ballast-holes at low tide, and once nearly got into a serious mess. Wading out when it was nearly dusk on a narrow spit of gravel, and being intent on my sport, I did not notice how quickly the darkness gathered, or that the tide had commenced to rise too high for my comfort. When I made a move, I could not retrace my steps quickly, as in the darkness I could not see where to place my feet in the thickened water; every other step I took might have landed

Fishing
with
grass-
hopper

Fly-
fishing

me in a ballast-hole. A passing boat stopped and took me out of my difficulties, the scullers responding immediately to my call, putting me safely ashore, without making any trouble about my dripping waders and muddy feet.

In fly-fishing there is a complete alteration in the

Line running-line contrasted with that for float-fishing. In float-fishing, legering and spinning, the weight of bait, lead and float, helps to carry the light line out ; and the finest line possible, compatible with weight of float, &c. is employed. In fly-fishing, the weight necessary to carry the line out is in the line itself, and you have to use the

Rod thickest line (dressed) that the rod will bear. Fly-rods have small rings, to prevent the "swish" of the rod drawing the line into loops between the rings ; the fly-rod makes long, sweeping strokes backwards as well as forwards, and loops of loose line between the rings would cause serious difficulties. It is not my province, in this book, to enter into the merits or otherwise of different fly-rods, and their varied makes ; it will suffice when I say that I like a light fly-rod, nine to ten feet in length, for dace-fishing, a tapered cast, unstained, or with very faint stain indeed. A long cast may be used when throwing with the wind, even up to nine feet if preferred ; but when throwing into a wind, five feet is ample ; and the taper should be short when throwing against a wind, also the rod top should be shorter and stiffer.

Winch For fly-fishing, the winch must have a check ; I like an adjustable check ; for if I want to get a long line out from the winch very quickly I slip the check off, stopping the line from tangling through over-running of the winch,

by checking the latter with the little finger on its rim, saving the trouble of pulling the line off the winch with the left hand. The line can be "shot" from a free-running Nottingham winch by this method. I oil a dry-fly (*i.e.* one that floats on the surface); this saves much flicking of the rod backwards and forwards to get the water out of the fly, and consequent blisters. I have had such terrible hands, full of blisters, after a day's dry-fly work that the saving of some hundreds of switchings and much valuable time is a great consideration.

In dry-fly fishing, a single fly is used; in wet-fly, an expert angler will use four or more in fast streams. The fly furthest from the rod is called the "leader," the others are "droppers." In wet-fly, the angler has this advantage: he can try several different flies on his cast, and soon finds which one is best taken, and can alter his flies accordingly. Almost any small trout-fly will kill dace; and the remarks of the May-fly fisher for trout are more often deep than loud, when some dace or chub takes the fly meant for trout.

Do not despise dace when either fly- or float-fishing; but keep out of sight as much as possible. Tipping the fly with a gentle is often productive of good sport.

THE EEL.

AS eels do more damage to young fry and spawn than any other fish, the proprietor of a trout-fishery will do well to exterminate them in every possible way. Though eel-fishing may not be considered sport, the fish is one of the best for the table. The eel is a puzzle to many of the wisest of anglers and scientists. I have seen them migrating up stream, little thicker than thread, in incalculable numbers, but have never seen a tiny eel come down. During the first flood after August, eels descend the rivers, but they only really "run," as it is called, on very dark nights, when wind makes no difference. On a bright moonlight night, eels are hardly ever taken in the nets. They feed well at night, and the best bait is a dead gudgeon, threaded on a double hook with a baiting-needle; and the eel must be given time to gorge the bait. Dead roach or dace are good baits, but there is nothing like a gudgeon; any fish bait is better than a lobworm, though that is a good bait. I once took a large eel with paste, bream-fishing with a travelling bait; this was in the Wey, at Pyrford, and about 11 a.m. Very

Night-
lines large eels may be taken on night-lines, particularly in ponds and lakes; the hooks should be tied on piano wire or very strong gimp,

gut being almost useless and quite unnecessary, as strength of tackle is the only requisite. Eel-fishing is often little good in the daytime, though I had, many years ago, some very large eels from Wimbledon Lake when carp-fishing; the eels gave me so much trouble that I abandoned worms for paste-bait in consequence. If you fish for eels with rod and line, let everything be strong, and let the bait rest on the bottom. Bobbing for eels is a peculiar and nasty method; a great bunch of lobworms, threaded on worsted, knotted together, and the line run through a lead placed above the worms, is lowered to the bottom of the river; the rod employed being a stout stick. The tug of a biting eel is plainly felt, he is lifted upwards and allowed to drop off into a bucket. This method is usually followed from a punt or boat at nighttime; the eels are caught by their teeth catching in the worsted.

To realise what numbers of eels a river contains, a night must be spent in an eel-house; and an eel-fishery is very valuable. About September, or later in some rivers, when the fish descend, nets are set in the weirs; the net being fixed on a square frame, which fits in a groove in the weir-beams. The nets are much like trawl-nets in shape; the purse (or lower end of the net) is closed by a knotted rope, the nets being allowed to hang streaming in the weir-run, their frames being pushed down in the grooves with a hooked pole. Dark nights and flood water are chosen, and when there is a big run of eels the nets have to be frequently lifted, or the weight gets unmanageable. Two men are required, the work of hauling being both hard and dangerous,

having to be done by the dim light of a lantern, and on a slippery weir head. When the net is hauled, a tub is set on or near the weir, the frame is pulled out of its groove, and the weight of eels dragged in by main force. This work is no child's play when the nets are heavy with eels as well as weeds and rubbish ; after getting the purse of the net over the tub, the rope is untied, and the eels are shot into the tub, a seething, wriggling, frothy mass. It is rare to take any fish but eels in this way ; and on netting a weir last year (September, 1896) in the full run of the eels, I only saw one small trout taken amongst them. The tubs of eels are emptied into a tank or boat-well as soon as possible, the fish being sent to market alive. Several nets are set at once in a weir, in different runs ; and when the eels are descending in large quantities they are hauled about every twenty minutes. On moonlight nights, the nets may be set and not more than a dozen eels taken.

If you wish to trap eels, wickerwork traps are far better than those of wire. The traps
Traps should be well weighted, and, when possible, pushed under streamers of weed ; they are baited with big worms, fish or garbage ; and I have also seen them baited with the flower of the yellow flag. Eels bite well in thundery weather, even in the daytime ; but the largest are generally caught at night.

THE FLOUNDER.

THE flounder is naturally a salt-water fish, but by habit he sometimes becomes an inhabitant of rivers.¹ I have caught perch, brook-trout, roach, and flounders, in the same swim when baiting with worm, and have seen little flounders, about the size of a five-shilling piece, miles away from the sea, where one would least expect to find them. In tidal waters, I have had really excellent sport with big fish, filling my basket several times over on a single tide.

My experience of flounder-fishing shows that a large live shrimp beats all other baits, but the shrimp must be alive, and, for heavy fish, the bigger the better. Next to the shrimp comes the lugworm, which is dug out of the sand

Baits

¹ A Trentside friend assures Mr. Wheeley that flounders do spawn in fresh water, in proof of which he states that he has seen flounders the size of threepenny pieces sixty or seventy miles from the sea. This is, however, evidence of nothing more than that the post-larval flounder ascends estuaries at a very tender age. It is quite out of the question for any fish with floating spawn to take up its residence permanently and reproduce its species in fresh water. The flounder is shown by all the latest researches to breed only in the sea. The so-called "river" eel probably comes under the same category.—F. G. A.

at low water, and I have also taken flounders with lobworm and redworm. If the lugworm be used, bait with a piece of worm an inch and a half to two inches in length, the reddish coloured lugs killing better than the black. I propose to describe baiting with live shrimp, as I have had the best sport with this bait.

Use a twelve-foot cane rod, upright-ringed, with
 Rod, a greenheart top ; fine running line, greased,
 line, &c. a six-foot gut length, and a tapered cork float. Shot the line till the float is sunk to the top of the cork, leaving about an inch of the quill above the surface.

One hook is quite sufficient, and it is important
 Hook to use a long-shanked sneck bent hook, which gives freedom to the shrimp, hooks the fish securely beyond the horny edges of the

PATENT POCKET SCISSORS.

mouth, and is easily extracted if the angler strikes at the right moment. Your flounder is a greedy

gulper of baits ; you must allow just a little time for the hook to be taken well in the mouth, but not enough for it to get down into the gullet, or there will be trouble in extracting it. A deeply swallowed hook is best extracted by slitting the side of the mouth and gill with scissors till the shank can be reached. During the time wasted, you would probably have taken another brace of fish, for they frequently lie so closely together in a hole that I have actually seen a brace follow a hooked one to the surface, trying to pluck the protruding shrimp out of the other's mouth ; this is a true angling yarn, which the "scoffer" is welcome to disbelieve.

To ensure sport, damage your shrimp as little as possible ; pass the hook right through the side of the shrimp's tail, at about the **Baiting** second joint. Let the shrimp hang quite loosely, and do not pass the hook through any other part. The depth must be plumbed most carefully, as the shrimp must be allowed to touch the bottom and no more. The flounder grabs the shrimp, and, if necessary, turns him, so that the shrimp goes down tail first ; this is only natural, as the legs and antennæ of a shrimp prevent it being swallowed comfortably head first. The head, and not the tail, of the shrimp is, in almost every case, found sticking out of the fish's mouth, that is, if the fish has been struck properly, and the bait has not been gorged ; even then the head of the shrimp is nearest the mouth. By the way, the hooks must be carefully selected : a thick-wired hook kills the shrimp very quickly, a weak hook breaks in the fish ; so choose a medium, about No. 9.

My favourite spot is a deep hole, an eddy for preference, with a sandy bottom. Very
Swim deep places should be fished with a traveller float and heavy tackle. Flounders bite very sharply and quickly, with a sort of double knock : this is, I think, the seizing and turning of the shrimp. Do not strike at the bob-bob immediately, but allow just a little time ; the first half dozen fish will show you exactly the time to allow, and you will soon find whether you hook the fish properly. If the hook is deep down, strike sooner ; if the fish are lightly hooked, allow a little law.

The time for fishing depends on the state of tide, situation, &c. I have done best on windy days, fishing from a quarter to half-flood in sheltered spots. Some situations can be fished at all times of tide, but flood tide is generally better than the ebb. Crabs are a great nuisance, more especially when lugworm is used for bait : they drag the float under in much the same manner as a fish, but in a side-long fashion. Should you get a few bites of this description, and be puzzled why you do not hook fish, lift the line quietly at the next bite ; the tug of a fish is plainly felt, but a crab is a dead weight on the rod. Crabs may easily be lifted ashore if you do not jerk the line ; never let one go in again that you can put the heel of your boot on.

Large flounders play very heavily ; they cannot therefore be lifted on fine tackle, so use a long-handled landing-net with a very wide hoop. It is not unusual to catch fifty large fish on a tide, or even half a tide ; but fine tackle must be used, for I have had men fishing on either side of me who did not take a single flounder on their very coarse tackle, while I got one at absolutely every swim.

Take the greatest care to keep your shrimps alive, for which purpose two or three large bait-kettles are much better than one. If the fish are really feeding, you will probably get one for every shrimp, barring what crabs, and possibly eels, take. The shrimps must be kept in plenty of sea (not brackish) water, and the kettles must be kept out of the sun as much as possible.

There are three special points to remember in this style of fishing: fish fine, plumb the depth very carefully, altering the position of the float as the tide rises or falls, and fish with *live* shrimps. It is quite a rare occurrence to take a flounder with a dead shrimp; yet some think that sea-fish cannot, or do not, discriminate between a live bait and a dead one. A live shrimp is a beautiful creature, so clear in colour that you fancy you can see through him; a dead shrimp is a flabby, grey, inert mass; and flounders well know the difference.

THE GUDGEON.

GUDGEON are small, dark-brown-spotted fish, about the size of sprats when full grown; but instead of being flat-sided, are rounded in form, and in consequence make the best natural **As bait** bait for spinning. The spots on the tail fins are very small, but those on the lateral line are of good size. They are tough baits, and pike often prefer them to dace; a small gudgeon is a very good bait for a big perch, especially when pater-nostering. It should be placed on the lower hook when two hooks are employed, as gudgeon swim near the ground. They are always good bait for pike, and try to reach the bottom, rarely entangling themselves in the tackle, as is frequently the case with dace, which work upwards more than gudgeon, and in doing this, sometimes get entangled in the line above the float if it be allowed to sink.

Gudgeon swim in shoals and search every inch of the bottom for food; it is pretty to see them "working," and easily done in clear, shallow water, for they are not particularly shy. They are delicious eating, but should be cleaned very carefully, as is the case with all fish save the red mullet. They may be taken freely in the hottest weather,

HENRY STANNARD, DEL.

GUDGEON.

SWAN ELECTRIC ENGRAVING CO.

when the river is at its very brightest, the proper way to fish for gudgeon being to employ a rake. The gudgeon-rake is a formidable **Raking** implement ; its long teeth are intended to disturb the gravel, and liberate the insects and slight muddy deposit amongst the small stones ; so that, however clear the water may be in its natural state, raking will generally bring the fish together, and five or six dozen gudgeon at a catch is not extraordinary. The rake is heavily made, weight is necessary to keep it down, and the pole or shaft should be heavy as well. Raking may be practised either from the bank or punt ; choose a gravelly swim about three feet in depth, anywhere you have seen gudgeon grubbing about. Ply the rake vigorously ; then fish with a small, well-scoured red-worm for bait. This is the best, though I have taken gudgeon with paste and gentles. Use fine tackle, No. 5 or 6 hook (p. 159), thin cork float, light rod, and running line. I employ running line when gudgeon-fishing, as it is not uncommon to pick up a good perch or two. The bait must be kept well down, therefore a thin cork float is better than a small quill, as it carries more shot. Gudgeon are very free biters, and their capture requires but little skill ; in the blazing hot midday sunshine of a summer's day, when hardly anything else will bite, an hour or two of gudgeon-fishing will fill up the time most pleasantly till the roach come on the feed. Gudgeon are getting much scarcer in the Thames—about Shepperton, at least ; and I think this is partly owing to so many being used for baiting eel-traps.

The Thames trout-fisherman will do well to employ a small gudgeon for bait, particularly in very bright water.

It is often a good plan to wade when fishing for gudgeon in a shallow swim, or at the top of some gravelly scour. The rake may be used as previously directed, or a short boat-hook will do a good bit of "scratching" if a rake is not to be obtained, being dug into the gravel alongside the angler when it is not in use. When fishing the

The Mole, near Hampton Court, I have caught
Mole lots of gudgeon at the spot where the carts are taken into the water, the grinding of the wheels and splashing of the horses thoroughly disturbing the water, and sending plenty of thick water down stream. So accustomed are the fish to the disturbance, that they feed close to the carts, coming into the muddy water to search for worms and other food. A large sod of turf may be placed in shallow water ; by standing on this and stamping slightly, a thick current soon shows itself, and the fish draw into the run.

HENRY STANNARD, DEL.

PERCH.

SWAN ELECTRIC ENGRAVING CO.

THE PERCH.¹

I AM glad to be able to vouch personally for the fact that perch are once more becoming plentiful in the lower Thames. I believe it is also the case in the upper part of the river. In May, 1897, Walton Sale, a Thames backwater, was well stocked with perch-spawn. I walked over to Walton to see about a punt I had purchased for a friend, and took the opportunity of searching the Sale for perch-spawn. The water-weeds and willow roots were thickly festooned with spawn in very many places, affording a good prospect of plenty of fry at an early date. It is a great pity that the Mundella Act allows perch to be taken so late as the 15th of March; I have taken them in February in full spawn, particularly in mild seasons; and it should be made illegal to take perch after the 15th of February, at very latest, in the Thames. I saw many perch caught on the closing day of the season in 1897, and each fish should have been put back in the river. I have, during recent years, taken many large perch when Thames troutling with small bleak or gudgeon, carefully

¹ In view of Mr. Alfred Jardine's forthcoming volume, the author has dealt very briefly with this and the following species.—ED.

returning them to the river. All this tends to show that the Thames will again afford good perch-fishing very shortly, although, till quite recently, the fish had become scarce.

Perch are predacious fish, though they swim in shoals ; they prey upon minnows, gudgeon, and other small fish ; they also take worms freely, and may be sometimes caught with gentles, though I do not recollect ever taking a perch with paste. Ground-baiting, except with worms, is not resorted to, but a few hundred of loose worms in a mill pool or weir will often prove very effective. I have caught some fine perch at Pangbourne Weir when fishing for barbel. They are frequently caught when gudgeon-fishing, also in roach-swims. If roach suddenly go off the feed, it is a good plan to send a big worm down the swim once or twice ; and it often happens that a perch will then be caught, having drawn into the swim, especially when the angler is ground-baiting for roach with worms.

The perch is a handsome fish, with dark bars or stripes, "hog-backed," with a large prickly dorsal fin, and a second, but much smaller one, between the tail and the larger dorsal. With his strong scales, broad stripes, and highly-coloured fins the perch is indeed an attractive fish, though his big mouth rather spoils his appearance. Although perch are vigorous biters, it is of the utmost importance to give plenty of time before striking ; do not strike at the first bob-bob of the float, but let it sail well under. Time must also be allowed when pater-nostering ; in spinning, strike at once.

Rod and winch The eleven-foot rod described in bream-fishing (p. 39) will do excellently for perch. Use a Nottingham winch, with an adjustable check ;

fine running line, dressed with vaseline and enamel, and a fine gut cast. I prefer the cast stained very light blue, and two yards are quite enough.

Large-sized hooks should be used for perch. Nos. 8, 9, or 10 (Hardy's) are none too large. **Hooks** Employ round or Kirby bent hooks for worm-fishing, and sneck bent for livebaiting, either with float or paternoster. Be sure that the gut length on the hook is fine, for perch will frequently refuse baits on coarse tackle. There is, indeed, no necessity to use coarse stuff, for if you get a two-and-a-half pound perch nowadays from public waters you are uncommonly lucky.

The floats usually sold for perch-fishing are very clumsy in appearance, being far too broad **Floats** in the cork. A tapered cork float acts just as well, and is much better for striking; moreover, it does not drag so much against the water as a flat-, or nearly flat-, topped float. The colours of perch-floats are generally very gaudy, but there is no necessity for this, as perch-swims are seldom fished long. The bait should swim from mid-water to within three inches of the bottom; and whether it be worm or minnow, the angler need not trip the bait along the bottom, as perch generally feed at some little distance from it.

The best livebaits are minnows; after these, small gudgeon. Well-scoured lobworms are very **Baits** good baits, and I have also killed fine perch with brandlings. Artificial baits are numerous, a small "Wagtail" being my favourite. Devon minnows, phantoms, quill minnows, small gold or silver spoons, silver spoons with the concave side painted red, or spoons with a red tassel of wool, will all kill perch. They will sometimes refuse

minnows and take worms, and *vice versa*. The lower hook of a paternoster should first be baited with a worm ; if sport does not quickly result, with

PHANTOM BAIT.

minnow ; if this be also refused the angler may conclude the fish are not feeding. Very large perch are occasionally taken when pike-fishing with a small dace ; and in my schooldays, I caught a huge perch in this way in a lake. I have no doubt the fish went three pounds or over, and I had no idea what a prize he was.

Livebaiting with float-Live- tackle for perch is baiting pretty sport. The

hook must be fine in the wire, or it injures the minnow too much ; it should go through the upper lip only, and the bait should swim near camp-sheathing, piles, roots and other shelters, or in eddies. Eddies below the buttresses of bridges are excellent holes for perch, as are also corner eddies in weirs ; holes below big masses of

weed should likewise be tried, while straight runs ought not be neglected if you know perch are about. Floating a minnow in this way is

very successful in the Kennet, where some years ago I had excellent sport by following this plan. Allow time for striking. Try a small gudgeon if the minnow be refused, and do not use more than one hook on this tackle, for two hooks generally tangle or lead to loss of fish in the weeds. As in barbel-fishing, a hooked fish breaking away is about the worst thing possible ; if care be taken, a good dish of perch may be caught out of one eddy or swim, but pricking fish or breaking in them will soon have a bad effect on sport.

Fishing with float-tackle and worm-bait is conducted in the same way as livebaiting, but **Worm-** a round bent hook should be used instead **fishing** of the sneck. Put the worm on the hook head first, and leave just enough loose tail on the point of the hook to wriggle a little without allowing the worm to hang loose. A dead or badly scoured worm is little good for perch.

The paternoster is a tackle leaded at the lower end, with the hooks hanging, or standing, at right angles to the line itself. The lead **Pater-** should be tied on with black cotton, to save **noster-** breakages. Pear-shaped leads should be used in **ing** preference to bullets, as they do not catch in obstructions so easily. Paternoster-tackle should be neatly made, though most paternosters are very clumsy in construction. Tie loops an inch-and-a-half to two inches long on the hook-length ; pass the loop round the main line, put the hook through it, and pull taut above a knot that joins two strands of the gut cast. This will hold, and the long double loop on the hook length helps to keep the hook away from the lead-line. This is far better than wire, bone, or bristles ; only take care to soak

the gut well before tying any knots. The loop, when pulled taut, will not slip below the knot on the main, or lead-line. Indeed, the doubled gut makes two loops on the main line, and with a little care one of these may be placed above the knot, and the other below it, when the hook will refuse to slip along the line in either direction. In paternostering, two or three hooks may be used, the lowest fixed six inches above the lead, the others at intervals of nine to twelve inches. Throw the tackle out, letting the lead sink to the bottom ; lift the rod and keep a taut line without lifting or dragging the lead ; the bites are not seen, but are easily felt. If no bite is felt after a minute or two, draw the lead a foot or two nearer, or make a fresh throw ; search the water as thoroughly as possible ; and do not forget to allow a little time before striking. Pike are frequently caught when paternostering for perch with minnows or small gudgeon, and the angler should always be prepared for a tussle with a pike, though it often ends disastrously, the fine gut being bitten through. If a pike be landed, examine the gut carefully ; and if it is at all scratched or frayed, the hook should be renewed. Paternoster tackle is very handy for fishing deep eddies, or places obstructed with woodwork of any kind, as the lead can be dropped into quite a small, clear place. A fourteen or fifteen-foot rod is often useful for paternostering from the bank, the extra length enabling the angler to drop the lead quietly into difficult places. Flowing water tends to prevent the baits tangling themselves round the main line, the drag of water on the bait keeping it clear. Lowering the tackle slowly will also prevent a good deal of tangling. A float is seldom used with

paternoster-tackle, but it is occasionally employed in pond-fishing, where the bottom is fairly level. The depth must be adjusted till the float stands upright, sunk to about an inch from the top. If you throw into water that is too deep and the float disappears, the lead must be drawn towards you till the float is seen properly. When using a float, the rod can rest on the ground, or on a forked stick, should the angler wish it.

Spinning for perch is the prettiest method of all. The ten-foot greenheart rod described in *Spin-chub-fishing* (p. 70) is an excellent rod ^{ning} for spinning with light tackle, in conjunction with fine gut tackle throughout, one or two swivels and a four-foot, single gut trace above the bait. The flights for natural bait must be small in proportion, a lip-hook and two triangles will do well for minnow-baiting, all the hooks being tied on gut, not gimp. The natural baits for spinning are minnows, small gudgeon, sprats or bleak. Use a very light, free-running winch and fine running line; strike directly a bite is felt, in the same way in which the bait is travelling, keeping as straight a line on the fish as possible, and not throwing the rod up at another angle. The line should pull straight, from rod-top to fish. There are many artificial baits; my own fancy is a small "Wagtail." I have repeatedly watched perch follow the spinning bait for some distance, the back fin of the fish being raised; and when perch follow the bait like this, it should be dropped to them, slackening the speed, when, should the perch not see the angler, the bait is generally taken. I once took three fish of different sorts in three successive casts

of the "Wagtail" when spinning for perch, a trout, a perch, and a chub,—pretty good evidence of the killing powers of the bait.

Legering is a good plan in floods or thick water ;
Leger- ground-baiting with a handful or two of
ing broken lobworms. As the tackle is fine, the weight should run on the running line, and not on the gut, or the latter will soon be frayed through or at least scratched. I like brown-stained gut and hook-lengths, and generally keep the bait about two feet from the bullet, somewhat further in straight runs. Another method, that is not quite legering, pays well in weirs when the water is low, but can only be practised where the bottom is unobstructed. Put half a dozen large shot, about six inches apart, on a six-foot gut cast, the lowest shot a foot from the bait, which may be a minnow or worm. Run the bait down in the foam of the weir fall, and let it travel about freely, just keeping it in touch on the rod-top. The line often draws towards the weir when it has gone a little down stream, the effect of the undercurrent.

FLY-SPOON.

Do not stop the bait as it works back, for it is working into a most likely spot for perch, while chub or barbel are frequently picked up in this way, and occasionally an unlucky trout. The bite of a fish is easily felt ; and if you get hold of a barbel, you will experience grand sport on the fine tackle.

Fly- Fishing with a fly-spoon is de-
spoon scribed in chub-fishing (p. 89).

I have had good sport with perch in the same way, or with a very small "Wagtail" on strong gut.

Fly-fishing for perch is very little practised. I have killed them with "Alexandras" and "Dusty Millers" (if either of these may strictly be called flies; I judge them rather to represent minnows). The fly should be fished wet, and worked slowly.

PERCH-FISHING.

THE PIKE.

OF the voracity of the pike I need say but little. I have frequently known a pike to take a hooked roach, and have also had a pike seize my roach float when playing a fish. In a baited barbel-swim, I have taken pike up to eight pounds in weight with a lobworm; this in the very early season when pike are extra hungry after spawning, and will take almost anything that moves. Trout-fishers hate pike, and with good cause, as a small pike (or "jack") will do very great harm amongst trout-fry, and these little "jack" are most difficult to exterminate in a trout stream.

The whole aspect of the pike is cruel, and the teeth are naturally set to hold a fish firmly and securely, pointing backwards towards the gullet, while the long fang teeth on each side of the jaw are in shape not unlike those of a dog. Let the angler beware of introducing his fingers into a pike's mouth, for a small three-pound fish will draw blood freely, and will lacerate the fingers unless the mouth is forced well open. A pike-gag is indispensable in the outfit; it saves time and tackle, especially when spinning, as several hooks

HENRY STANNARD, DEL.

PIKE.

SWAN ELECTRIC ENGRAVING CO

have frequently to be extracted. Get the gag well in the pike's mouth and force his jaws apart before attempting to release the hooks. Pike certainly act up to their appearance, for when they are not really feeding they will take the wounded livebait in sheer spite, playing with it across their jaws, and not attempting to gorge it. On these occasions, they will let an unwounded fish alone, not troubling to pursue it; while a pike well on the feed will chase the baits with great vigour. The terms pike

PIKE-GAG

and jack relate to the same fish; a small pike is usually called a jack, but the name jack is frequently used on the Thames for any sized fish, while in Norfolk I have hardly ever heard the fish called by that name; there, he is almost universally a pike. Speaking as a pike-fisher, and not as a trout-fisher, I think it a pity the Mundella Act allows Close time pike to be taken as late as the 14th March, at which time, in a mild spring, pike are big with spawn. In waters where it is desired to preserve pike, the 20th of February would be quite late enough to allow fishing for them; and I am sure Thames pike-anglers would be benefited by a change to that date. Again, the 16th of June is much too early to commence pike-fishing, and

this might well be altered to the 16th of July or 1st of August. I am speaking particularly of the Thames, where we have such vast quantities of bleak, roach, dace, &c., that I am of opinion the pike do less harm than in other rivers to the trout. In a trout-stream proper, pike should be slain without mercy, and the gun and the snare unhesitatingly employed to get rid of them.

Pike are in best season from October to February, for a winter pike is firm and hard, deep and
Season thickset, very different from the wretched scarecrows that are caught in July or August by those who fish for them at that time of year. Windy, blustery weather gives good sport as a rule; the wind seems to stir the fish up and they are keen for their food; in very still weather pike seem lazy and disinclined to feed, speaking, that is, from my own experience. I have done but little good when the wind is in the east or when heavy snow has fallen, though I have had good sport occasionally in hard frosts; sometimes, in very hard frosts, I have been unable to stir a fish. In Norfolk, I once had a good day when the cold was so intense that I had to keep knocking the ice off the float, the fish froze stiff in a very short while, and the bait-kettle was thickly encrusted with ice. I was fishing a deep pool below a mill; the great eddy kept the water open, while the ice above the mill was strong enough for skating. Do not, therefore, allow a cold day to stop your pike-fishing, but fish the deepest waters, for there the fish will most likely be found.

In bitterly cold weather, the line will freeze in the rings; and to prevent this, cotton-wool should be tied in the rings and saturated with castor oil,

one of "J. P. W.'s" tips in the *Sportsman*. January is usually a cold month, but it is^{Winter} one of the very best for pike-fishing; by^{fishing} that time the winter floods have swept most of the decayed leaves and weeds out of the rivers, and beds of rushes and reeds, far too high in the early autumn, can be thrown over from the bank, and the spinning-bait drawn carefully along their edges; or the live-bait can be dropped quietly over them and worked into all sorts of good holes for a pike.

A likely spot in the winter for pike is just below a reed bed, either at the side or in the middle of the river; if a deep eddy is formed below this bed, you are almost certain to find a pike in or near it. Little bays out of the main stream should be carefully fished over and searched thoroughly; and in spinning, it is important not to spin too fast. Work the water with the spinning-bait up and down as well as in a straight line, letting the bait sink and drawing it up again. By so doing you will get many a fish that will not come near the surface to seize the bait, for, though the pike is voracious, he will sometimes want a little humouring; on other occasions he will eagerly pursue anything in the shape of a bait that you may put before him, or, indeed, he may refuse everything. In floods, pike keep close to the bottom, and may be caught by legering in eddies; after floods, I prefer spinning; while the paternoster is a most useful tackle to search deep holes and corners below timbers or camp sheathing. Indeed, I think the paternoster is the most deadly livebait tackle there is; it searches water thoroughly, though fish are often lost by striking too soon. There is nothing like a pater-

noster for searching a weir-pool, or under the apron of a weir. In the early season, pike often lie up in these places ; and I once got nine pike from under the apron of a Kennet Weir. This was in September, and the pike happened to be "mad on."

River pike are usually much handsomer than those from ponds or lakes, while a pike from a weir-pool is generally a better fish than one from a slow stream.

As regards the tackle for pike, I think we are all inclined to use rods a trifle too heavy, and
Rod tackle a trifle too coarse and clumsy. I have an eleven foot greenheart rod, by Slater, that only weighs one-and-a-half pounds, which I use for spinning, having killed many pike on it, the largest over eighteen-and-a-half pounds. This rod is too light for livebaiting, and there is too much spring in it for that sort of work. Livebaiting requires a stiff, short rod that will stand the weight of livebait, lead and float. I certainly prefer greenheart rods to those of cane for pike-fishing ; ten to eleven feet is a handy length, but a longer rod may be used for paternostering. See that the winch fittings of a pike-rod are strong, and that the rod rings are of a good size and good metal. In selecting a rod, pick out one that will not tire you ; you will kill more fish with a rod you can easily manage than with one too heavy. All pike-rods should have upright rings of the round pattern, and should be supplied with two tops, the shorter for live-baiting, the other for spinning. A rubber button should be fitted on the butt in preference to a wooden one, it is softer to the groin when throwing or winding in. Cane rods with solid tops are made for pike, but I do not like them, as the weight is in the wrong place,

unless very carefully balanced. I prefer the weight well back in the butt.

A good winch is important, if you are to fish in any comfort. A four-inch Nottingham Winch centre-pin with adjustable check (to slip on and off) is a good size, and the throwing should all be done from the winch. In January, 1897, I tried Messrs. Hardy's new winch, the "Silex," for pike-fishing. This is a good strong metal winch, and using a spinning bait and fairly light lead I found I could throw well with it on a first trial. I consider this winch will be valuable to beginners in the Nottingham style of throwing; it has a finger catch to prevent over-running, the check is silent, and the pressure is adjustable. During an afternoon's practice with it, I had only one over-run, through trying to throw too far; and I was rather hampered by using a dressed line, being accustomed to a plain line (greased) when spinning. Another detriment to comfort was that, during most of the time, I was nearly up to my knees in snow, making the foothold bad, which is against good throwing.

I always use a plaited silk line, soft dressed with vaseline and enamel (see p. 73). For throwing from the coil, a dressed line is better; Line though by the time the angler has learned to throw from a coiled line, he can learn to throw from the winch, avoiding all tangling in sticks and other obstacles; and in pike-fishing, it is often most convenient to be able to stand in the midst of rushes or in high grass, and throwing from the ground cannot be done in these places.

The long oval floats, green with a red or white top, are best. Now, as a really good "tip" in live-

baiting for pike, I advise adjusting the depth with

Float a small piece of porcupine quill tied cross-wise on the line above the float and not by jamming a peg in the float itself. Let the line run freely through the float; when the pike runs with the bait, the float is pulled under as usual, but in striking, you do not lift your heavy float from or against the water; the line slips through it, and almost the full force of the stroke is on the hooks. Again, in the action of throwing out, the float slips down the line to the lead at the commencement of the throw; the weight is then in a much better position for casting; a fixed float, a long distance from the bait, sometimes makes a throw exceedingly difficult, but the chief benefit, a far freer pull directly on the fish, is obtained in striking.

There is a multitude of artificial pike-baits; I have tried many of them, and at the present

Baits time prefer the "Wagtail" to any. When the fish get to know the bait, it will perhaps not be so killing. Spoons I don't like, though a red and silver spoon, made by Bambridge, Eton, kills well in the Irish waters. I know from experience that Hardy's "Crocodile" spinner for a dead bait is a good one (see p. 129). The natural baits are: dace, gudgeon, roach, bleak, goldfish, minnow. This last-named is small, but is very useful for getting small jack out of trout-streams. Preserved sprats are good spinning baits, being very bright, and the preservative toughens them wonderfully. These may be obtained from a number of tackle-dealers. Dace and gudgeon are the best live baits; the former play towards the surface, the latter play chiefly downwards. Goldfish, I understand, occasionally kill very large pike, but I have

not used them. They should be effective, if only because they are strange. Ground-baiting for pike or other predaceous fish is not resorted to.¹

PATENT "CROCODILE" SPINNING TACKLE.

Gut traces are far more reliable than those of gimp. If a trace is used at all, it should be of the best salmon gut, with gimp on the flight.

¹ As an exception, a ground-baiting of lobworms is found effective for perch.

Gimp is a little too much for a pike's upper jaw and sharp teeth, gut is liable to be
Gut or gimp bitten or chafed through. Test the
traces gimp *every* day before using it, and specially if you have had the tackle some little time.

Pike are such long fish that a gaff is preferable to any but the very largest landing-nets,
Gaff and even these may lose a big fish through the hooks catching in the meshes. A triangle is frequently outside a pike's mouth when he is hooked by the side of the jaw. If you slide your pike head-first into the net when this is the case, it is probable that the triangle will entangle itself somewhere, so that, when the pike gives a heavy shake, he either breaks the tackle or shakes his head free. To gaff a fish, put the gaff underneath him and strike up ; the weight of the fish is then on the gaff, and the gaff takes a better hold. Just where the head joins the body is a good place to gaff a pike. Gaffing must be done quietly and without hurry, though a great pike, struggling on the surface, with his mouth wide open, as is sometimes the case, makes you long to drive the steel quickly into him. A short gaff can be carried on a strap, slung over the right shoulder, hooking the crook of the gaff over the strap, and protecting the point with a cork. Telescopic gaffs are handy when you have an attendant. I have a little gaff, the shaft thirty-five inches long, that I have used for years, carrying it hung over a strap ; the butt end of the gaff being clear of the ground. When spinning, a mile of water is soon fished over, particularly if you have to pass many unfavourable spots ; and as you never know when you may

hook a very heavy fish, a gaff should always be carried. See that the hook is firmly screwed into its socket, or it may turn when you attempt to strike into a fish. Small pike may be lifted out by grasping them across the head in the eyes. I have landed many in this way, but must confess I should not like so to tackle a big pike, for I doubt if the fingers would retain their hold when the weight is felt. It is difficult to get quite near the water in many places, and even a three-foot gaff will save many a loss. Take care that the handle of the gaff is deeply grooved, or the grasp may slip.

The ordinary creel is of little good to carry
 so long a fish as a pike,
 unless the creel is

COMBINED GAFF AND BALANCE

salmon-size. Often, in pike-fishing, you want something that really will carry a bulky weight (see p. 224).

The art of pike-fishing may be roughly divided under two heads, spinning and livebaiting. Livebaiting includes fishing with float-tackle, pater-nostering, and legering. Dead-gorge-fishing is now, and justly, looked upon as a poaching method. The fish were allowed to thoroughly gorge a bait, which mostly necessitated the killing of every fish hooked, no matter what its size or condition. Gorge-fishing, in modern times, has therefore fallen into disuse, and this mention of an obsolete sport must suffice.

Spinning for pike is the better method. It affords plenty of change and exercise, and **Spin-
ning** there is far more enjoyment in it than in watching a float. The whole attention is occupied ; care and observation are required with every throw ; until the bait is out of the water again, the whole tackle is working, and working together. In spinning, a great variety of water can be worked, either shallow or deep ; the bait being skimmed over ground weed or drawn amid channels between weed beds ; the water can be worked across or along the side you are fishing from ; and by raising and sinking the bait, almost any depths can be fished. The spinning motion is imparted to the bait by crooking the tail, or by fans at the head of the bait, the flights (the hook lengths) being tied in many ways. A dead bait is used in spinning, generally a dace, gudgeon or bleak. Of these, gudgeon spin best ; dace, bleak and sprats are bright baits. Bleak are tender, and tear easily ; sprats are also tender, but the preservative solution

toughens them considerably. To fix a spinning bait on the hooks requires a little practice, and the insertion of the hooks somewhat depends on the style of flight you are using and the size of bait. Fix the tail-triangle first, then if the tackle has a single hook tied the reverse way, crook the tail by inserting the reverse hook in the side of the bait, the point of the hook must be inserted at a spot that will pull the tail very far back, as when the single hook is driven into the bait the tail will slip back considerably. After getting the tail angle, a hook of the next triangle is driven into the side of the bait (we are working towards the head). If you are using a large bait, there may be yet another triangle; if so, one hook of this must also be driven in. All these hooks should be deeply inserted, to get a firm hold, or perhaps a throw or two will drag the tackle away from the side of the bait. Then comes the lip-hook. If this is a sliding lip-hook, see that the gimp or gut has several turns round its shank; otherwise, in striking, the tackle will run through it, and, instead of properly hooking your pike, you will probably only double up the bait, which will very likely come back in a loop, head and tail together, scored to pieces by the pike's teeth. To make more certain of hooking fish, there should be a perfectly loose triangle somewhere; a second triangle below the tail is excellent, or a flying triangle may be attached, resting near the lip-hook, not inserted in the bait at all, but left entirely loose. Whatever tackle you employ, do not have anything to do with split rings; even in spoonbaits, split rings and brazed rings are not reliable. After inserting the lip-hook through both lips of the bait, hooking the under lip first, work

the gimp or gut on the lip-hook so that no slack be left, the whole flight on the bait being kept as straight as possible. After the flight, come the trace and lead. A salmon-gut trace is far better than one of gimp, gimp traces being chiefly

employed for pike as gut is imagined to be not strong enough; but as thirty and forty pound salmon are killed on gut I fail to see why we should use gimp traces for pike, though I prefer gimp on the flight for reasons previously given. To spin comfortably, there should be at least two swivels between bait and lead: I prefer leads fitted with swivels, two smaller leads rather than one large one. Care should be taken

that the lead is not too far from the bait; the closer it is to the bait, the easier the throw, eighteen inches to two feet being a good distance. Eighteen inches may seem too near the bait, but I have not found it make any difference to sport. In spinning from a weir head,

where the straight runs of water, going directly from you, can be utilised to carry the bait out, the lead may be put much further from the bait ; but if it is kept far from the bait in spinning from the bank or punt, a very jerky, uncomfortable throw is the result. Now, in spinning from the winch, beginners nearly always throw too hard at first (see p. 230) ; it is far better to begin with gentle casts till you get easy command over the whole tackle ; very long throws are extremely pretty, but a very short throw indeed will frequently pick up a pike. I have hooked them quite close under the rod-top, from a very short throw indeed ; do not, therefore, pass by a likely spot because it is close at hand. Before making the throw, judge where the bait should fall, the depth of the water (as nearly as possible), the obstacles to be avoided, and the direction in which the bait should travel ; also, see the best place to land a fish. In deep water, let the bait sink well before winding it in, and work it slowly. The tug of a fish may come at the most unexpected moment, so keep your rod-top as near the bait as possible without slack line, working the bait at all fishable depths. In shallow water, the bait must be drawn in almost immediately it touches the water, and it is quite a common sight to see the pike chase the bait ; drop it to him, and he will generally turn with it ; with a natural bait, allow just a second or two, but with an artificial bait strike at once ; and in either case, strike hard. The hooks, in spinning, are driven into some part of the mouth or tongue, among the bones and teeth, and the points have to penetrate chiefly hard substances. This brings me to the question of hooks. The points should be very keen, and the barbs not too

gross. Bayonet-pointed hooks have been tried, and are certainly considered the best, but I understand the hook-makers will not supply them. A few hooks, far apart, on a spinning flight are much better than a number all crowded together; one triangle, well driven home, is of more service than two or three lightly struck in; and, after playing a pike for a considerable time, he will sometimes open his mouth wide and shake his head, and the hooks lose their hold, having never been driven properly home. That is why I like a loose triangle somewhere; it is entirely free, and not smothered in the bait; a triangle, loose behind the bait, generally fixes itself firmly in the root of a pike's tongue, which is a good, tough holding-place. On hooking a pike when spinning, there is usually a fluster to start with; he responds to the strike with a tremendous wrench, and, in shallow water, makes a great swirl on the surface, his mottled sides being visible the while. Do your utmost to avoid slack line; casting from the reel will stop all this, and with care you can follow or run from your fish without any loose line trailing on the ground; and the fish is always under proper command. Strike in a direct line in the way the bait is travelling, keeping the line straight between rod and fish. To avoid the trouble of putting on a spinning bait in a correct position on the flight, the "fan" tackles, or tackles with a strip of metal to push into the bait, should be employed. Almost any of the tackle-makers' lists will provide a selection fit for the most fastidious, the difficulty lying rather in the choice amongst so many. If you are livebaiting, and find the fish are only playing with the bait and not "pouching" it, change to spinning; spin

slowly so as to imitate a wounded fish, and strike hard, and you will hardly miss a fish. Spinning has this advantage: the angler is independent of a bait-kettle, and half-a-dozen baits in bran or a few artificial ones can easily be carried in the bag or pockets, and with these you can fish miles of water. If you prick a fish when spinning, run the bait over him again directly; he will most likely take it. Spin to the very edge of the water.

In very deep pools, and in waters that are encumbered with stakes, piles and other obstructions, livebaiting is naturally more ^{Live-}baiting killing, as the bait can be kept in a certain spot, away from dangerous obstacles.

And, first, of float fishing. I have already spoken of the float being loose on the line, and the angler will do well to attend to this. In lakes and ponds one or two "travellers" (or pilots) should be placed on the line above the float and peg; these travellers are little round corks, perforated with a large hole, and running loose on the line. Though the running line be greased, it will sink after a time, particularly near the float; in throwing out, the little corks are carried some short distance up the line and prevent it sinking.

When the bait draws towards you, sunken line wraps itself round the line below the float, or the bait entangles itself in it; and these travellers do away with most,

"JARDINE" TACKLE.

if not all, of this annoyance. In streams, the current prevents any sunken line, and travellers need not be used, except perhaps in some very quiet eddy. Nowadays, in livebaiting, snap tackle is almost universally employed ; the old system of threading a bait under the skin from the shoulder to the tail with a baiting-needle has gone out, and was, in fact, only another gorge-bait. Livebait tackles are now made with either a single hook and a triangle, or simply with two triangles ; personally, I prefer the latter. The triangle may be made with two large hooks and one small hook each, or the upper triangle only may have a small hook, the lower being allowed to hang perfectly loose beside the bait. Where two triangles are used, each should have one small hook ; the upper triangle is hooked in the bait, inserting the small hook behind, or just below, the back fin ; the lower triangle is hooked (by the small hook) near the side of the throat of the bait, or, better still, in the horny gill-cover, without damaging the bait more than can be helped. Livebaiting must always be a more or less cruel practice, but by no means so barbarous as the old system of threading a bait. The double hold in a bait frequently prevents it being thrown off in a long throw. Another livebait tackle has one single hook, a large sneak bend, for preference, to enable the bait to breathe freely and to take well hold of the pike ; this is passed through both lips of the bait, and, in situations where little throwing is required, is a good tackle. Hooking the second triangle at the head of the bait is the best plan, as jack pouch the bait head first, seizing the bait crosswise, and turning it. The triangle thus goes down towards the gullet, and gets a good hold in a

tough part. When livebaiting in a pond or lake, the rod can be placed on the ground ; but see that the line is clear, and that the check is off the winch. The rod for livebaiting must be stiff and strong, as it has to carry the weight of bait, lead and float. In livebaiting, a little below midwater may be considered a good depth ; pike see their bait better above them, and are not ground-feeding fish, except perhaps in heavy floods, when they feed nearer the bottom in deep eddies, to keep out of the rush of the stream. On throwing in your bait, the float will bob about and travel with the action of the bait ; if a hungry pike is about, the bait may be seized immediately ; if the float goes under steadily and keeps under, you may be sure the fish is well on the feed and means business ; but if it keeps popping up and disappearing, either the fish is only playing with the bait, or it is a very small one. Of course, there are exceptions to this rule, as I saw a twenty-four-pound pike that only pulled the float under once, and the angler thought he had left the bait ; but the general rule is that a float going under and keeping under means a feeding fish, and a good one. Although fishing with snap-tackle, you must not strike too soon ; give the fish time to turn the bait (a minute after the float's disappearance is ample), allowing the line to run quite freely ; then, before striking, wind gently in, and feel the fish before jerking on the rod. Acting on the advice of an experienced keeper, I strike straight up when livebaiting, and not sideways. Judging by results, I think this is the best plan. Among suitable spots for livebaiting may be mentioned deep holes between beds of lilies or rushes, eddies, and still lay-byes ;

plenty of pike are caught by running the bait down stream just outside the weeds that fringe the banks. One swivel should be placed on the line where the hook length joins the running line, the lead resting on this swivel to keep the bait well down. In very shallow places, where large pike are frequently to be found, especially in the early part of the season, I let a small bullet rest nearly on the back of the bait, taking the chance of the pike being alarmed by gripping it in his teeth, and striking sooner. In shallow water, where the bait may touch the bottom, I do not make use of a float, but lower and sink the live-bait without one, judging a bite by touch. A pike will savagely take a wounded, struggling fish when he will not attempt to move after one that swims freely and naturally. A yard length of stout gut may be used when live-baiting, but it is not necessary unless the pike are shy and much fished for, and care should be taken that the lead does not chafe the gut. In very clear water, I use gut, but even then I have killed plenty of fish without it. In the Thames, where the pike know a great deal, fine tackle throughout should be employed.

Legering is effective when the water is high or rather thick. Run the line through a heavy **Leger-**
ing bullet, and let the bullet have a large hole through it to allow the line to travel quite freely. A stout gut cast, a yard in length, is sufficient; and I prefer a single, large hook, hooking the bait through both lips. If possible, leger from a punt, trying all eddies. Legering in weirs is often successful; in these, I use a single loose triangle about an inch from the lip-hook; it gives an extra chance in rough water. On feeling the bite, let

the fish run a yard or two, and strike smartly, for the bullet has to be lifted. Just after a heavy flood is a good time for legering, as the fish are deep down in the holes, and are only too glad to see a lively dace or gudgeon, though a very thick flood in some rivers sickens pike for some time, and they perhaps refuse to feed till the water clears thoroughly. Legering can only be practised in places where the bottom is free from obstructions; it is therefore impossible in some weirs, where great blocks of stone, old timbers, &c., are found; and, as a rule, the finding of them means the loss of much tackle.

Paternoster-tackle is perhaps the best for searching for pike in very weedy holes, or amongst piles and camp-sheathing. A long rod ^{Pater-}noster-^{ing} should be used, as it is sometimes requisite to drop the bait straight down under the rod-top, particularly alongside weir aprons and in such-like situations. The paternoster is a tackle with the lead at its lower end. This lead should be looped on the gut-length with fine thread, as it frequently catches in sundry obstructions or between stones. Unless this precaution is taken, the whole tackle may be lost; whereas, if the lead be just looped on with fine thread, the thread will break and liberate the rest of the tackle. Even conical leads, as paternoster leads usually are, will get tangled up, and the bit of thread will save time, trouble and expense. Paternoster-hooks stand out at right angles to the line, or are, at any rate, supposed to do so. In lowering the bait, however, it will frequently get foul of the main line before touching the water; it is advisable on this account to get the bait in the water as soon as

possible, allowing the stream to carry the bait clear. For pike, only one hook should be employed on a paternoster, though two are frequently used for perch. For very deep holes, or where the bottom is foul, the hook may be two or three feet from the lead; in shallow water, it should be nearer than this. I prefer a single hook, of good size, for paternostering, on gimp or twisted gut; any second hook is much more liable to catch in the line or in weeds. The lead is quietly dropped until it reaches the bottom of the river or pond, and the line is kept just taut on it. Being so close to the main line, the bait cannot get into obstructions even near at hand, and you can often hook a pike in the most difficult places with this tackle. Where the water is much obstructed, very strong tackle must be used; but for open holes and runs, fine gear may be safely employed. Striking a pike with paternoster-tackle is rather uncertain work, as in most cases the pike cannot be allowed much law, owing to dangerous surroundings: on feeling the bait taken, drop your rod-top to the fish, give him as much law as you dare, according to his movements, and strike smartly against the fish. A float is not employed in this style of fishing; it is all done by touch and watching the line.

Trailing for pike is much practised in the Irish lakes and other large sheets of water, being in fact almost the only way to work such great waters with any prospect of success. On the Thames, however, it is illegal. The Thames Fishery Bye-law No. 6, 1893, is as follows: "No person shall allow any rod and line, or line to which any bait or hook, natural or artificial, is attached, to be drawn or trailed from any vessel on the River Thames."

I particularly quote this bye-law for the information of anglers, though it is well known from one end of the Thames to the other. Trailing is practised with a spinning-bait, either natural or artificial, the angler being rowed about with the bait trailing some distance astern. It is a very

Outer Can

Inner Can.

BAIT-KETTLE.

killing method, and so many undersized pike were poached from the Thames that a stop was put to it.

For carrying live baits any distance a large kettle, or can, is compulsory. A kettle, as it is called, with a separate interior kettle of perforated zinc to place in a running stream, is

the best. I think an improvement would be to make this separate interior of unperforated zinc to half its height, as there would then always be some water for the baits; in this case the outer kettle would have to be emptied when the baits were replaced, or the unperforated zinc would not sink. A little ice, dripping from the top of the kettle, helps to keep baits alive on a journey.

TACKLE CASE.

I am told that a big gaudy fly, chiefly composed of
Pike-fly peacock feathers, silver twist and wool, kills
pike freely in ponds, the fly being thrown
with a salmon-rod, and worked slowly below the
surface. I have not tried this, though I have
killed many small pike with a tiny fly-spoon on
salmon tackle.

Pike, about six pounds in weight, from rivers,
are fairly good eating; the fish should be killed

and cleaned as soon as possible, rubbing the interior with salt. Stuff them with veal stuffing ; ^{As food} do not strip the scales off ; bake in a deep dish, and serve with parsley and butter, or some richer sauce. With a little lemon juice and cayenne pepper, a river pike is not bad, but pike from ponds taste muddy. The flesh is beautifully white, but beware of the little forked bones.

THE ROACH.

ROACH-FISHING is without doubt the most popular branch of coarse fishing ; the votaries of the art are most enthusiastic, braving all weathers and conditions of water without scruple in its pursuit. Thousands of anglers commence roach-fishing directly their stickleback and minnow age is passed, and they fish for roach through youth, manhood and old age with the utmost enthusiasm. Surely, no other fish has given sport and enjoyment to so many as the roach. Placed within the reach of the humblest of anglers, a passable fish for the table and affording good sport on the exquisitely fine tackle necessary for its capture, it is not wonderful that the roach should possess such great attraction for anglers of all ages and positions. Every one who knows much about roach, will agree that considerable skill is required to make a good bag when the fish are shy or much fished for ; there are, it is true, many instances of very large roach having been taken on the roughest and coarsest of tackle, but this mostly happens when the water is thick and the fish are congregated together in an eddy. Let the lucky angler, however, who has taken fish on coarse tackle, try his

HENRY STANNARD, DEL.

ROACH.

SWAN ELECTRIC ENGRAVING CO.

best when the water is clear and the fish shy ; he will then find what a wily fish the roach is, and what great skill is required to capture him. The novice has no chance, save by the merest luck, of making a better bag than an experienced hand fishing under similar conditions. Nicety of striking, adjustment of tackle, baits, and methods of baiting, the knowledge of groundbaits, the play of fish, &c., can only be acquired by long practice ; therefore let no one despise roach-fishing or fishers ; many study roach-fishing for a lifetime, and then consider there is a little "something" more to learn even when very old age compels them to abandon the sport. My very happiest recollections of angling are of roach-fishing ; my first lessons were from my grandfather, when I was quite a child ; and the success the old gentleman met with, and his earnest and kindly endeavours to instruct me in the art tended to make me an enthusiastic angler at a very early age. Before I was ten years old, I had caught hundreds of roach, many of them on single hair lines ; and now, after Thames trouting, chubbing, or what not, I gladly welcome the autumn and winter roach-fishing, for there is nothing more enjoyable in angling than a really good day with the roach in the later season, when the fish are in prime condition. If ever we have a new Act regulating the close season, Close it would be well to allow roach-fishing in the time Thames till the end of March, but to prohibit it till the middle or end of July. Some of the best roach-fishing is lost by closing the season on the 15th of March, while the roach that are taken in June are not worth catching, being mostly rough, flabby, and out of condition. A winter or spring

roach is a deep, plump, hard-fighting fish, and a summer roach is not to be compared with him for condition or sport. Winter fishing is, therefore, eagerly sought after by the best roach fishers, many refusing to try before September. My early efforts at roach-fishing were conducted under very favourable circumstances ; I had permission to fish a river in Norfolk where a line was seldom wetted ; the roach were large and plentiful, and the jack in the river were small, very few indeed being ever seen or caught. So large were the roach, that our difficulty was to catch one small enough for a jack-bait ; my grandfather fished the river for over thirty years, both for jack and roach, and the largest jack he ever caught in that stretch of water only weighed a little over eight pounds, while many of the roach weighed a pound and a half, a few going a pound and three-quarters, and a very few going yet a little over that. I do not remember getting one that weighed two pounds ; for, whatever may be said to the contrary, a two-pound roach is rare, even in the best waters in the Kingdom. You may catch thousands of roach before getting one that weighs a pound and three-quarters ; it is all very well to "judge" the weight, but putting the fish in the scales is very disappointing work. Alas ! my Norfolk fishing was recently spoilt for years to come ; the wheel or machinery at the mill "went wrong," the water was run down, and all the large fish were killed or poached ; since the catastrophe, I have neither seen nor taken a single large roach there.

It is astonishing how difficult it is to find out fishing ; there is a little village in Norfolk called Heacham, being the station before Hunstanton is

reached from town. I paid many a visit to Heacham before I heard of any fresh-water fishing In Nor-
in the neighbourhood, though I made folk
frequent inquiries. One day, in reply to an inquiry, I was told there was roach-fishing at Holme, about five miles away. Holme-next-the-Sea lies beyond Hunstanton, and the fishing is down in the marshes, close to the sea beach. It would be hard to imagine a more desolate spot, or to find more bracing air. It may be useful to anglers who visit Hunstanton to know about Holme, so I mention the locality for their benefit ; and when I say I have caught more roach there in a day than I cared to carry, they may consider the water is worth a trial, though the fishing is very uncertain. The stream is both narrow and shallow, and the roach are occasionally hard to find ; I once returned with only a single roach in my basket, but this was on a most unfavourable day. In this water, I have found red worms and lobworms kill well ; and as it is necessary to make very long throws to get sport, light Nottingham tackle should be employed. I have had a very mixed bag during a day's fishing ; taking roach, eels, plaice, and flounders, a trout, a perch, and two small jack, all with the red worm for bait. The flounders and plaice get into the water through the tidal gate in the sea beach. It is some time since I fished the Holme water ; the charge for fishing was only 1s. per day, and the old fellow who looked after the water was only too glad to see his customers get fish. I lately heard from Mr. Bond, proprietor of the White Horse Hotel, Holme-next-the-Sea, that the fishing is still to be had. I think his charges were about 7s. per day for board. The hotel is

close to the Hunstanton Golf Links. Before going to Holme it is best to make arrangements to be met at Hunstanton ; the drive is rather a long one, two miles or thereabouts. Whatever the sport the angler may find at Holme, if he like bracing air he will not regret a visit.

Before proceeding to the subject of tackle, &c., I may say that in roach-fishing it is important to avoid disturbance of the water as much as possible and to keep well out of sight ; that is, if you want to get big roach. The little fellows are not over-cautious, but large fish are very wily indeed, especially if they are much fished for. In shallow streams, with a clear water, I have taken large roach by fishing very long swims with Nottingham tackle, when the fish would not come anywhere near the punt or angler, and the long rod and tight line method of fishing would have been useless. Roach up to half a pound in weight care little about disturbance, but, unless the water be coloured, the big fellows are always difficult to catch.

Roach swim in large shoals, and, when they feed freely, catches of twenty or thirty pounds are not uncommon ; in winter, I have caught them all day long, fishing only one swim or eddy, but in August or September, evening fishing is to be preferred, baiting a swim carefully, drawing the fish into it and fishing about sundown. In the Colne, the roach come "well on" at this time of day, and I pay little attention to poor sport in the afternoon, knowing well that success is almost sure to come when the sun sets, that is, if the evening be warm and still. I have spent many a blank afternoon while roach-fishing, and have taken good

baskets of fish between sunset and dark, catching them even when it was too dark to see the float, tight corking, and feeling the bites. Roach are very susceptible to changes in the water ; the stoppage of a sluice or mill-wheel will frequently put them off the feed. Thus, in a mill-pool I used to fish, I frequently got fish all the time the mill was running ; but directly the millers stopped the water and went to dinner, the roach would cease biting ; I always took care to let my float travel down with the first wave or rush of water from the mill-wheel, and generally caught a roach on the first run down when the bait reached the gravelly shoal at the end of the pool. Roach feed best in sandy or gravelly swims ; they are very clean feeders, liking sweet, freshly made, clean pastes, well scoured worms or gentles, and a carefully mixed groundbait. In the early season, they are to be found in sharp runs of water between weed beds, where they get a plentiful supply of insects or larvæ ; when the weeds rot, they move to deeper water, frequenting eddies, mill-pools, and slow-running deeps. In heavy floods, they often seem to follow the water. When watching ^{In} floods the river after and during a flood, I have punted over the meadows and found numbers of roach hundreds of yards away from the river itself, the fish splashing in the shallow water and apparently being quite at home amongst cabbage stalks, fences or what not ; and the way they follow the subsiding waters back is little short of the marvellous. It is only where there is a really deep depression in the land that I have found many fish after the subsidence of floods ; when the water is on the land, they may be seen in the most extraordinary places, and

whence it would seem impossible that they should be able to return to the main river. They certainly have the sense to get out of the rush of the main stream into water they can stem comfortably, and to return with it when it falls. After the great floods of 1894, when the Lower Thames Valley was like an inland sea, I walked over miles of meadows when the water subsided, searching for fish, and only found them in one place, a small but deep depression near Chertsey ; and the stragglers were nearly all small perch with hardly a roach amongst them. All this tends to show that roach are not unable to take care of themselves, and I cannot remember having found any large roach stranded after floods, the stray fish being very small. I have had excellent sport in eddies adjoining the main stream ; little, shallow places, where the finding of big roach might well be deemed impossible. The angler should never neglect to try such spots when the water is very high and thick ; a depth of two feet is ample, and the fish are usually greedy. I have caught roach under the lee of fences, palings or tree-trunks, in flood water, fishing on the grass with the tail of a lobworm, or a red worm, for bait, or if the water was very thick indeed, with large lumps of white bread-paste, the last-named being more easily seen by the fish.

Roach are handsome, shapely fish when in good condition ; the eyes of golden-red, and the anal and ventral fins tinged with red. The pectoral fins are not so deeply tinted. When in his prime, a roach is deep and thick ; his bright scales looking like burnished silver in the winter sunshine, the scales smooth. In a bad-conditioned fish, on the other hand, the scales are

rough and harsh to the touch. Roach are fair baits for pike, not equal to dace or gudgeon ; and a small roach is a good, though little used, bait for Thames trout.

Roach-rods may be divided into two classes : the long or Lea rod, and the short Nottingham-^{Rods} ham, or Sheffield, rod. Roach-fishers will never agree which is the better of the two ; some use the Lea rod, others prefer the short pattern. A great deal depends on the river and its current, still more on habit. I have made good catches of roach in the Lea with a ten-foot rod, and I have done well in the Thames with a sixteen-foot rod.

The Lea rod is made very long, sixteen to twenty-one feet or more. A rod of this length requires the most careful workmanship, the leverage on the lower joints being tremendous, and lightness, compatible with requisite strength, being achieved in its construction. The joints are carefully whipped with silk, this greatly adds to the strength of the cane. There is seldom more than one ring on the rod, at the extremity of the top joint ; these are the true Lea rods, of which poor Sowerbutts and his father were the leading makers. I was examining some of his latest made rods only a few days before he caught his fatal chill, and he told me he had been working hard to get a good stock of them ready, as he was, at last, going to take a holiday. A few days afterwards I heard of his death, and was much shocked.

What I particularly dislike about these white cane rods is the conspicuous colour and the glitter ; surely the cane could be stained without adding appreciably to the weight. I cannot but think the

dangling of a dazzling white rod over the heads of a shoal of roach in clear, or nearly clear, water must tend to spoil sport. I never feel comfortable when fishing unless I use a running line, which is not customary with the Lea rod. The line is made fast to the end of the top joint, and the rod-point follows the float, being kept immediately, or nearly, over it. To bait the hook, or to land a fish, the butt has to be unshipped each time. The great idea of the Lea roacher is to keep a straight line over his float, with as little slack as possible. Rings add somewhat to the weight, and prevent the rods being packed up into two or three pieces, which is a consideration. To get rid of slack line in a rod with rings, the Lea roach-fisher need only adopt a very simple plan, that of using a winch with a strong check, turning the top ring down a little, and tying a small piece of twig or match crosswise on the line between float and rod-top. When the tackle is fishing, wind on the winch till the match or twig is held by the check on the winch against the top ring; a tight line is thus easily provided for, and there is running line to play a bream or barbel, for it is no uncommon occurrence to hook either of these fish in a roach swim. It is most exasperating to lose large fish for the want of running line, and I have seen it done in the Wey by most skilful handlers of the roach-pole. As regards rings, very few would suffice. Upright rings could be quickly whipped on (before fishing) with a few turns of waxed silk; the larger ones could be fixed quite firmly enough with two or three fine india-rubber bands; although the rings would be far apart, the line could not lap round the rod, as the check on the winch acting in

unison with the piece of match would keep the line taut and straight. I venture to suggest this for the consideration of Lea fishermen, and to show that it is quite possible to keep a taut line on a ringed rod. I think the comfort of running tackle would amply repay the slight trouble of fixing and untying the rings. In windy weather a twenty-foot rod is almost unmanageable; I have found a sixteen-foot rod beyond proper control in a high wind; while fishing may be continued in a full gale with a light ten-foot rod and heavily shotted tackle, of which I had a striking example last September (1896). Having waited with the utmost impatience for really good roach-fishing weather for some time, a favourable day came at last; but, soon after we started fishing, it commenced to blow heavily, and the long rods were quite beyond our control, the gusts sweeping them about and rendering it quite impossible to strike with any certainty. We therefore abandoned them in disgust; and, putting up our short rods, and fishing long swims, we caught roach all day long, the three largest going a pound and a half each, all the fish being caught in a gale of wind and from the bank. In still, calm weather, in slow streams and deep swims, or in places where you can get near your fish without alarming them, the long Lea rods will occasionally prove more effective than the short. As length is frequently required to reach an eddy from an obstructed part of the bank, or for fishing a long way out from a place whence a sweeping throw cannot be made, the outfit of the roach-fisher should include both styles of rod. It is hard work using the long rod, and for a long day's fishing I prefer the short, light rod; I have one that I have fished

with for several seasons, and it has given great satisfaction.

This rod is 10 ft. 2 in. in length; deal butt (coloured black), cane centre, and solid top of lancewood. Logwood or rosewood would be still better, but so long as the top is of solid wood, it strikes a long line properly off the water. Although the rod weighs barely three-quarters of a pound, I have killed many a big roach with it, "hitting" the fish quite thirty yards away, using thin quill floats, and a fine, greased running line. This rod was made by Slater, of Newark; but I had larger rings fitted, and find I can fish more comfortably in consequence. This little rod can be used for a very long day's work without tiring the wrist or arm, its weight being hardly felt at all; and the strike is made from the wrist, not requiring the assistance of the forearm, as is the case with a very long rod.

The winch for roach-fishing should be a light, check Nottingham, of as little weight as possible, but large in the barrel, to assist in winding in quickly. A check winch is best, as it is useful in tight corking and legering. I strongly advise winding with the left hand in roach-fishing, in which striking and winding in occur so frequently.

The running line should be little thicker than stout cotton, and should be greased thoroughly with vaseline, which must be allowed to dry in several times before the line is used. As a long gut cast is generally used in roach-fishing, especially by London anglers, colouring is of no consequence, the fine line working better without any enamel being mixed with the vaseline. Extreme lightness has to be considered, so only a floating material should be put on the line; enamel adds weight,

and I fancy the spirit contained in it tends to destroy very fine lines, though I have found no harm done to chub-lines. (Directions for greasing a line and taking the kinks out of it are given under chub-fishing.) A black thread line is much used by some of the Thames professionals, particularly at Kingston ; this line has a rough fibre to it, and is thus supported for a long while on the surface of the water. The vaselined line is much the better for very long swims ; the fibres in the ungreased line soon fill with water, but a rub or two with a greased rag, say, twice a day, keeps it in good order.

Thames anglers employ very long casts or gut lengths, six to nine feet being the usual Gut measurement. For very thin, light floats I use length the finest undrawn gut procurable throughout ; with a heavy float I like a tapered line, or thicker gut where the float is capped on. There is considerable chafing on a gut line from float caps, particularly if they are of quill, and a few cappings with a heavy float will spoil a very fine gut cast. When fishing swims where the float is kept close to, or under, the rod-top, two or three strands of single hair may be used above the hook itself, but the strike must in this case be very gentle. Hair is very elastic, and it is quite surprising how a wet hair cast will stretch ; the strength of good hair is also considerable, far greater than one would expect. The very greatest care must be exercised in nipping on the shot, or the hair will be severed. With hair casts, I find I get most fish on those of dark brown, though the tackle-dealers tell me grey or white is more usually chosen. When very large roach are to be caught, I do not advise the use of hair ; by paying a good price, beautifully fine gut may be

procured. Take care to avoid any grease on the gut line ; gut holds beads of air, and grease aggravates this fault.

Float-caps are hollow circles of quill, or india-rubber, that fix the float at a required depth ; they are fitted on the upper part of the float, for every roach float should be ringed at its lower end. If two caps are used, instead of a ring and a cap, the float may possibly be lost by the caps loosening their hold and the float being shaken off. I have lost one or two like this when "hung up," the jarring on the tackle loosening the caps, the float being carried away by the stream. I use two caps with very heavy floats, one broad one of india-rubber and one of quill. When two are used, the quill cap need not be pressed on the float so tightly, and the gut cast is better preserved from injury. In choosing porcupine or other quills, see that they taper very gradually at the top (so that the quill cap may not be shaken off). India-rubber caps do not hold the float so tightly on the line as quill caps, but they are less liable to injure or break the gut. The upper loop of the cast is passed through the ring of the float first, and then through the float-cap. I have seen a few beginners fishing with their float upside

ROACH HOOKS.

down, which does not look very sportsmanlike.

Hardy Brothers give in their catalogue six sizes of roach hooks, Nos. 3 to 8, of

which Nos. 7 and 8 are worm hooks, the others being suitable for paste or gentles. Personally, I do not believe in very small hooks for large roach, so

many good fish are held for a moment, and then struggle off. There is nothing more annoying than losing a hooked fish ; I would far rather miss him clean than prick him with a hook and then let him go, for the alarm given to a shoal of fish by a hooked fish darting away is much greater than that caused by a fish missed entirely. No. 7 is a useful size and quite large enough to hold a fish well. Hooks on gut or hair are supplied for roach-fishing ; drawn gut should satisfy any one for fine tackle ; and in coloured water, I use fine undrawn, and am quite satisfied with the results. If very fine drawn gut or hair be used when fishing long swims, you are extremely liable to break the weakest length in the strike ; I get, perhaps, fewer bites, but prefer to make reasonably sure of the fish. For small fish, like bleak, I now always use hair hooks, and catch two bleak on hair for one caught on gut ; the only reason for avoiding hair in roach-fishing is its tendency to break in striking. A crystal hook is best for paste or worm ; the sneck bent is very good when fishing with gentles, and, in using the latter, the point and barb of the hook must come quite through the skin of the gentle, even if only a small part of the gentle is pierced. If the point is not free, the tough skin of the gentle interferes with the striking of the fish.

ROACH HOOKS.—SNECK-BENT.

The float must suit the water fished, carrying shot accordingly. Roach mostly feed on or near the bottom, and the bait must be kept well down. One of my floats for heavy water takes twenty-two shot, eighteen of which are B B ; the

Floats

rest, nearest the hook, are smaller. Even this is not heavy enough for some waters. When the water is exceptionally heavy, a corking lead with shot

Photo by H. P. Bassett, Weybridge.

ROACH FLOATS.

below it is required to get the bait down quickly. As a contrast, I have a quill that takes only three small shot to sink it to its very top when the hook is baited ; and in exceptional cases, I use a quill even

lighter than this. I make most of my heavy floats ; it is a very simple matter, but the floats with long tapered cork are best procured from the makers. For very heavy floats, there should be a good substance of cork near the upper end of the float only ; thus, the cork on the float taking twenty-two shot is one and three-quarter inches in length, but it is nearly three inches in circumference at its widest part. (The circumference of a float is most deceiving to the eye, the measurement far exceeding what one would expect, and if the reader will take the trouble to measure some of his floats, he will find the results somewhat curious.) The quill of the big floats is eight inches in length, the cork running up to within an inch and a half of its top. This body of cork, at the upper end of the float, keeps it wonderfully steady in the water ; very long, tapered cork or reed floats are inclined to wobble, whereas the float should travel as steadily as possible. The cork is fixed on the porcupine quill in the same manner as described in chub-fishing, though it is not made a slider float. The shots sink the float till the cork is just submerged for its entire length ; as I use the float for very long swims, I leave rather more "top" than usual above the surface. I have other floats made on the same system, but carrying fewer shots ; tapered cork floats of different sizes, the taper running well down the float ; also the plain porcupine quill. Roach-floats are subjected to hard work, and want something pretty solid to stand the incessant striking ; I therefore eschew artificially tapered quills or reed floats made in several pieces. Reed floats are liable to split, and the whippings on tapered quills (made of several pieces, bone and quill) sooner or later give way.

I had a very pretty reed float, but it was tender in use, and at last I split it somewhere; the consequence was the float became waterlogged after a few swims, and sank. Since then I have used more solid floats, the floating power being in their actual substance, and not from air inside the float. A very nice roach-float is made of tapered cork and quill, coloured black, excepting an inch at the top, which is left white. Personally, I prefer white tops to roach-floats, though some like them red, and a yellow-tipped float can be seen for a long distance. The roach-fisher should provide himself with at least half a dozen ready-fitted tackles, with different sized floats to suit various swims.

Shotting requires care. The smallest shot should be nearest the hook, the largest ones nearest the float; that is, when different sizes are used. Do not put all the shot close together, as the tackle does not then fish so well; begin rather with a tiny shot nine or ten inches from the hook, two or three others, about an inch and a half apart, above it. Then place (in a heavy tackle) five or six shots, B B, fairly close together, the lowest being about three inches from the topmost small shot; then miss six inches of line, and nip on another batch of shot, increasing the numbers in the batches as you get nearer the float. Use as few shot as possible in any still water; if you must throw out a long way, lap a little lead round the lower end of the float, this gives weight to carry the line out when float-tackle is used; or squeeze a pellet of stiff groundbait round three shot placed about an inch apart on the gut, if you are fishing without a float.

The groundbait for roach, which must be prepared with special care, is generally composed of

bread and bran. Break a stale loaf into ten or more pieces ; let these pieces soak for the **Ground-** night in an earthenware pan, taking care **bait** that the whole of the bread is covered with water. The bread should be kept under water by a strainer or something similar being placed on it. There are two ways of mixing the bread with bran : either by squeezing the water out of the bread, kneading the bread and crust into a stiff paste, and then kneading as much bran into the bread as it will take ; or by placing the bread and crust, with the water just wrung out of it, on the top of the bran, and kneading the bread and bran together at one operation, which saves much time, and is perhaps as good as the first plan, though some prefer the two kneadings. In either case, the bread and bran must be thoroughly well pressed and kneaded together, bran being squeezed into the bread till the bread will hold no more of it. The groundbait must not be pulpy or watery, but the lumps must be firm and hard. The long soaking should do away with all lumps in the bread (if it has had plenty of water to soak up and has been quite covered) ; if by chance any lumps are left in the bread, they must not be allowed to remain in the groundbait, or they will detach themselves and float to the surface. I do not like meal mixed with the bread and bran for roach. I have taken considerable trouble to study groundbait for roach of late years, and find that careful preparation amply repays the trouble taken. One thing I have particularly noticed : many more roach are caught by entirely omitting clay from the composition of the groundbait, especially in the Hampshire Avon. Weight can be given by enclosing stones in the lumps of groundbait, which

should be little, if at all, larger than hens' eggs. I am confident that the Thames system of baiting with great lumps of groundbait is detrimental to sport; fish should be attracted, but not fed. A small pellet of bait at every swim is a most excellent dodge when float-fishing; if you have an attendant, let him pitch one a little above the float at the commencement of each swim, that is, in gentle runs or in eddies. I have had, and seen, good results from this practice. A few gentles may be enclosed with the bread and bran if you are baiting with gentles. Both bait and groundbait should be as clean and sweet as possible; paste should be made by the bank and used fresh, mixing fresh paste every three or four hours in hot weather; the cloth containing the paste should be kept in the shade.

Groundbaiting with broken worms will frequently give sport during the autumn, winter and spring

GROUNDBAIT CAN.

months; but even with this groundbait avoid using clay, mixing the worms with bread and bran, or sinking them with a "diving bell," an ingenious arrangement, in which the groundbait is lowered to the bottom; pulling the cord liberates the groundbait, which is scattered on the bed of the river. "Diving bells"

are mostly used when fishing from a punt. (Peek, of Gray's Inn Road, E.C., sells them, the price being only eighteenpence.) A groundbait of

brewers' grains (fresh and sweet, not sour), when baiting with boiled wheat, will often prove effective, particularly in pools below flour-mills, where roach are naturally on the look-out for grain food. In eddies and gentle swims, a handful of broken worms thrown in loose without anything to sink them will often bring the roach on the feed. Let it be remembered that the worm is usually more of a winter than a summer bait, and is more often than not a successful bait in discoloured water.

Gentles, pastes, bread crust and boiled wheat are the chief roach-baits. To these may be added worms, caddis, grubs from old cow-
Baits
 dung, green weed, pearl barley, flies and insects of different kinds, both natural and artificial, including grasshoppers; I have even taken roach with the body and part of the wings of a butterfly, daping the bait on the surface. (For gentles, see p. 223.) Roach are very changeable in the
Gentles
 way they take gentles; a single gentle is sometimes enough, particularly in clear water or in the summer, when they are exceptionally dainty. It will, however, surprise many roach-fishers to learn that I get my best roach in winter, or in thick water, with five gentles on the hook, looping, not threading them. No. 7 or 8 (or a large roach-hook) is required for this; a small hook would be entirely smothered in the gentles, and fish missed in consequence. The five gentles, all writhing together, prove too tempting for roach to resist, and I may here state that I have hardly ever caught big roach with dead gentles. Gentles require warmth in winter to keep them lively, but they must be kept cool in summer or they soon assume the chrysalis state. They must also be

kept dry, or they get thin and flabby. In winter fishing, I keep a small supply from the gentle bag in a tin box in a warm pocket, or warm the box in the hand; the warmth makes the gentles stir, and puts them in fine condition for the hook. They soon die in the cold water, when I pull them all off, and entirely renew the bait. Three gentles on the hook are a useful number, two threaded right through, the last one being hooked on by a mere thread of skin, and allowed to wriggle. When this gentle is dead, roach generally refuse to look at the bait. Hooks for gentles must have very keen points and be thin in the wire; otherwise the gentle will be "squashed" when put on the hook. A single chrysalis on the shank of the hook, with a gentle on its point, will occasionally tempt large roach, but the chrysalis is even more difficult to bait with than the gentle. Gentles for the hook are usually kept in yellow sand, and the roughness of the sand damages the gut just above the hook, as does also the tough skin of the gentle when it is torn off the gut. Roach-hooks should, when baiting with gentles, be occasionally renewed, directly the gut shows weakness. The gut shows white for about an eighth of an inch above the hook when the sand has scraped it. Grains of sand adhere to the tips of the fingers, and the friction soon spoils the gut or hair.

Plain bread-paste has few equals as a roach-bait.

Bread Considerable knack, only acquired by prac-
paste tice, is requisite to make it properly, as it must be neither too firm nor too soft. If too firm, it will not leave the hook on striking, and the hook will not pierce the fish; if too soft, it will not stick on properly. The crumb of a loaf, two days old,

as white as possible, should be used for bread-paste. New bread will not make good paste, as it is too glutinous, and instead of making a nice smooth paste, it runs into stiff, gummy lumps when squeezed up. Old fine linen rag should be used to squeeze the bread in ; new linen, or even a new handkerchief, will not do so well. Old linen that has been frequently washed has all the "size" or gloss taken out of it, and is therefore much better for the purpose. Bread and other pastes must be used freshly made, particularly in hot weather ; only a little should be made at a time. Break a few pieces (not crumble) into the rag or handkerchief, which must be dipped in the water for a couple of seconds with the bread quite loose ; then comes the difficult part of the operation, to get rid of part of the moisture, but not too much of it. If too much water is squeezed out, or if the bread has not soaked long enough, dry, crumbly lumps of paste will be formed ; while if the water has not been squeezed out sufficiently, the paste will be "pappy," and will not stick on the hook properly. The happy medium is a paste that will stick on the hook, yet will allow the hook to come through it when you strike. The wet bread must be kneaded and squeezed up in the linen ; avoid touching it with the fingers as much as possible. The fingers and thumb soon get accustomed to the "feel" of the paste, and you can tell if it is all right before the cloth is opened. If the paste goes wrong in the mixing, it is best to discard it altogether and mix afresh entirely. Roach are fastidious about pastes ; they will occasionally refuse the pure white paste, apparently regarding it with suspicion ; a little fine bran mixed with the bread will sometimes

be taken when the white paste is avoided. Small roach are often a nuisance, taking the bait freely, close to the angler; to stop this, when you know large roach are in the swim or near it, put on large baits; the little fellows refuse these, or only suck or nip off a tiny piece; the big roach take the whole bait, or what is left of it.

Another excellent paste is made of arrowroot biscuit. Scrape or cut off all the brown
**Arrow-
root
paste** outside of the biscuit, then grind the remainder to a fine powder with a rolling-pin, mixing the powder with water in a pie-dish. I have found this a very good paste.

Here is a recipe for a yellow paste that I have
**Yellow
paste** sometimes found will kill roach when they refuse bread-paste entirely. Mix flour and yellow ochre powder together in a dry state, three teaspoonfuls of flour to one of ochre, stirring the flour and ochre together thoroughly before adding water. This should also be done in a pie-dish. Very little water is required, and it should be stirred in with a clean skewer or spoon; if the paste is too wet, more flour must be added. This paste should be kept in a tin box, not in a cloth, as it is inclined to run if it gets too wet. A very little aniseed should be mixed with this paste, which turns yellower when it has been mixed a little while, and is bright yellow in the water. Turmeric might suit instead of the ochre, but the paste kills so well that I have not troubled to try any other colouring matter. I cannot say whether the yellow ochre would render the fish unfit for food, the quantity in a pellet of paste is so small that I should be surprised at any harm being done. Yellow paste kills well in summer time.

For a red paste, cochineal may be used as the ingredient for colouring. Roach will often take cheese paste.

Red
paste,
cheese
paste,
green
paste,
and
weed

Boiled green peas, mashed up in a mortar with wetted bread, will make a green paste. Roach like a green bait in the early season, and they are partial to the green weed that clings to stones and steps in running water. Whether roach take it for any insect which it may contain, I cannot say; but very large roach are caught with this green weed. The lads at Chertsey dabble along the shelves of the weir, hooking the weed off the ledges with the hook itself, and fishing in the swiftest water possible; this is in the early season chiefly, when the roach are up on the "scours." I heard that one lucky lad got a roach over two pounds in weight by fishing in this way, and I have no reason to doubt it.

I have killed hundreds of roach with the old-fashioned dough-paste, made of flour and water. It is beautifully white, but does not stick on the hook well, though it is suitable for gentle runs and slow streams. Its chief fault is that it becomes very sticky if mixed too wet, and I cannot recommend the use of wool or other substance to keep the bait on the hook.

Dough

A mealy potato, mashed up in a mortar with bread or flour, makes a nice soft bait, or pellets may be cut from a "waxy" half-boiled potato with a quill. Either is white and attractive.

Potato-
paste

Bread-crust, a most killing bait, is but little used, compared with gentles or bread-paste. Soak a "tin loaf" until the crust is soft enough to allow the hook to penetrate it quite

Bread-
crust

easily ; it must not get too soft, or the crust will not hold on the hook. Cut the crust off the bottom (or side) of the loaf in one piece with a long, sharp knife, just detaching a little of the crumb with it. Place the "slabs" of wet crust flat on a piece of wood or lid of a biscuit tin, and score them with the knife into little squares about the size of a small pea. The hook is run right through a single square, and the tackle is lowered quietly and steadily into the water ; a very slight jerk will detach the crust from the hook. Roach are exceptionally greedy for this bait, but it is difficult to use. If a second swim is fished with one bait, the line must be drawn most carefully from the water, or the crust will leave the hook, and it is, in fact, generally necessary to bait afresh at each swim. Being so soft, and the hook so free, it is an excellent bait for hooking fish, very few being missed in striking. I can confidently recommend bread-crust as a roach-bait.

When I have run short of gentles in the summer time, I have found the grubs in
Grubs old cow-dung a fairly good substitute. By turning over the dung with a stick, the grubs may be found in numbers, one being sufficient to bait the hook.

The best and cleanest white wheat should be
Stewed wheat used for this bait. It must be soaked for many hours in water, and then very slowly stewed, not boiled, till the wheat splits open, showing the white interior. Groundbait sparingly with brewers' grains when this bait is used. Pearl barley makes a nice white bait, but is not so good as wheat. In the month of September, some of the very best takes of fish I have ever seen on the

Hampshire Avon have been obtained with stewed wheat.

In the early season, in hot weather, I have caught roach with flies, both natural and artificial. Flies
I have had several good fish by daping with a bluebottle or a grasshopper ; the difficulty is to keep out of sight, and landing one fish generally scares the others for some time. A red or black fly, trimmed without wings, will kill roach at times, particularly if tipped with a gentle ; though, in this case, I think it is more the gentle than the fly that proves attractive.

A whole lobworm, carefully threaded on the hook, the latter in the tail end of the worm, Worms
sometimes kills the very largest roach. I have caught fine fish with this bait in Norfolk, by both legering and tight-corking, allowing the roach to suck the bait well in. This method requires time before striking. Half an inch of the tail of a well-scoured lobworm is also a deadly bait for large roach. I have also had a few with the head of a lobworm. Well-scoured red worms are excellent in thick water ; but brandlings are not much good for roach ; at least, I have not done much with them. Very little of the worm must be left loose on the hook, or the fish will bite the loose Shrimp
part and miss the hook. A peeled shrimp is a good bait for large roach.

I have taken very few roach, or indeed any fish, when the water is full of the first great fall of yellow willow leaves in the autumn, the leaves flavour the water and sicken the fish.

A disgorger should always find a place in the roach-fisher's outfit, as it saves much time in extracting the hook, and prevents friction on the gut

where it joins the hook. There is a new disgorger in the market, which fits on the end of the finger with a thimble, a good arrangement; but the disgorger might be considerably shortened, those I have seen being too long. Mathews, of Marlow, is the patentee.

Roach are chiefly caught by three methods: ordinary travelling float-tackle, tight float-ing, and legering. The first-named is the most popular. A sandy or gravelly swim should be selected, and the depth plumbed most carefully; allow the bait to be close to the bottom or to trip along it, as roach are mostly ground-feeders. Whenever possible, an eddy should be fished; the groundbait rests better in an eddy than in a straight run, the latter being more easily fished from a punt than from the bank, particularly long swims. Plumbing the depth should be done as quietly and quickly as possible; avoid lowering the plummet more than is absolutely necessary, or dragging it along the swim. A shoal of roach may be alarmed for some time by a plummet being dropped in their midst and dragged about amongst them. If roach are very shy, the plummet should not be used, but the depth guessed and the tackle allowed to run down a few times, altering the depth till the float drags under or bobs slightly; when it drags under, it is set too deep, and when it bobs and rises again, the hook is scraping along the bottom, when it must be set shallower till it travels steadily down. The depth may be judged pretty accurately in this way. For fishing swims close under the rod-top, the float must be sunk almost to its very tip; for long swims and in rough water or weather, it must not

be sunk so deeply, or the bites will not be seen. Always fish with the lightest tackle that will suit the swim ; and in roaching, strike at the slightest bite or indication of a bite. The strike cannot be made too quickly, except when large worms are used for bait, when time should be given. Roach have small mouths, and take a little while to suck in a lobworm. Avoid any slack line between rod-top and float ; when fishing with a long rod, not even an inch of line should be allowed to rest on the surface if it can possibly be avoided ; but the float should be under the rod-top and the rod lifted the instant any indication of a bite is given. When fishing long swims in the Nottingham or Thames style, the running line must float, and it must be kept as straight as possible on the surface, or fish will often be missed. The greatest quickness of eye and touch are essential in roach-fishing ; for the roach is a very sharp, quick biter, but will puff out a small bait the instant he finds anything wrong about it. The float bobs, comes up again, and you strike just an instant too late ; the bait has been in the fish's mouth, but has been ejected, the weight of line, shot, or float having warned the fish that there is something unusual about the tempting morsel. All depths of water should be tried for roach ; in very heavy floods, a shallow eddy or shallow water where there is protection for the fish should always be carefully searched. I have had many a pound roach out of a foot and a half of water in heavy floods, particularly when the water is very thick indeed. Try swift swims in the early season, especially between beds of weeds ; deeper water gives better sport, as a rule, later in the year, when the river is in normal con-

dition. Even a tussock of grass will serve as shelter for roach in heavy floods, and the tiny eddy it helps to make may be full of fish, so that such spots should never be neglected, although they appear so insignificant. The loop-throw (pulling a loop or loops of line down through the rings) is very useful in roach-fishing, as quite a light float may be thrown a considerable distance by this method, taking care not to let the line that forms the loop run out too fast, or it will lap round the rod. Another throw for light tackle was lately shown me by Mr. Slater, at the Westminster Aquarium. The baited hook is grasped between the left-hand thumb and first finger, the line being wound in on the winch till there is considerable bend on the rod, the rod top being lowered near the surface of the water till the instant of making the throw arrives. The rod is then smartly thrown upwards, the hook being released at the same moment. The winch is also made to revolve by a gentle tap or draw of the third or little finger of the left hand on the underside of the rim at the same time. The spring of the rod carries the tackle out, and the distance an expert can throw by this method is astonishing. A very free-running light winch and fine line are requisite. Another way, which is extremely simple, is to grasp the roach-rod by the right hand only, below the winch, checking the winch till, the instant of the throw by the pressure of the thumb, the rod is brought well back and the tackle is thrown forwards with a long, steady sweep, releasing the thumb pressure when the impetus is imparted. The winch is checked as may be required, and stopped by the thumb when the throw is com-

pleted. The little ten-foot roach-rods are manipulated with the greatest ease with one hand, and the strike can be made very sharply from the wrist. The long rods require a lift more than a strike, and the forearm must come into play as well. When the float runs down the swim, watch it with the utmost intentness; a greedily feeding roach will bob it smartly under, but occasionally the merest quiver or slight stoppage indicates a biting fish.

Tight floating frequently kills the best roach. In this method, the float is held steadily in **Tight** one place, and not allowed to drift with the **floating** stream or eddy. The distance from float to hook must be greater than the depth of water, as the bait should rest on the bottom. In gentle runs of water, twelve or eighteen inches of line between float and hook beyond the actual depth will suffice, but in swift runs the float must be set further from the hook. It is important to use thin floats, goose-quills, or porcupine-quills; thick floats are washed about too much, and difficulty is experienced in keeping them steady. My remarks on tight floating for bream (p. 49) will here be of service, as the same system of fishing should be employed; but the rod should always be held, and strike instantly when a bite is noticed.¹

A description of legering has been given under barbellling (p. 4). In legering for roach, **Leger-**the tackle should be the finest possible, **ing** with not less than six feet of natural gut. The weights employed are bullets, corking leads, and flat spiral strips of lead. Do not use a heavier lead than the swim requires, and make as little splash or

¹ See worm-bait, p. 171.

disturbance as possible when throwing in. I am indebted to "A. R. M.," of the *Sportsman*, for the suggestion of a spiral strip of lead. A thin, flat strip of lead is rolled up somewhat in the form of a screw thread, leaving a little room between the edges of the turns, just sufficient for the gut cast to pass through, which makes the lead detachable, though it stops on the shot in the same way as a bullet or corking lead. The lead strip has this advantage, it will hold a good lump of groundbait squeezed around it, and also keeps wonderfully steady. As usual, strike directly a bite is felt, except when baiting with a large worm. In legering for roach, the bait should be near the lead; a foot away from it is plenty, particularly if the lead be covered with groundbait.

When fishing with the travelling, or drifting, float, **Long swims** very long swims may be fished and the fish properly hooked; but the floats must be thin, and the strike carried well back, a gentle lift of the rod being of little use. The wrist-strike is hardly sufficient when twenty or thirty yards of line have to be picked off the water, however straight the line may rest on it. Above all things, take care that your running line floats: a sunken line drags the float down instead of up when the strike is made, and the fish are not "hit" properly. Thames fishermen usually make the mistake of not fishing far enough away; about twice the length of the rod covers the ordinary length of the puntsman's swim; the bait is drawn back just when it begins to fish properly; and large roach will seldom come near a punt for a long while after two great rypeck irons have been driven into the bed of the river. In the Thames, the punts are placed at right angles

athwart the stream, stopped at each end by a rypeck, and not one angler in fifty fishes a long swim. I get my best Thames roach a long way off, for they are well-educated fish, especially those of large size. The little roach come close to the punt, even in clear water; but unless the water is coloured, the larger fish are very shy. A summer roach of a pound and a half in weight is a rare fish in the Lower Thames, and not many of that weight are caught even in the winter season.

For comfortable fishing, the angler should take up a sitting position, on a campstool, basket, or other firm seat. The true London "roacher" usually carries a box, which holds both fish and tackle, and forms a convenient seat. If the situation be at all swampy, a basket cannot well be used, the weight of the angler sinks it, and the water gets to the tackle or fish; besides which, the basket-work will pick up a lot of mud. Personally, I prefer a folding, triangular campstool, with leather seat, not webbing, which wears out very quickly. A broken band may cause a nasty fall, or a ducking. The legs of the campstool sink somewhat in soft ground, but that does not matter, provided that the ground is not very marshy. The stool can be strapped to the rods, or placed in the bag, when the day's sport is over; it is of little weight, while boxes and baskets, strong enough to sit on, are cumbersome. For very long swims from the bank, a standing position is best; the extra height from the water aids in the strike, and the float is seen for a longer distance.

Roach do not "fur" so quickly as bleak or dace; but they soon go "off colour" in a punt-well. I have seen plenty of diseased bleak and dace in the

spawning season, but few diseased roach. There is a cast of a curious roach in the Piscatorial Society's museum. This roach, a one pound fifteen ounces fish, was dropsical, and of extraordinary depth, swollen out beyond all ordinary proportions. Roach from lakes and ponds are seldom such handsome fish as those from a quick-running stream.

LEWIS COHEN

LEGERING FOR BARBEL IN A BACK STREAM.

HENRY STANNARD, DEL.

RUDD.

SWAN ELECTRIC ENGRAVING CO.

THE RUDD.

THE angler sometimes thinks he has caught a "queer" roach, but the fish is really a rudd.

The dorsal fin is set much further back in rudd than roach, and the rudd has a larger mouth, more blunt in its shape; the rudd is also a deeper, clumsier fish than the roach, and the fins are more vivid in colour. Moreover, the upper lip is more hard and rigid in the rudd. Although rudd are frequently caught in roach-swims in the Norfolk and Huntingdon waters, it is rare to take them in the Thames. I am told that Slapton Ley swarms with these fish. In hot weather, rudd swim in large shoals in shallow water, and are best caught by surface-fishing, either with paste, gentle, or fly. I find I get the largest rudd with large lumps of paste, the little ones being an incessant nuisance when gentles are used. Employ roach-tackle and hooks, using a light, springy rod. Attract the rudd by throwing pieces of bread on the surface, and throw as near the bread as possible, taking care to keep out of sight; but allow time in striking, letting the float run well away. The bait should swim from one to two feet below the surface; even in deep water this will be suffi-

cient in warm weather. A thick quill float, dark

Float- green with white or red top, with a strip of
fishing lead lapped round the lower end, will give weight for throwing far, and two shot may be placed eight inches from the hook. As usual, grease the running line with vaseline to make it float. Although rudd are not as shy as roach, the angler should avoid causing waves on the water by clumsy movements when fishing from a boat or punt, and quiet swims, out of the wind, should be chosen. In streams, the float can easily be worked a long way from the punt ; but in the Broads, the angler should throw as far as he can to his fish, either from the winch or from a coiled line. Rudd take the fly far better than roach, and for this

Fly reason they can be fished for in situations
fishing where float-tackle is almost useless owing to the presence of weeds beneath the surface. Fish with heavy running line when you use the fly, and with a powerful rod to make long casts ; throw as far as possible, and fish with a wet fly ; it is all the more deadly if tipped with a gentle. As when fishing with float-tackle, allow time in striking, for the fish must not be " snapped " quite so smartly as roach. A two-pound rudd is a good fish, though they are generally supposed to run much larger than roach. July and August are the best months for rudd-fishing, and by taking reasonable care, large baskets can be made.

By carefully coiling the line on the bottom of the punt or on a newspaper, a very long line can be thrown ; loose twigs and bits of grass are thus avoided. A very small impediment will cause a nasty tangle in a coiled line.

SWAN ELECTRIC ENGRAVING CO.

TENCH.

HENRY STANNARD, DEL.

THE TENCH.

ALTHOUGH tench live in muddy ponds, they are very handsome fish, their colour being perhaps dark or golden olive, with dark, bluish-black fins, the pectoral fins being very large for the size of the fish. Tench thrive in the very muddiest ponds, seem perfectly happy in the thickest weeds and scum, and will live where there is sometimes hardly any water. Almost every angler can relate a story of the wonderful vitality of tench, which seem able to do without **Vitality** water for a long while. I came across a striking example of this quite recently. Fishing in private water for carp in the daytime, after trying paste for some hours without a nibble of any sort, I put on a brandling in desperation, taking my chance of hooking an eel. After the bait had rested quietly for a while, the line was stirred with a gentle draw, then it moved slowly out. I knew this was not an eel, from the way it was taken ; there was no jerk in the bite, but it was almost exactly like the sucking of a carp, and I fondly hoped I was soon to tackle a great fish, for carp up to sixteen pounds in weight had been taken from that water. The line ran out smoothly

and quickly after a while, and I struck the fish. I knew at once it was a small one, but, to my surprise, it was a two-pound tench! I wrapped it up carefully in a cloth; and on reaching home about nine hours after its capture, the fish was quite lively, so I put it in a bucket to amuse my children. They did amuse themselves with it for a day or two, the tench being nearly as much out of the water as in it; then the dog found it great fun to take the tench from its bucket and lay it on the kitchen floor (and he did it quietly and gently) to dry a little! After a time, we carried the fish down to the Thames, and put it in for re-stocking purposes. This may be regarded as a yarn, but it is a perfectly true one. Of the supposed medicinal properties of the tench I know nothing.

There are few pleasanter ways of spending an utterly idle summer's day than in tench-fishing. The fish are not particularly shy; I have fished in the company of two or three anglers, and we have all been catching tench fast. One need never be in a hurry in tench-fishing, for the fish is a slow feeder, the only difficulty being to get him to feed at all; but when he does, he fully makes up for lost time. You may fish for days and not get a single tench; then they will suddenly feed, and you may fill your basket in no time. In my schooldays I once found out some tench when catching sticklebacks for an aquarium, having frequently enjoyed pulling the latter out with a worm tied to a bit of cotton, a wooden match for a float, and a willow wand for rod. On tying on an extra big worm, the match was pulled right under. I thought I had a most extraordinary stickleback to tackle, but to my great surprise I drew a small tench to the top of

the water, when he dropped off. This was a marvellous find ; and on the next half-holiday two of us, armed with what we thought the correct tackle, paid another visit to the pond, and secured some half-dozen fish between us, the largest perhaps a pound in weight. Of course we told the news at school, and a large party was organised, only to be promptly ordered off by an irate farmer ; but I am afraid we had a few more tench in spite of his prohibition.

Tench-fishing is just the thing for those who can enjoy a lazy day, although an hour about daybreak is frequently worth all the rest for sport. Light rods and very fine tackle can be used, for, though they are caught larger, a three-pound tench is a very good fish, and you will probably catch scores and scores of them before getting one of that weight.

Where the bottom is very muddy, the bait should be kept off it by using a float that will **Float** support a worm and shot ; but the tackle **tackle** I have found most effective is a very fine quill float, looped on by the lower ring only as in bream-fishing, two yards of the finest undrawn gut stained brown, No. 6, 7, or 8 sneck-bent hook, and one shot about eighteen inches from the bait. This tackle can only be used in still water and on calm days. Tench may be legered for with light **Leger-**tackle, and I have caught many in that **ing** way, but it is not necessary to get so far out for them as in carp-fishing, as they will feed almost at your very feet when they once begin. Proceed as directed in carp-fishing in either style, resting the rod on the ground, and arranging the line to run out freely to a fish. When you find the tench are feeding, the rod should be held and the fish at-

tended to promptly. Allow plenty of time in striking ; the bite is more "bobby" on the float at first than a bream-bite ; but when the fish has taken the bait, it sidles under in much the same way. Almost any light rod will do for tench-fishing, the long roach-rods being very useful to drop the line quietly over edges of weeds, &c. ; but it is best to employ running tackle for tench, as, for their size, they fight well, their big fins giving them power. Warm, muggy weather is best for tench-fishing, but I have often caught them on blazing hot days, fishing in a shady spot under the boughs of some great tree.

Worms are undoubtedly the standard bait for
Baits tench ; I have also taken them with gentles or lumps of bread-paste, which last sometimes entices them when worms fail to do so. I once had a supply of very large brandlings from the earth round some hot-water pipes in a green-house. I found these almost irresistible, not threaded, but looped on the hook here and there, quite loosely, giving the fish plenty of time to suck them in. A groundbaiting of chopped worms will do good, but it also attracts eels at night, and they play havoc with your fine tackle. With such fine casts as I have described, it is perhaps needless to say the running line must match, and a pliable rod rather than a stiff one should be used ; this gives to the strike, and will not break the fine tackle. Leger-lines for tench should have very light leads to sink them, pipe leads being better than bullets, as they will not sink so easily in the mud. After throwing in, do not pull the lead towards you, as this only helps to bury the bait, but let it rest just where it falls, simply reeling in the line until the weight is just felt.

Tench are not common in the Thames, but I have seen a few caught in the Chertsey and In the Shepperton waters, more by chance angling Thames than otherwise. Some years ago, when camping out, sleeping in a dinghy, I came through Chertsey Lock in the very early morning and saw an angler, fishing from the upper end of the lock island, with a brace of very fine tench. He was tight corking in the slack water, just among some straggling weeds. This was after a pouring wet night. When searching for stranded fish after a heavy flood, I picked up a single tench on the island at Shepperton Lock, covered with mud, and weak with flapping about; but after washing him well, he swam away quietly, and made for the deeps of Ham Haw Pool, where I expect there are many tench, though I have never caught one there, even when bream-fishing. I saw some nice tench taken below Whittet's oil mill, in the main river Wey, just before it joins the Thames.

If you know there are tench in a pond, do not cease fishing for them after a trial or two, or because the pond seems really too scummy and muddy. The Broadwater, at Weybridge, has several feet of mud in it in places—real black mud—yet by employing very light tackle, I have taken tench. The water is private. I should imagine the Sale at Walton-on-Thames would hold tench, as it is exactly the style of water they like. I believe Elstree Reservoir contains numbers of tench, and that the water can be fished by payment; as I have not fished it, I cannot speak from actual experience. Penn Ponds, Richmond Park, contain tench, though I have not caught them—indeed, have not fished for them there.

THAMES TROUT.

WILL my readers kindly note that I do not, for one moment, consider a Thames trout to be a coarse fish? My reason for including a chapter on Thames trout in this volume is that the only methods we can employ with any reasonable chance of success are those resorted to for coarse fish; spinning and live-baiting are the chief, while legering and paternostering are occasionally, but very rarely, practised. The fly, alas, so seldom kills large Thames trout that I must reluctantly confess that it is almost waste of time to use it, that is, the fly proper. Alexandras, Dusty Millers, and the like, have been known to tempt a few large fish, while I have no doubt the May-fly accounts for one now and again, but chiefly in tributaries, and not often in the Thames proper. Where Thames trout have access to mill-pools that form the first stoppage to fish proceeding up a tributary, I have no doubt that they may be caught with the fly in or below such pools; but as many of these are private fisheries and but little disturbed by boats, launches and the many other annoyances that vex the angler on the main river, the trouting can hardly be considered Thames fishing pure and

simple. When trout get above the first weir or mill-pool of a tributary, they cannot be considered, from an angling point of view, to be Thames trout any longer. When I say the fly seldom kills large Thames trout, the reader must remember what great weights the fish reach; anything under seven pounds in weight is not large on the Thames, and fish of that weight are by no means rare, a few of nine pounds or over being taken every season. Trout of ten pounds weight are very scarce, but the Thames holds such fish; and the angler, whoever he may be, has the chance of getting one whenever his bait is in the water. He need not therefore travel to New Zealand to get a huge trout, for, if he will only persevere, he will, sooner or later, get one from the Thames; it is only a question of knowledge, time, and patience. With respect to play, Thames trout equal salmon in their first grand rushes; and, tackle for tackle, the captor of a large trout in one of our big weirs in full flow may fully consider his feat on a par with that of landing a twenty or thirty pound salmon on an eighteen foot rod. Only salmon can keep pace with the rush of a freshly hooked, game Thames trout, tearing downstream in the very heart of a big weir-run, with all the force of the water behind him, most likely concluding his mad dash for liberty with a vigorous leap, scattering the water with a mighty splash. A Thames trout, hooked at the head of a weir-run and bolting into it, will take fifty yards or more of line off the winch in his first rush; and if he makes up his mind to go clean away, there is no stopping him on fine tackle until he is somewhat exhausted. With play like this, it is not surprising that the fish

are eagerly sought after, especially as well conditioned fish are the handsomest imaginable. A good fish is as bright as a bar of new silver, generally thickly spotted, except on the belly, right up to and below the eye and on the dorsal and caudal fins, and even the adipose fin shows spots in some fish. I know of no nobler-looking fish than a big Thames trout in fine condition.

I must strongly warn anglers who are not accustomed to weir-work from attempting to
Dangers
of weir-
fishing fish from a weir platform or head without the services of a skilled attendant till perfectly accustomed to all the glitter and turmoil of the dazzling white water ; I also caution all from attempting to approach a weir from above or below, in punt or boat, till the set and run of the current is well known. I have had more than twenty years' experience of Thames work, and assure my readers there is great need for the utmost care. We Thames-trouters never neglect precautions when approaching a weir, either from above or below ; we appreciate the force of the straight runs of water, and we also know something about the undercurrent and backwash. It is the undercurrent and backwash that constitute such a danger, particularly to a weak swimmer or one stunned or partially stunned by a fall ; the difficulty is to get clear away, as the main current sends you down stream and the eddies bring you back again. A fall into a weir is totally different from a fall into the open river. Branches and logs of wood remain for days in some weirs, being swept down by the main current and returned to the weir to the spot whence they started. I have seen dogs in weirs, a retriever amongst the number, and

in many cases they had to be fetched out by some one in a punt ; and an angler, not knowing the runs of water, would probably be in the same predicament. It is only right to issue a strong warning to be careful, for weir-fishing always presents a certain extra element of danger beyond bank-fishing. Weir-
A permit is necessary to fish from the weir- permit
platforms ; it costs ten shillings per annum, expiring on the 31st of December. Permits are to be obtained from James H. Gough, Esq., Secretary to the Thames Conservancy, Victoria Embankment, E.C. Twenty-six weirs are mentioned on the permit. Amongst those I have fished I can recommend Whitchurch (Pangbourne), Hambledon, Boveney, Romney, Old Windsor, Bell, Shepperton, Sunbury, and Molesey Weirs. Chertsey Weir is also a good weir for trout, but it is excessively difficult to land fish there. Teddington Weir produces a big trout or two during the season, but they are mostly caught by barbel-fishers. The permits are issued "subject to any existing private fishing or other rights ;" they are not transferable, and holders may go on the weirs between 6 a.m. and an hour after sunset, at their own risk, the Conservators not being liable for any accident. The permit must be produced when asked for by any officer of the Conservators. The angler who fishes a strange weir has a much better chance of getting fish if he employs a local professional to show him the likely spots ; but I advise him to pay his attendant well, for there are no fish that the professionals are so jealous about as "their" trout, as they all consider them. Some professionals regard a stranger almost as an interloper, unless he employs them, and are very chary of supplying baits. They can hardly

be blamed for this, but civility generally brings custom sooner or later. In some weirs, it is next to impossible to land fish without help, but your attendant should keep quiet and allow you to give your whole attention to your tackle. Watch your line and bait carefully, as inattention will cause you to lose fish; as a rule, if you prick a trout you may put him down as "done for," for some time to come, though I once landed a trout in the evening that I hooked hard in the morning. It may be held that this was a different fish, but I knew the fish too well to make any mistake about his identity. It is simply maddening to lose a fish by having your attention diverted and failing to strike him at the proper moment; prompt action is required, without the least bungling or delay. Nailed boots should be worn to avoid slipping on wet stones or greasy (damp) platforms. I have damaged my elbows once or twice with bad falls, through going on wet, slimy stones in slippery boots; when falling, the angler instinctively endeavours to save his rod, and an elbow, or wrist, generally suffers in consequence.

Anglers who thoroughly study and watch the river are the most successful with Thames trout; one is seen feeding, and carefully
 "Mark-
 ing
 down"
 trout "marked down," his feeding-time noted, and the best situation for the punt carefully considered, that is if a punt must be used to approach the fish. Thames trout are specially noted for feeding in the same spots and at regular times; and I always note the time when I see a trout feed. Bleak collect in certain places, and these should be carefully watched, either in weirs or in the open stream. Trout generally have some quiet

resting-place and leave it to feed, dashing amongst the shoal of bleak like a pike, but moving much more quickly, and pursuing the baits with greater vigour. It is quite exciting to see a large trout scattering the bleak. The angler should keep a sharp look-out, and on seeing a fish move should get his bait over him at once. If the trout misses his prey, and has not been alarmed, he is almost certain to take it instantly. Getting the bait over a feeding fish often requires much skill; and a good knowledge of the current, particularly in weirs, adds considerably to one's chance of success. A dozen bleak, or more, will suddenly dart in all directions from one particular spot, making long skips on the surface of the water; a greedy trout soon shows himself, pursuing one particular bleak, which may make half a dozen skips before the trout takes him, but in most cases the trout has that particular bleak and no other. From the elevation of a weir platform, the movements of a feeding fish can be seen plainly; and I have often watched a trout in pursuit of his prey. The darting bleak above the surface of the water and the eager, ravenous trout immediately beneath him present a sight that stirs the patient angler to immediate action. If your bait is not in the trout's immediate vicinity, it must be got there with as little delay as possible, whether a spinning or live bait. I have ^{Method of} actually seen a trout abandon pursuit of a ^{fishing} fast-flying bait and take the apparently disabled fish on my spinning flight; this happened, for instance, in Sunbury Weir, on the 28th of April, 1893. The fish was an old one, and evidently knew the difficulty of securing a lively bleak. Old fish frequently miss a strong, quick-moving bait, and it

is pretty work to guide your bait over them ; if the line be allowed to drag ever so little in the wrong place, the precise spot may not be reached in time, and your chance is lost for the time being. As trout are often hooked forty or fifty yards from the rod-top, there is a great diversity of water between rod and bait, and the workings of different eddies have to be learnt by experience. If the trout does not take the bait instantly, let it rest quietly at his feeding-place ; here, the advantage of livebaiting is apparent in quiet places, for a livebait can be kept still, or nearly so, in a spot through which the spinning bait must pass. In very quick runs, live or spinning baits can be worked with equal ease. If I know the feeding-place of a good trout in a weir, I try that place first of all ; but I begin with all the likely places near at hand when fishing strange weirs, then try mid-weir, lastly all the distant spots, thoroughly working all eddies, and, where possible, the shallows, lighter tackle being required for the latter than for the mid or head weir runs. I have taken most trout with a quickly-moving bait, either with a lengthy draw, or by moving the bait with a series of short jerks. On more than one occasion, I have seen trout follow the bait for a considerable distance, finally taking it with a grand rush or leap. The fish give no warning, as a rule, and hardly any splash ; when the bait is worked deeply, the pull only is felt, but it is a pull, and no mistake, perhaps followed up by a rush of thirty yards or more. It is difficult to give advice as regards striking fish, as so much depends on the way the bait has been taken. In spinning, the angler should strike without a doubt ; but in livebaiting, the hooks are free, and many

fish hook themselves. Livebaiting is looked upon by many anglers with some little disdain, but there is plenty of knack in working a livebait in a proper manner only acquired by long practice. The actions of a skilled angler when imparting motion to his bait and the process of guiding it into difficult places are most interesting to witness ; and the novice will most likely find he cannot reach certain spots at all, which are easily fished over by a man who knows what he is about. The livebait can be worked in places quite unsuitable to spinning-tackle. Should a fish take the bait very quietly in a corner eddy, fairly close up, he will probably come towards the fall ; in this case, I lower the rod-top perhaps for a couple of seconds and then strike gently, taking care that no check, however slight, is previously given to the fish. But if the fish take the livebait vigorously, especially in the centre of a run, the heavy plunge hooks him securely, and striking may possibly tear the hooks out. Some say "never strike a Thames trout," but I do not agree with this. When trout go away hard, seeking the depths, they are almost certain to be well hooked ; splashing fish are difficult to deal with, and the hook has generally a very light hold. If a fish comes right up to the weir after being hooked, you will have a difficult task to land him ; jag the line on him at any cost to induce him to go down stream, do your utmost to pull him into the heart of a swift run, wash him away, but never let him have a slack line. The rush of water in a weir often assists the angler in killing his fish, and I have had much more trouble with fish in the open stream. With a really game fish, when brought to the side the line cuts a distinct feather or curl

in the water ; this will give some little idea of the pace at which a Thames trout moves. I once had the bad luck to lose a good trout through being unable to strike. I was livebaiting in a weir over a feeding fish, and a large branch was suddenly driven up by the action of the water—this branch entangled my line, and while endeavouring to clear it, at a distance of perhaps thirty yards, the trout took my bait very quietly. The line was firmly fouled by the branch, and I was quite unable to strike. As the fish took the bait so quietly, he did not hook himself, and on feeling the hooks he dropped the bait, which I found all scored with teeth marks when I got the branch ashore at the lower end of the weir-run. The bait was some twenty feet below the entanglement.

Immediately behind any obstruction in a weir
Likely spots caused by stumps, or stones, is an excellent place for trout ; or just above the junction of two streams or runs, the slacker water between two runs often holding fish ; while, if there be a far-shooting fall from an open gate, or in a corner of a weir, the fish frequently lie immediately above the junction of the upper water with the lower. I have hooked trout within a few feet of the rod-top, being very careful indeed to keep out of sight when fishing so close up. Every foot of the far ends of the runs, fifty or more yards away, should be worked ; but when fishing shallow water with live-bait, all lead should be discarded, and not even so much as a single shot should be on the cast. If a float is used in swift, shallow water, it should be at least ten feet from the bait. When I speak of a float for trout-fishing I fear some of my readers will be puzzled, and perhaps disgusted. The float for

Thames trouting is simply a guide to the position of the bait and nothing more ; it is not used to show a bite, or, as it is called in trouting, "a run." As a rule, only "known" fish are tried for in the open water, that is, the river proper, not weir water ; and a "chuck and chance it" method will, except by great luck, only lead to poor results. Any one fishing a new part of the river that he knows nothing about may run his bait over a fish that is well known to local anglers, and secure him ; but the usual process in the open stream is to find a trout and carefully fish for it. According to the riverside tales one hears, Thames trout would appear to feed invariably just opposite a waterside inn. I have been told of fish scores of times, and nine out of ten of the localities indicated are those in the immediate neighbourhood of which beer is to be obtained. My advice is : find your fish yourself, and make sure you are fishing for a trout, and not for some leaping barbel. Having found a good fish, and decided to livebait for him, stop the punt some distance above his feeding-place (if he cannot be fished over from the bank), and work the bait over, or beyond and up to, the spot. The punt must be stopped entirely, by weight, rypeck, or other assistance ; if you or your attendant move the punt or boat, and by such movement draw the bait over the fish, the method immediately constitutes trailing, which is illegal. A trout that has been hard fished knows a thing or two : he will feed freely a few yards off your bait again and again ; and when you try the new place, he tantalises you by selecting a bleak from the old one. He will perhaps refuse to show himself while you try patiently for him for hours together, and

when you move and let him alone, he will probably feed vigorously in a very short time. I cannot consider this chance, so shy and clever is an old Thames trout. At some unlucky moment, when really madly on the feed, he is hooked ; and he well knows where to go, and what to do when that happens. Thames trouting is nothing less than fascinating to all who give much attention to the sport, for the fish are the gamest the river contains. You never know how long it will take to get a fish ; you may run one immediately, or you may fish for weeks without success : hence the patience required. It is not the number of fish killed, but the skill and patience that must be exercised in their capture that truly constitute sport ; a fish killed by really waiting on him and for him, and at last secured by some cunning device, gives the true angler his greatest satisfaction. I was marvellously fortunate in my first endeavours, for I hooked and landed the first Thames trout I ever tried for on the third cast of the bait. I saw the fish when waiting below Sunbury Lock ; he " moved " close behind the stern of my little dinghy ; and two days later I put a spinning bait over him with most satisfactory results. Since then, I have caught fish that I have tried for most patiently, and valued them accordingly. In 1893, I had a three-pound fish on the second cast of the season. A fine trout was landed at Shepperton by an angler who was making his first trial of weir fishing, and a six-and-a-half pound fish was recently taken at Sunbury under similar circumstances. I mention this for the encouragement of beginners, to induce them to persevere. Catching a good basket of fish gives great pleasure ; but the intense enjoyment of landing a large Thames trout

fully repays one for all the patience that may have to be exercised. Thames trouting spoils other trouting as regards size of fish ; a two-pound or three-pound trout from another river is thought little of when you have landed some of the mighty Thames fish. The tints of freshly-caught, well-conditioned trout are admired by every angler, and so greatly is the beauty of the fish increased by size that the event of landing a large Thames trout is a memorable one, and an inveterate Thames trouterman never willingly relinquishes the sport. No day is too long for him ; and hard luck is cheerfully endured, for the time comes when a big fish makes up for all disappointments.

The fish vary as regards shape and colour, and weirs with swift runs and little shelter produce better fish than those with gently-flowing runs and easy lay-byes. Fish are more on the move in shallow, straight-running weirs ; they are also better sporting fish altogether, firmer and heavier, and much more plucky when hooked. Trout are plagued by lice and leeches, particularly in hot seasons or when the water is very low ; those in Sunbury weir seem to be specially subject to these pests. I have never taken trout at Shepperton with either lice or leeches on them ; and, in fact, the fish from these two weirs are strongly contrasted, both in condition and shape, though Sunbury Weir is the next below Shepperton (for I do not count the little tumbling bay near Walton a weir). The stream at Shepperton is fierce and unbroken in its rush, while the long fall at Sunbury is strewn with boulders that check the water. The study of the fish at these neighbouring weirs is most interest-

Sunbury
and
Shepperton

ing ; an angler who has caught fish at both weirs could almost with certainty decide from which weir any particular fish comes.

The most likely time for sport is when the water rises very suddenly after heavy rain ; the **Weather** push of water then starts the trout, and seems to put new life into them. May is generally the best month for game fish, particularly if the weather be warm, which, alas, is frequently not the case. No weather, however cold or blustering, is too bad for Thames trouting ; though, as in most cases, genial weather produces best sport. Never let a bitterly cold day, however, discourage your hopes ; for on these days there are few bleak in a weir, sometimes there is not one to be seen, and your bait possesses extra attractions ; bleak shift to deep water in cold weather, and it will tax the skill of any angler to catch one for a bait when the water is chilled or there is a cold wind blowing (see p 30).

In cold weather, the angler should fish deep, keeping the bait well below the surface with plenty of weight. Wild days, with a south-west gale and heavy rain squalls, have often proved lucky so far as my own efforts are concerned in weir-fishing, I fish the more sheltered spots thoroughly on these days ; for stream-fishing, I prefer calm, sunny weather, when trout show themselves more freely in the open water. I have seen them feed all over the weir in a bitter nor'-easter ; but this was in bright, sunny weather, chasing the bleak out of the deeper water, and pursuing them with the utmost vigour. When trout leap sullenly, falling with a dead splash, they are not feeding, but are possibly trying to rid themselves of parasites. An ex-

perienced angler has no difficulty in recognising the difference of action, and will not shift his bait to a sullen fish. The senses get so accustomed to the glitter and roar of a weir that neither is noticed, and any fish moving on the surface or darting above it are seen directly, almost mechanically. When trouting, the hours fly by with marvellous rapidity; boats and launches pass above the weir utterly unheeded, though the shrill whistle of a launch signalling to the lock-keeper is now and again startling.

Trout have a dangerous knack of leaping when hooked; when this occurs, the rod-top must be lowered, chancing a slack line; raise it again when the fish has fallen, for if you pull on the fish at the critical moment you will probably lose him, or the jerk of the leap may snap the cast. Most trout play very pluckily; a sluggish fish is generally old or in bad condition, or has been hurt in some way or other. A trout usually fights to the very last, and dies very quickly after being landed.

Owing to so much disturbance and the highly educated state of the fish, all Thames fishing is difficult, especially in the Lower Thames. I certainly think the art of trouting the most difficult of all to acquire; but it has at least one feature in the angler's favour, for when trout feed they mean business, baits are not sucked off, but dashed at. A big trout indeed will pull the rod out of your hands if you are taken unawares and the line is entangled in the winch or rings, and its tearing plunge is one of the most exciting experiences the angler can wish for.

Quiet dress, colour of rod, line, &c., should be considered. I have done better with trout since I

paid more attention to these items, trivial though they may seem. I even avoid banging the gates on the weir-platforms, especially on the new iron weirs, as there is no knowing how far the vibration makes itself felt. Thames trout are so knowing that it is no good giving even a half chance away. When punt-fishing, do not place a fish in the well, as he will soon recover much of his vigour if he was lightly hooked, and will bang about and knock his scales off; return him directly if you do not intend to keep him; if worth setting up, wrap him in newspaper at once. The Thames limit of size is sixteen inches. It is a great pity that fish under four pounds are frequently kept; for if all small fish, not too deeply hooked, were returned to the river, the stock of trout worth catching would soon increase. The fish undoubtedly grow at a great pace; they live in a big water, and the supply of bleak, minnows, &c., is enormous; it is this supply that causes Thames trout to neglect flies for fish food, but it has a wonderful effect on their growth.

Thames trouters should command great patience, quick sight, and the knack, only acquired by long practice, of watching the water for long distances. The eye really educates itself to see fish; and it is the knowledge of the exact spot in which a trout feeds that often leads to success. Remember the precise spot in which you have taken a trout; another is almost certain, particularly in weirs, to occupy that place in a short time. A walk along the river-side in the very early morning will frequently aid you in finding fish, for all fish are much more on the move before the water is disturbed by boats.

A Thames trout tries the rod to the uttermost, being such a quick-moving fish ; and when he has to be held, a weak rod may fail at a critical moment. Messrs. Slater and Co. made me a rod several years ago, with which I have landed twenty-eight Thames trout and scores of chub and pike that have taken the trout-bait. The butt and centre-joint are of solid cane, not split cane ; the top is greenheart. The joints measure as follows : Top, 50 inches ; centre-joint, 50 inches ; butt, 57 inches ; making a rod about 13 feet in length. I only employ the full length in difficult weirs, where it is of use to reach over stones and stumps, close up. In easy fishing weirs, I like a shorter rod ; so I had a special butt made by Holroyd's, of Gracechurch Street. This is a short butt of hard wood, grooved to give a firm grasp of the hand, important in cold or wet weather ; the butt is only 26 inches in length, giving a rod of about 10½ feet. The weight of the shorter rod is only 1¼ lbs., of which the butt accounts for three-quarters of a pound, thus keeping the weight well back in the hand. The rod is fitted with a mixture of rings ; they are large upright round rings, excepting two, the top rings on the centre-joint, and are bridge rings. I use these two special rings for making the loop throw (p.244), pulling the line down between them ; the line does not catch in or round the rings when the throw is made. The rod is a dull, dark green, and being well weather-beaten, is without glitter. A Thames trout-rod should be supple, but with plenty of power in it, a combination most difficult to attain, for it must not be weak. The rod must be of such a weight that the angler can easily manage with one hand, an over-weighty rod being a terrible infliction, for it should always

THE "WHEELEY" THAMES TROUT ROD.

be held, and not left to fish for itself, or it will probably only scare a feeding fish by pricking him when the bait is seized. Rods are often used for Thames trout-
ing that are far too stiff; a stiff rod will break fine tackle when striking; also, trout move very quickly, so that a springy rod is necessary to "give" to the fish. There is, moreover, much more chance of the hooks losing their hold through being torn out of the mouth of a fish when a stiff rod is employed. Thames trout plunge so heavily and suddenly that a hard held fish may easily break a fine cast if the rod does not yield sufficiently to the sudden strain.

There is a new pattern of rod in the market this year (1897), made by Hardy Brothers. It is made either in split cane or greenheart, with lock joints, cork-covered butt and special rings, and is

eleven feet in length. I must ask my readers to form an opinion of the action of these rods from personal experience, as the makers have honoured me by calling it the "Wheeley." I may say that I took the greatest pains over every detail of several pattern rods, which I carefully tested in actual use, before the exact pattern was decided upon, and was in correspondence for a long while with the makers on the subject, giving every suggestion that I thought would be of advantage.

The winch should be a 4-inch, or $4\frac{1}{2}$ -inch, first-class centre-pin, with adjustable check, to slip on or off. The "Silex" winch is also an excellent one. The winch should carry at least 150 yards of line, for trout in weirs are hooked sixty or more yards from the rod-top. When you hook a trout far away at the very end of a run and he obstinately bolts down stream, a tremendous length of line is required, and it is the greatest folly to attempt to fish for Thames trout with only fifty yards of line, for the fish cannot perhaps be reached, much less played, when hooked. In most of the Thames weirs, the angler stands at a considerable elevation, and distances that may seem impossible to very many anglers are most easily fished. In weirs, both stream and elevation assist the angler, the tremendous run of water keeping the line straight and taut; and one of the secrets of successful weir-fishing is to fish very far away, so far that the little cork used as a guide to the position of the bait is with difficulty discerned. The winch should be of the best make, with a large barrel to aid in winding in quickly; when great speed is required, take the fingers and thumb off the handle and hit the outer revolving rim of the winch downwards with the

underside of the fingers ; this causes the winch to revolve with great speed, tearing the tackle through the water. This method will save a slack line when a hooked trout heads up stream towards the weir with all his force.

A fine plaited or twisted silk line should be used, and it must be well dressed with vaseline,
Line to keep it as much as possible on the surface of the water. A thick, solid dressed, or enamelled line is comparatively useless for fishing very far away, as it sinks and is swallowed up in all the whirl and tumult of the weir runs. It is most difficult to work with a thick line, the pull of the water on it being so great that the play of the bait cannot be properly felt. Striking a fish hard with a very heavy line in a long swim will probably break your rod, while a thin line floats better and rips through the water, assisting the angler to strike his fish properly.

The trace for both livebaiting and spinning,
Trace, must depend on the power of stream and
or cast rod, the weight of leads and the size of the bait. Heavy rods require stouter traces than light rods, and a dace must have a stouter trace than that used with a bleak, small gudgeon, or minnow. Very fine traces will not properly carry heavy leads or baits. In unobstructed weirs, with low water, really fine traces may be used, but line and rod must correspond ; it is no good trying to strike or play fish with a heavy rod and very fine tackle. If the trace is very fine, the hooks must be small, very keenly pointed, and not grossly barbed ; the rod must be light and pliable, and the bait small, with hardly any or no lead on the trace ; and, if livebaiting with very fine tackle, it is best to

discard the float. It is simply absurd to fish an obstructed weir with very delicate gear ; but, where trout may be allowed to travel practically where they please when hooked, I never fear using very fine gut ; so long as it is undrawn and really good. Each weir requires its own special tackle and system of fishing, that is, to a very great degree ; and the right tackle and right system will kill the most fish. I like a blue cast for fishing the darker water between two runs, or in the open stream ; natural gut, unstained, for the white, foamy water. The spinning-trace should be fitted with three or more swivels, though one is sufficient for livebaiting ; indeed, I do not always employ one when fishing in the open stream. The weight on the trace must depend on strength of current, depth of water, direction of wind and the place fished ; in cold, windy weather the bait should be fished deep ; in hot, sunny weather it kills best on or near the surface. Study the positions of the baits (bleak), and fish accordingly. When possible, remove all weight, in fishing the corners of weirs, close up. Some few unlucky trout are caught on tackle that is only fit for pike-fishing, and are hauled out almost by main force ; but there is no play to speak of, and such fish are caught by mere luck.

For spinning, use fixed lip-hooks and two, three, or four triangles, according to the size of the Spinning bait. I prefer to arm the bait thoroughly, as I have had so many bitten asunder by trout when there are few hooks on the bait. It is best, perhaps, to run fewer fish than to stand the chance of pricking or scratching fish that do not take the bait very greedily ; whatever hooks you employ, however, you will occasionally have a bait well

torn without even pricking the feeding trout ; and it is little short of a marvel to see how a bait is scored, all to pieces, and yet the fish missed. A flying triangle, beyond the tail, is very deadly ; but it has a nasty habit of hooking fish outside the mouth, which is extremely dangerous when any obstructions are about, or when getting the fish into the landing-net. I once hooked a six-pound trout in heavy water by the pectoral fin ; the fish came short at the bait twice ; then, as I thought, took it ; when I felt the play, I thought I had, at last, got hold of a really big one. For some time, I could do nothing with him ; he was all over the weir, plunging, leaping, and doing just what he pleased ; and at his first leap, I saw he was hooked somewhere outside the mouth. I really think the fish took twenty minutes to kill, and I was uncommonly glad when my wife slipped the net under him.

The hooks on the flight must be reasonably small, with keen points and plenty of metal in the bends ; very fine wired hooks should not be used. The mouth of a trout is very small compared with that of a pike, and you cannot make large hooks penetrate with fine tackle, even if the fish gets them in his mouth. Small triangles are the best for trouting, and they must be of the very best make, and not ridiculously small : No. 8 (Hardy's) trebles are a useful size. Spinning requires stouter tackle than livebaiting, the strike must be harder, as the hooks are partially embedded in the bait. In difficult weirs, a tiny float, as a guide to the position of the bait, may be placed on the line ; fix it at least six feet from the lead. In spinning from weir-heads, where little throwing has to be done, when

there is a great body of water in the runs, the lead may with advantage be six feet from the bait. When throwing is necessary, the lead must be nearer, about two or two and a half feet away; the nearer the lead is to the bait, the easier it is to cast; but leads must not be too near the bait when trouting. Leads fitted with a swivel at each end are perhaps best. Search every foot of available water, either in weirs or the open stream, and try all depths. If trout are not showing much, fish deep. Spinning scares fish more than livebaiting, and tends to make them shy of the line, a result brought about by the incessant dragging of leads across and through the runs, and by the extra splashing when throwing out. A spinning bait will sometimes tempt trout that refuse the livebait, and *vice versa*. Changes of methods and tackles should be made; baits of different sizes should be tried at different degrees of speed. It is far better to throw directly from the winch, especially where the foothold is insecure or the ground cumbered with stones, loose sticks and other obstructions.

Very fine tackle can occasionally be employed

when fishing with livebait ; when the water can be worked without lead, the trace may be of fine undrawn gut, that is when you can let a **Live-baiting** hooked fish run without danger. A lip-hook and one triangle make a good livebait tackle, the triangle being about one to one and a half inches from the lip-hook. I have found a second triangle, three to three and a half inches from the lip-hook, of great service when fish come short. In live-baiting, it is often difficult to get the bait to swim properly ; it should swim in the most natural position, straight in the water, in the same way as an unhooked fish. Some baits swim best when hooked through the upper lip, others through the lower ; they are of different shapes, and the alteration of the lip-hook frequently makes a difference. If the bait drags on its side, it is not fishing well ; and some bleak will not fish properly, something in their shape or weight causing them to hang wrong, or the tackle not suiting them. Only a single triangle should be used (with the lip-hook) when live-baiting in the open stream, and the triangle should rest loosely on the back of the bleak between the dorsal fin and the head. If the gut is very fine, the triangle should be tied closer to the lip-hook than usual, and not dangle alongside the bait. A small pear-shaped, or conical, lead is placed on the gut, two to three feet from the bait ; and to avoid chafing the gut, it is a good plan to put the lead on a second strand of gut, knotting this strand at each end of the lead to the main line. For livebaiting in very quiet water, or in shallows, do not employ lead at all. The hook that holds the bait should always be run through a lip, and not under or near the back-fin, as

in pike-fishing. As in spinning, the tackle must be intently watched, and it is impossible to lay down any fixed rule as to striking. A trout, dashing at a livebait in a swift run, or at the edges of the weir-fall, generally hooks himself hard; but a quiet, feeding fish should be allowed to run a yard or two without check, and should then be struck, very delicately if with fine tackle. In many cases, the plucky fish dashes at the bait, dragging the rod-top down without warning, and the angler finds himself in the thick of a tussle as soon as the bait is taken. I tie all my livebait tackles on at least six feet of gut, which saves having two loops on the cast, about a foot from the nose of the bait; and everything, in the shape of loops or shot, that cuts the water in any way, should, whenever possible, be avoided. Very heavy leads are sometimes requisite to keep either the spinning or livebait well down in weirs; in which case, the leads should be five feet or more away from the bait.

The float, chiefly used in livebaiting, should be a plain ginger-beer-bottle cork, tapered at each end, with a hollow quill inserted ^{Float} through it lengthwise. The end of the line is, especially when wet, more easily passed through a quill than through the plain cork; and the float is fixed on the line by a light peg that fits the quill. Corks collect in the eddies of weirs, or float down stream; the fish see these corks and are used to them, whereas a gaudily painted float would, especially in the open stream, doubtless be regarded with considerable suspicion. It is best to fish without a float, but it is not advisable to do so in obstructed water. The float may be fixed two to ten or more feet from the bait, according to

the water fished. When fishing on the surface without lead, or in shallows, I keep the float quite ten feet away from the bait. It is only a guide to position, and not a float in the ordinary sense of the word. In weir corners, it is sometimes necessary to have a float only a foot from the lead, keeping the bait in the undercurrent, but - not allowing it to be sucked right into the weir. In swift water, the float often hangs a few inches above the surface, the line from rod-top to lead being quite taut from the pressure on lead and bait. Corks should be tapered, being then less liable to catch in obstructions, and not spurting up the water so much when the tackle is wound in.

It often happens in weirs that the hooks foul **To clear** some obstacle, generally sunken. Take **line** care not to strain the rod in trying to free the tackle. Gentle pressure should be applied ; but if the hooks refuse to quit their hold, a willow loop should be run down the line. This will often wash the hooks clear, or a second one may do so. Should both fail, there is nothing else to do but put on a powerful strain, lower the rod, and pull directly on the obstruction ; the heavy strain may possibly tear the hooks clear, but getting "hung up" generally means loss of much tackle. Do not pull on the line by winding the winch, or the winch may be strained ; wind the line round the hand, and pull from the hand. Take care the fine line does not slip, or it will cut badly. I have cut my fingers deeply on two occasions through letting the line slip. The strain that a long length of line bears is wonderful ; it is occasionally quite difficult to break with a steady strain, while even

the jerk of the lead, when a tangle occurs in spinning, will snap a very strong line.

A full-sized, deep landing-net should always be taken when fishing for Thames Landing trout, though net it is ludicrous to see the nets that are sometimes brought on weirs by inexperienced anglers. Holroyd's made me a beautiful net some time ago, the hoop fifteen inches by eighteen inches, and I could do with it even larger. The hoop falls on a knuckle-joint, and I carry it, on a short handle, when fly-fishing, slung over a strap. The comfort of a large-sized landing-net is immense. As Thames trout of six or seven pounds are often taken, it stands to reason that a large net is required. A gaff greatly spoils fish intended for preservation.

A small bait-kettle is useful, for, though Bait-kettle the angler may possess a punt, it is not always wanted in or near the weir. A few baits

THE "HOUGHTON" LANDING-NET.
(HARDY'S.)

can be kept alive and at hand if the kettle be suspended in a gentle run of water.

Nothing beats a bright, medium-sized bleak as a bait, though I have killed trout on dace,
Baits gudgeon and minnows. Dace make good livebaits, as they work strongly, but gudgeon spin best. A very small roach, about the size of a sprat, will kill Thames trout. I have not used loach. Natural baits are far the best, and freshly caught baits are better than those that have been even a short time in a punt-well. So greedy are trout at times, that I know of cases in which a bait that has rubbed itself till hardly any tail-fin was left, has secured a large fish; this was, however, in quick water. Any of the small or medium-sized artificial baits, Phantoms, Devons, Wagtails, &c., will occasionally kill fish. Thames trouting with a worm is looked upon as arrant poaching. Fly-

spoons may possibly kill fish in shallow
Flies water. I have already spoken of fly-fishing; if the angler must fish with fly, I recommend gaudy flies with plenty of tinsel, or peacock, Alexandras and the like, worked wet. Trout are queer fish, and a friend lately gave me an account of an excellent day's sport (not on the Thames) in which the fish took a dry Alexandra freely! I have tried salmon-flies of different patterns and sizes; but, as I have not had any sport, I have, most reluctantly, ceased to fly-fish for Thames trout.

Legering with a bleak or gudgeon will sometimes
Leger- take a fish; it is a killing method in weirs,
ing keeping the bait close to the fall edge with heavy lead, and hooking it through the lip as in livebaiting. Trout frequently lie right under the fall in the slacker water, keeping close to the

bottom to get out of the fiercer rush. Legering can only be practised in gravelly weirs, for those with blocks of stone on the bottom prevent the use of this tackle.

Paternostering with a single bait will also take trout, but the paternoster is not looked upon as a sportsmanlike tackle, and is ^{Pater-}nostering very little used.

Little throwing is required in weir-fishing, except in slow corners or cross-stream spinning, as the angler generally works from the weir-head. The water itself will, in most cases, carry the line out, and distant spots can be worked over by drawing the bait to, or through, them from the ends of the large runs. Never hurry fish in play, but do not let them rest or have unnecessary liberty. A sulking fish may be started by tightening the line and tapping the rod with the finger-tips, as I have done on one or two occasions. Above-all things, avoid poking at a fish with the landing-net; drift him over it quietly, lift steadily, and wait till the fish is completely within easy reach.

It is important to try close up to the weir-fall; in these places trout will possibly miss the bait once or twice, but generally come again in a few minutes if they are not scared. Keep as still as possible on seeing a fish dash at the bait, and work it in the same spot; you are almost certain to get hold of him. In very swift streams, trout sometimes miss the bait, being carried beyond it by the force of the water, for, when greedily feeding, they will dash into the swiftest run after a bait. They may sometimes be tempted to take a bait by incessantly moving it in short jerks, fishing one particular spot; nor is it uncommon to take trout

directly the bait touches the water at the fall edge. A good plan is to skip the bait up the fall all along the edge of the weir, dodging the bait up and down. Watch the bleak, and imitate their actions as nearly as possible; above all things, do not be discouraged by blank days, for your first big trout will prove so fascinating that you will find it hard to stop admiring him and to try for another. I suppose every angler longs to catch a Thames trout; I can say, at any rate, that the hints given in this chapter embody the results of very long experience.

NOTES.

ALTHOUGH the minnow is an insignificant little fish, he is very useful for catching perch and trout ; indeed, for large perch, he is about the best bait possible.

**Minnow,
Ruffe,
Miller's
Thumb,
&c.**

Minnows frequent swift brooks and running streams, assembling in hundreds ; and it is a common sight to see perch, chub, and other fish chasing them for food. Minnows should not be caught on a hook when required for bait, as extricating the barb damages the fish. A needle should be heated in a candle or lamp flame and the point bent round, so that the needle thus forms a long-shanked, eyed hook without a barb. A willow stick, a length of thread or cotton, and perhaps one shot completes the tackle. Bait the point and bend of the needle with a piece of red worm, and drop the bait amongst a shoal of minnows, keeping the bait-kettle handy, with the lid open, and half filled with water. If fishing from a punt, the minnows can be dropped direct into the well ; but minnows in a punt-well should be kept in the perforated zinc part of the bait-kettle, for the gratings of punt-wells are mostly wide enough apart to let them escape. They must have plenty of running water, or they usually die very quickly. The needle arrangement should only be practised in clear water ; directly the worm is taken, lift the minnow up and drop him off the needle without touching him with the hand. He will frequently save all trouble by dropping off of his own accord ; but if he falls out of the kettle or punt-well, he must, of course, be picked up ;

it is, however, best to avoid handling minnows intended for bait more than absolutely necessary, as they are tender little fish. You get fat minnows by fishing for them with a worm, and they may be caught very quickly.¹

For catching large numbers of minnows a hoop net should be employed; this is slung by three or four cords to a central cord, the net being suspended from the end of a stout stick, six or eight feet long. The net is dropped quietly into the water, a disc of lead or a large bullet helping to keep it down; it is allowed to rest quietly on the bottom, and is lifted when the shoal of minnows is over it. A few tags of red worsted are fastened in the meshes of the net to attract the minnows; but a pellet of paste, placed in or dropped on the net, is far more attractive.

Another method is to have a small meshed net stretched on two or three wire hoops. Place this at the mouth of any little drain or brook, and beat the water downwards, driving the minnows into the net. When minnows are much fished for with nets they soon become very shy. Still, shallow pools at the edges of weirs are occasionally black with minnows; in April, 1897, the shoals of minnows in Shepperton Tumbling Bay were quite a sight, for there were simply "bucketsful" of them amongst the stones. These little fishes love shallow, gravelly swims, and are incessant pests when bleak are being fished for with gentles; for, though the minnow is small, he is a veritable little glutton, and thinks nothing of trying to swallow a large bunch of gentles or a whole worm. Give minnows plenty of air when they are carried in a bait-kettle, or they will soon die.

Minnow-nets may be used in the Thames, provided they are not of a greater diameter than three feet in any part of the net; and the minnows so taken must be used for angling in the river Thames.

The Ruffe, which much resembles a small perch, is little fished for on his own account, nor do I know any one who makes a special practice of ruffe-fishing. I have taken a very few, chiefly when roach-fishing with gentle or small worm, and light roach-tackle may be employed in their capture.

¹ Mr. R. K. Alder, of Addlestone, showed me this method some few years ago.

Ruffe are disliked by anglers, many of whom think that when a ruffe is taken there are no other fish in the swim, or that others will not bite. This may sometimes be the case, but it is not my experience, as I have caught roach, dace, gudgeon, and ruffe out of the same swim, and ruffe were not the first or last fish taken. I have only taken them in the Thames at the main mouth of the Wey, in a deep, quiet swim where the bottom is rather muddy, but it is now some two years or more since I have taken one.

Bullheads, or Miller's Thumbs, have the largest heads and mouths, for their size, of any fresh-water fish I have ever caught ; they look far more like a marine than a river fish. They have a wicked appearance, the eyes are set close together on the top of the head, the pectoral fins large, and the dorsal fins extending almost entirely along the back. In colour they are brown backed, with dark bars, and very light coloured on the belly. Once, when drifting down stream in a punt and looking out for gudgeon on a shallow, I saw a bullhead rolling over and over along the bottom, and scooped him out with a bait-net, thinking that he was dead ; but he had only gorged a minnow about half his own size, and so well had he got the minnow down that I could not separate the two ; the minnow broke in the attempt to extricate it. I kept the bullhead for some time in the punt-well and returned him to the river none the worse for his gluttony. This is almost on a par with the big pike in the Hampshire Avon that gorged a salmon, both being lifted out by the keeper ; only I think the pike and salmon together weighed over thirty pounds, my glutton and his prey weighed perhaps an ounce.

Bullheads may be caught with light tackle, using a small hook baited with a tiny worm.

The Loach is another small fish sometimes used for bait. I have never caught one, so cannot give practical instructions in the art of loach-fishing ; but the angler might perhaps consult "Lorna Doone" if he wish to become proficient in the art.

I am indebted to Mr. F. Wilkinson, a fellow-member of the Piscatorial Society, for the information that follows. He is an amateur taxidermist, having

set up his fish without any lessons in the art ; but when I state that the case of stuffed fish presented by him to the Piscatorial Society is one of the best and most admired in the Society's collection, the reader can easily judge that the method employed is thoroughly excellent and practical. This case is highly prized by the members of the Piscatorial Society, and was to be seen this summer at the Imperial Institute, Yachting and Fisheries Exhibition. It represents a catch of fish lying on the grass, including roach, dace, chub, bream, perch, pike, and trout. The fish have now been set up for several years, and are in excellent condition, and in all respects quite equal to professional work. Being able to set up one's own fish is a most interesting corollary of angling, and I feel sure the information given by Mr. Wilkinson will prove of value. He says :—

“It is impossible to reproduce the lovely colours of freshly caught fish in their exact tints ; and I think the naturalist who follows the profession of setting up fish should also be a practical angler, as he will then observe the proper colours of live fish. This important feature is, I am afraid, much neglected, and the colours of many stuffed fish are in consequence decidedly wrong. I have had no lessons in the art of setting up fish ; but all that I have done has taken me some time to find out, and I have not allowed myself to be discouraged by some miserable failures. As in fishing itself, much patience is required, and I do not advise any one to make his first essay on a two-pound roach or other valuable specimen fish ; for, judging by my first attempt, failures at the outset are inevitable, especially in loose-scaled fish. Thus, roach are difficult to deal with, while perch give comparatively little trouble, their scales being more firmly attached to the skin. The tools required are a sharp knife, a pair of scissors, and one or two pairs of sharp cutting pliers, together with a few surgical needles ; these are all I have used. I wrap my fish in thin paper as soon as possible after capture ; this dries and adheres firmly to the scales, preserving their brightness and position, and, to some extent, preventing extension.

—“On commencing operations, cover one side of the

fish with a thin solution of gum-arabic, placing fresh paper over this, the original paper on the fish having been carefully damped off. Let this dry thoroughly; then place the fish on a soft cloth with its unprotected side uppermost, cut the fish from the root of the tail to the gill with a pair of sharp scissors, in most cases keeping as correctly as possible to the lateral line; cut out the gills and extract the eyes, then separate the skin from the flesh, commencing at the head, lifting the skin up with the fingers and passing a knife along the first cut, the skin should come off with ease, and, after practice, the operation can be rapidly performed. Scissors must be used when the fin-bones are reached; these bones must be cut sharply through, and the spine must also be divided at its junction with the tail, the spine of a jack or other large fish necessitating the use of pliers; this, to me, is a difficult operation, as it is easy to damage the specimen. Having done both sides of the lateral cut, taking care to see that all the bones are detached, then proceed to drag the body from the skin. I believe it possible to take everything out in one piece, though I have not yet succeeded in doing so. The cheeks must then be cut and scraped from the inside and the flesh removed, the space left being filled up at once with cotton wool or tow; this precaution is important, as the fish will otherwise assume a most cadaverous appearance when left to dry.

"The brain must also be removed, cutting the bones with pliers in order to get at it. There is now nothing left but a bare shell of skin and scales, with the fins attached. See that all remaining pieces of flesh are carefully scraped and wiped off.

"The 'setting up' process now begins. I cannot say whether my method is perfectly correct, but I have found it answer fairly well.

"Fill the skin with damp silver sand; I sprinkle the sand with spirits of turpentine, which has a cleansing and preservative effect. When the skin is full, place a strip of cardboard under the lateral slit, sew the skin up from the tail end, and fill the head tightly with tow or wool, to prevent the sand from falling out. Now turn the fish over for the first time since commencing operations and place it on a board; it will not be in its

proper shape, and must be coaxed and pressed into the form you wish it to assume at this stage of preservation. Fish intended to rest partly on stones, or to rest on others, must be moulded into shape. If a fish has to remain bent, it must be raised or depressed accordingly, by means of supports, because when once dry its shape is settled for good.

"In moulding the shape, great care must be taken to prevent distension, as I have spoilt several fish through neglecting this precaution. The skin must be packed to just its right fulness, or it will wrinkle or sink in. If the fish is to be in a swimming position, the fins must be more or less extended, and paper gummed on either side, overlapping the edges. This finishes the fish for the present; it must be left to dry gradually for a period of at least three weeks, more time being allowed if the weather is damp. Frequent examination must be made to prevent damage through the skin getting fly-blown, and mice or rats will spoil everything in a very short while if they get the chance of nibbling at your work, as up to this time no preservative has been applied.

"The tedious operations being over, the process of completion begins. If by any chance the skin should get fly-blown, which will be chiefly about the head, a few drops of turpentine poured into the eye-sockets will prevent much harm. When the skin is quite dry and hard, it is time to take out the sand and apply the preservative, for which I have used a compound of arsenic, corrosive sublimate, camphor, soft soap, and spirits of wine,—a deadly poison, in using which great care must be taken.

"Unstitch the fish to remove the sand, pull out the cardboard, and shake out the contents. Apply a thin layer of the preservative to the inside of the skin, painting the head carefully. Fill the fish lightly with tow, and sew it up again, inserting a strip of wood along the fish to hold wire supports when they are required. Insert the glass eye with a little cement, damp the paper off the fins, and refix them with gold-beater's skin; as they will most likely be split and ragged, trim the edges with sharp scissors. Now take the gummed paper off the fish by slightly damping it. Before the scales are perfectly dry, I apply some of the best copal varnish very

sparingly ; this I have found an excellent plan for preserving the natural hue. Do not varnish the scales on the belly of the fish yet, as it will require painting ; this must be done in a day or two with great care, for daubed fish look very unsightly. Here the practical knowledge of the angler comes in ; he knows the correct colours to employ, and we are all aware how evanescent are the beauties of freshly caught fish ; and these hues, however skilfully reproduced, are but a feeble imitation of Nature.

“I have seen some strange examples of colouring, though the specimen has been beautifully modelled. Brush marks should be avoided, and shading should be most carefully done. I find great difficulty in blending the various hues in proper graduation. When the paint is dry, apply one coating, or more, of copal varnish. The fish is then ready to case, and may be set up with grass, rockwork, &c., as required. The preparation of grass is interesting, as each blade must be carefully ironed and then painted ; the hot iron expels all moisture, and prevents the grass from shrivelling. A stock of grass should be prepared when it is in good condition, before the edges are frayed or withered, and a plentiful supply may be gathered in a very short while from the river’s bank.”

I think it advisable to write a few words on this subject, as I once saw a 3 lb. barbel honoured with a glass case ; its captor apparently thought he had a fish really worth “setting up,” having evidently been deceived by some waggish professional. Cases with curved glass fronts make the fish look much better than plain-fronted cases. A collection of different fish of one’s own catching is most interesting, recalling the place and circumstances of each capture.

Coarse
fish
worth
“setting
up”

Ideas vary as to what fish (and their sizes) may be worthy of preservation ; but the list of weights given is, I think, a fair one.

Chub . . . 4 lbs. or over.

Pike15 ,, ,, From most of our rivers, lakes
or ponds.

Pike ...	25	lbs. or over.	From the Irish lakes.
Perch ...	2 $\frac{1}{2}$	„ „	
Carp ...	6	„ „	This is perhaps a low weight for specimen size.
Barbel..	7	„ „	
Tench ..	3	„ „	
Roach..	1 $\frac{3}{4}$	„ „	
Bream..	4 $\frac{1}{2}$	„ „	
Rudd ...	1 $\frac{3}{4}$	„ „	
Dace ...	14	oz. „	This is a rare weight, but it is no use setting up dace unless they are really fine specimens.

Amongst game fish, the following weights may be taken as worthy of preservation :—

Salmon—30 lbs. or over. These should be cast ; the skins are too oily to last well when stuffed.

Lake, or Thames, Trout—6 lbs. or over. Trout from other rivers, 3 lbs. or over, or perhaps a little less, according to river.

Grayling—2 $\frac{1}{4}$ lbs. or over.

I can personally recommend Messrs. Cooper and Sons, of 28 Radnor Street, St. Luke's, E.C., as excellent taxidermists ; they have set up over a dozen trout for me besides other fish, and their charges are reasonable.

It is very important that fish should be sent to the taxidermist as soon as possible after they are caught ; wrap them in newspaper, covering every part, including the fins, to keep the air away. Newspaper slightly adheres to the fish, while oiled paper does not, and the slight adherence is an advantage. Press the paper on the fish in single sheets, and keep it on ; do not expose any specimen to the air more than can possibly be helped. Cooper himself recommends newspaper, and I have used it with all my fish with satisfactory results. Tissue paper is too flimsy, and is difficult to get off again, as it sticks too closely. Never, on any account, wrap fish intended for preservation in grass ; grass heats and stains, and also dents the skin and scales. If the fish has to be sent by rail, it should be laid on dry straw in a roomy box, with plenty of paper below and around the fish. Keep the fish straight, and take especial care that the skin is

neither creased nor rubbed. Care should be taken from the very outset with fish intended for preservation; when in the landing-net, they should not be deposited on a dusty path or road, and string should not be tightly tied round them, for it scores the fish and rubs the scales.

It is most annoying to have fish spoiled, and I have therefore given a few hints that I know from practical experience are serviceable.

Gentles are the larvæ of flies. The best gentles for angling purposes are bred from liver or rump-steak. Hang a large lump of liver in some **Gentles** sunny place; in hot weather the blow-flies will soon visit it, and it will be alive with maggots in a few days. A large dry earthenware pan, half filled with bran, should be placed below the liver; any gentles dropping from the liver will fall into this, a few small lumps of liver being placed in the bran till final "scouring" is necessary, when the gentles may be kept in sand or bran. It is a nasty process altogether, and it is often better to get the gentles direct from the tackle-dealers. I surround both pan and liver with fine wire netting, and keep the liver and gentles away from animals and birds. Before gentles are scoured they are black inside, and a black, unscoured gentle is an excellent bait for bleak. Gentles may be kept for a long period by depositing the liver in a box and burying it: see that there is no crevice through which they can escape, as they force themselves through a very small hole, even through the perforations in the lid of a bait-box. Carter and Co., of 137 St. John Street Road, Islington, and Peek and Son, of Gray's Inn Road, will always forward gentles on receipt of a remittance; and they keep a stock through the winter. The dirt in pigeons' nests is sometimes full of gentles. The warmth of the sitting birds is most favourable to the growth of the maggots; and with the help of a pair of tongs a small handful of gentles may be shaken out of a single nest in hot weather, when the birds bring off their young. I need hardly say these gentles are very strongly scented, and they are yellow in hue. Gentles should be kept in sand or sawdust when in the bait-box; damping the sand slightly will keep them from assuming the

cnrysalis form for some time, but too much damp will make them flabby. A gentle in good "form" is tough, and wriggles; and bleak and roach take the live gentle with avidity when they entirely refuse dead ones. Gentles stiffen and turn straw colour when they are about to assume the chrysalis form, afterwards changing to a deep brown or reddish hue. A chrysalis on the shank of a hook, with a gentle on its point, will sometimes tempt roach when they refuse the gentle ungarnished.

Fishing with two rods at the same time cannot be recommended from a sportsmanlike point of view; and, except when carp-fishing, I never employ more than one rod at once. When roach-ing, it is advisable to have a jack-rod at hand, in case you get worried by roach being seized by some hungry or spiteful pike. Even then, drop your livebait in, and try for a few moments only; for if the struggling bait be left in the swim, it will possibly scare the roach away. Some anglers like to use two rods; "it gives them something to do!" Well, it certainly may, as regards fitting up tackle and providing extra weight to carry about; but two rods will not make the fish feed better, and if they are "on," a second rod is not wanted, and only causes confusion, fish being lost, rather than gained. Two rods at once rather savour of fishing for the pot, not for sport. The use of two rods at once on the weirs under the control of the Thames Conservancy is *illegal*.

A handy bag can be made from plain sailcloth, it will only cost about half-a-crown, and will carry a thirty-pound fish with ease. A yard of sailcloth, twenty-four inches wide, should be hemmed at the edges to prevent fraying. Next, insert brass eyelets along the edges of the canyas about five inches apart, and opposite each other. The bag, with fish in it, can be lashed with stout string to a stick or the gaff-handle when you have done fishing, stretching the ends of the bag tightly out, thus keeping the bag and fish straight. The stick or gaff is grasped over the middle of the bag, the string being lapped over the stick and passed through the eyelets from one end to the other. The ends can be

tied up or left open, as required ; or a short length of the bag can be used for small fish, roach, dace, perch, &c. This bag is of little weight ; it can be rolled up, and takes up very little room in the creel. It can be scrubbed and soaked when it requires cleansing, and will last for years. For long fish, such as pike, Thames trout, or barbel, this bag is most useful.

As a preservative from moth, there is nothing to equal the albo-carbon sold by most gasfitters. The smell is pungent, but not unpleasant. The cubes should be placed wherever clothes or feathers are kept ; a few, sewn in muslin bags, suspended in wardrobes, will effectually keep moth away. The carbon may be finely grated amongst flies or feathers. It evaporates very slowly, and costs but a few pence the pound.

To pre-
vent
moth

The running line should always be carefully dried after use. Uncoil it from the winch on the table ; or a "spreader," as sold by most tackle-dealers, may be used. A greased line should have the greasy rag run over it as it is wound again on the winch. Test the ends of line occasionally ; the length that touches the water most is liable to get rotten ; and when this is noticed, a few yards must be broken off, until the sound part of the line is reached. The late J. P. Wheeldon, one of the best anglers who ever lived, was most careful in drying his lines ; many times, when he stayed at Weybridge, I called on him, and generally found a neatly coiled line on the table or sideboard.

Drying
line

LINE DRIER.

Some of the provisions of the Thames Fishery Bye-Laws are most important to anglers ; and the following should be specially noted.

No. 5. No rod and line shall be used except when fished with either a natural or artificial bait in a proper manner, and no person shall fish with more than two rods and lines at the same time.
Thames Fishery Bye-Laws, 1893 No. 6. No person shall allow any rod and line, or line to which any bait or hook, natural or artificial, is attached, to be drawn or trailed from any vessel on the River Thames.

No. 7. No person shall fish for pike with any device or tackle that does not admit of the pike taken therewith being returned to the water without any serious injury.

(Gorge-fishing is thus prohibited.)

Anglers should also note :

Nets Minnow nets of greater diameter than three feet in any part of the net are prohibited.

No landing-net shall be used with a greater diameter than two feet, and a greater length than three feet from the ring and the end of the net, nor with a mesh of less than one inch from knot to knot, such measurements to be made when the net is wet.

No casting or bait-net must exceed twenty feet in circumference, nor have a mesh of less than one-half inch from knot to knot.

Anglers may only use a minnow-net, a landing-net, and a hand or well-net.

Minnow-nets may only be used for the purpose of providing minnows for bait, to be used for angling *in the River Thames*.

A casting or bait-net may only be used by assistant river-keepers in obtaining bait, to be used by persons for angling *in the River Thames*.

Specially note the words marked in italics; it is illegal to take baits from the Thames for use in other waters.

Bye-law No. 10, which refers to this, is continually evaded; and it is a scandalous shame that good stock-fish should be taken in thousands from the Thames for angling in other waters.

No. 11 prohibits night-hooks, night-lines, and fixed hooks or lines above London Bridge; so any one who wishes to set night-lines must betake himself to Barking Creek or similar savoury neighbourhood.

Snatching, foul-hooking, or snaring fish is prohibited.

The close season for trout is from the 11th of September to the 31st of March following, both days inclusive.

For lamperns, 1st of April to 24th August, inclusive.

For all coarse fish, 15th of March to 15th of June, inclusive, except roach, dace, gudgeon, bleak, and minnows taken as bait for trout.

No. 25. No person shall fish for, take, or attempt to take by any means whatever in that part of the River Thames as lies above the City Stone at Staines, nor from any vessel in that part of the River Thames as lies between the City Stone and London Bridge, any fish between the expiration of the first hour after sunset and the last hour before sunrise.

Night-fishing is therefore illegal above the City Stone at Staines, or in "vessels," *i.e.*, punts, boats, &c., below it. Anglers may fish at any hour of the day or night below the City Stone *from the bank*.

The sizes for the most important of Thames fish are as follows :—

Pike or Jack.		Extreme length, 18 inches.		
Perch	 "	"	8	"
Chub	 "	"	10	"
Roach	 "	"	7	"
Dace	 "	"	6	"
Barbel	 "	"	16	"
Trout	 "	"	16	"
Grayling	 "	"	12	"
Bream	 "	"	10	"
Carp	 "	"	10	"
Tench	 "	"	8	"
Rudd	 "	"	6	"
Gudgeon	 "	"	4	"

These sizes do not apply to baits ; but no person may have in his possession or under his control more than fifty baits at one time, or take more than fifty on any day.

Pith, the spinal cord of the bullock, is the best winter bait for chub-fishing. Considerable care must be taken in its preparation. The outer skin must be snipped

off the pith with scissors ; all the streaks of blood must be washed away ; and it is a good plan to scald the pith in boiling milk. The interior, or core, is too soft to stop on a hook or triangle by itself, so part of the skin must be left on to afford a hold. The point and barb must be run right through this skin, or else fish may be missed in striking, or a single strip of pith may be threaded on a hook. The brains are used simply as an attraction to the fish, and not as food for them. Scald the brains, a good quantity for a day's baiting. The brains are cut or squeezed up, and mixed with water in a tin or a large wide-mouthed bottle ; the whitish fluid is poured in the swim, and the hook, baited with pith, travels down with, or immediately after, it. The fish seize the pith greedily, the tempting morsel generally being irresistible after the white particles of brain have passed by. If chub refuse pith you may conclude they are not on the feed.

Pith and brains I follow the same system when baiting for chub with cheese, pouring a little cheesy water into the swim. So gluttonous are chub for cheese, that **Other baits for chub** it is not uncommon to find them disgorge a considerable quantity when they are caught. Cheese passes through the fish with great quickness, the white fluid running from the vent ; though in the beginning of the fishing season, the milt of a late fish may be mistaken for it. In the early season they frequently throw up lumps of semi-digested weed ; so a large lump of green weed might prove a killing bait. If chub are kept in a punt-well for any length of time, when Thames fishing in the cherry season, the number of cherry stones they will void or throw up is astonishing.

As an aid and a comfort in angling, I most strongly advise winding the winch with the left hand. **Left hand on winch** All beginners should commence in this way, avoiding a bad habit from the outset. I do not claim the idea as original, but I entirely uphold its advantages, though I used the right hand on the winch for years and years before altering my style. Fish should be played on the rod chiefly, and the more powerful and practised hand should have control of the rod. We nearly all use the

right hand in preference to the left, and that hand (the right) generally does all the throwing or casting, thus instinctively knowing the weight of the rod and appreciating what strain is being exerted on the tackle and fish. Why, then, when playing a fish, from salmon to roach, is the rod so frequently shifted to the left hand? I cannot but think many good fish are lost in this way; to begin with, there is the change of hand at the very commencement of the struggle in the first rush, which may cause a hitch or undue slackness of line; whereas if the rod has not changed hands, winding in begins, or you are perfectly ready for action the instant the fish is struck. The right hand feels the action of the rod beautifully; being right-handed, I do not pick up a new rod with the left hand to try it, but appreciate its action by the natural touch of the more powerful hand. Friends with whom I have discussed the matter say they have wound the winch so long with the right hand that they do not like to change to a new method, and that it would take so long to learn. I found it took a very short time, and advise all anglers who wind with the right hand to practise the other way with just a winch and rod-butt; this can be done in a room, and it is astonishing how soon the habit is acquired. Sheffield roach-fishers use the left hand for the winch to a very great extent; I have only met one Thames angler who does so, but he is one of the most skilled fishermen I know, and always speaks well of the method. A friend, to please me, gave the left hand a trial on the winch; he now declares he would not return to the old habit on any account; and I am pleased to have made one, if not more, thoroughly satisfied convert. Others, who do not care to alter, agree that the left hand on the winch is theoretically correct, and I can assure them it is practically so as well. An alteration of the line-guard is necessary in some winches, as turning the winch handles from the right-side of the rod to the left presents the winch lower side uppermost. I use the left hand for the winch in all styles of angling, spinning, fly-fishing, floating, &c., and unhesitatingly say it is the right thing to do, and that the angler derives benefit and comfort from it when he has mastered the very slight difficulty that is sometimes experienced at first. Half an hour's practice of winding with the left hand will do

away with nearly all awkwardness, and, with a little further practice, the left hand will wind as fast as the right. As an illustration of this, I may say I have killed all my Thames trout by winding with the left hand, and a quicker fish does not swim. For manipulating the winch in chub-fishing, the left-hand system of winding is invaluable; indeed, all fish are struck and in play instantly, but the chief benefit is that the rod is managed by the right hand without change, and that the fish is played on the rod, and not by, to a great extent, the touch on the winch. I am speaking from experience, having tried both ways; and I think the method only wants suggesting for many anglers to try it, and, after trying, follow it. Let the fly-fisher for trout try it, using a winch with a large barrel, and he will soon find the advantage.

This is such a stumbling-block to many anglers that I think a few words on the subject may be acceptable. Many anglers seem quite afraid of it, and will not attempt what they think to be so difficult. It is, like all other things pertaining to casting, simply a question of a little patience and practice. For successful angling, there is nothing to equal it; it is useful for all the varied systems of coarse fishing, particularly in spinning, livebaiting, and float-fishing in far-off swims.

Like other actions, difficult at first, ease comes with practice, helped at first by a little teaching. A serviceable Nottingham winch can nowadays be bought for very little money; for very long and fancy throwing, an expensive winch, costing perhaps twenty-five or thirty shillings, or even more, is advisable. But, in my opinion, fish are caught more by carefully made casts and proper working of the bait than by mere long throwing. It is true that reaching a certain spot a great distance away frequently means getting a fish, if not several; but by using a fast-running winch, the dangerous habit of coiling line on the bank or in the hand is entirely done away with.

With a properly made throw, the line is always in a fit state for use; there is no slack line, and no bits of stick, rushes, &c., are entangled anywhere; you can throw and fish while standing up to the waist in rushes, being thus enabled to reach many most favourable spots which

would otherwise have to be left alone. The chief difficulty to be overcome is the control of the free-running powers of the winch, effected by properly checking the winch as the line runs out. If the winch be allowed to run at its own free will, after the impelling force has been imparted to the tackle and bait, it will over-run. The line will then loosen on the barrel, or tangle in the most

Photo by H. P. Bassett, Weybridge.

LIGHT SPINNING. HANDS ON ROD AND WINCH.

desperate way on the winch; a check is given, and, if this be at all heavy, the line generally snaps. Now, to prevent all this unpleasantness, a very slight pressure must be applied by the fingers to the revolving part of the winch, using one or more of the right or left hand. I wind with the left hand, and, in making the throw, draw the bait up to a convenient distance from the rod top, judging the length from which the throw can most easily be made according to surroundings and tackle. Grasp

the rod above the winch with the right hand when throwing from right to left; and when throwing from left to right, the left hand should be uppermost. By a change of position, however, I can nearly always, save in a few situations, throw with the right hand above the winch, which gives me more power. At the commencement of the throw, bring the point of the rod well back, seeing that the bait swings steadily, and clear of the ground. When the bait has reached its most backward point, throw it forwards with a long, steady sweep, not allowing the winch to revolve until the impetus is given. The first or second finger of the left hand which grasps the rod below the winch, should gently touch the revolving edge of the winch as the bait flies out, quite enough to prevent any entanglement of the line without interfering with the run of it. When the bait has reached its destination, the pressure of the finger is increased, and, with this increased pressure, I lower the rod-top slightly. The winch is then stopped entirely; the whole tackle is ready for an instant strike, or for winding in; and a spinning-bait can be made to revolve directly it is in the water. The pressure of the finger should be continuous, but only the very gentlest touch is required (in light throwing) until the completion of the throw, when the winch has to be more decisively stopped, particularly if the line is running too far, or towards a dangerous spot. The winch can be controlled by the first or second finger of the left hand, or by the little finger of the right hand when the latter is above the winch, the stopping action being altered accordingly when the position of the hands is changed. On paper all this seems complicated, but it is not so; after practice, the action becomes almost instinctive. Do not use too much force in the throw when learning; longer distances will be reached when practice has made perfect. Practise for an hour on a lawn, or in a field, choosing a spot that is unobstructed in any way. Very likely, at first, you will find the bait fly in the most unexpected directions, or the line will hardly run at all; do not be discouraged, but persevere; after a time, you will throw with comfort and with your whole strength. The handles of the winch will rap your finger-nails smartly if you do not keep your grip on the rod steady, especially when using a heavy lead and

bait. When winding in, the novice should occasionally watch his line on the winch itself, and see that he does not wind in all on one side, or the line will "capsize" over itself, and a fearful tangle on the winch will be the result, which may cause the destruction of much line. When winding in, the running line should be passed between the first and second fingers of the hand that holds the rod, working the line backwards and forwards with the fingers, so that it is spread evenly on the winch. To wind in very quickly, let go the winch-handles, and spin the winch round by hitting the rim with the under-side of the fingers; this makes the winch revolve very rapidly. In throwing from right to left, the left foot should be nearest the water, and *vice versa*.

A single lesson, practically given, is a wonderful help; but if the angler will follow these directions, he will soon cast with comfort.

To bait a hook with a lobworm, threaded on the hook, dip the worm in gritty dust or sand, then insert the hook. The grit or dust gives a hold to the fingers; otherwise it is almost impossible to hold the worm.

One of the best ways of getting lobworms, as they are generally called, is to search for them at nights on lawns with the help of a lantern. If the ground be well watered, lobworms will appear in hundreds on a warm night, anchoring themselves in the ground by their tails. It is wonderful what a grip this tail has; a worm is easily broken if you pull too hard. When gathering worms, step quietly, or you will alarm most of them, when they will quickly withdraw themselves into their holes. Some hundreds are picked in a short while, I do not say easily, for I have so many remembrances of severe back-aches after "worm-hopping." Among plants, in strawberry beds, and in similar places, worms may be procured by driving a long kitchen poker into the earth and shaking it vigorously, the vibration causes the worms to ascend. (I say a *kitchen* poker, for a fine, bright steel poker is not improved by the process.) A spade, or fork, driven into the ground, and tapped or shaken, has an even better effect; after a short while, the worms come wriggling out in numbers. Ground that cannot be dug over will thus produce worms; however,

if I want lobs, I write to Theaker, 3 Broad Marsh, Nottingham, and I must say he has never failed me in punctuality or in the quality of the lobs sent. Lobs, when freshly picked off the grass, are of little use for angling; they are tender and partially filled with mould. Fill a tub or pan with damp moss pressed down, place the worms on the top of the moss, and they will crawl in and quickly scour themselves. They should be picked over carefully and the dead ones removed every two or three days, for a worm is no good unless it is "sweet." Worms breed and live well in rotten sacking, and damped flax waste is an excellent thing to scour them in.

Keeping the feet dry should carefully be attended to, especially by persons of sedentary habits. Stout boots, with a few nails in the soles and heels to prevent slipping, are all right for summer wear; but for winter use, or for walking in wet grass and damp situations, knee-boots afford great comfort, quite making up for their extra weight. Rubber boots entirely keep out damp, but they also keep in perspiration, so they should be felt-lined. An acquaintance, who fishes constantly, says that rubber boots give him neuralgia, while leather boots do not. Oilskins which will really keep out wet are indispensable for winter use. I prefer the short, shiny, black coats, but wear a sweater under the waistcoat to guard against chills from perspiration. A light, short coat, to loop up when wading, is useful for summer wear, but there is nothing like good seamen's "oilies" for bitter cold winter work. Nailed boots will cut a punt about terribly; wear felt- or rubber-soled shoes in summer, and rubber boots in winter. Neutral tints are most sportsmanlike in clothing, and it is a pity "oilies" are black or yellow only. I never sit on the ground when roaching; a small triangular camp-stool, with webbing, folding into a very small compass, is handy to carry, affords comfort, and may possibly save a serious illness. In legering and roach-fishing, a sitting position is almost compulsory. An "oily" should never be rolled up wet and left in that state, or it will soon rot; open the coat well to dry it, hanging it up on a stick through the arms, and opening it out well. With a short coat, waterproof trousers should

be worn, reaching over the tops of the knee-boots, but not much lower, or the wide ends get in the way of the feet. A "sou'wester," with flaps over the ears and the "tail" of it covering the back of the neck, should not be forgotten. All waterproof clothing is cumbersome, but there is no comfort in winter fishing without it, and I find the only things to keep the wet really out are these shiny waterproofs that run the water off. They must be strong and thick, as the wear is severe. Thick woollen mittens with a thumb are serviceable; they are easily slipped on or off. Do not neglect to wear thick woollen underclothing in winter, as it is the greatest protection from chills. A good thick "Harris" tweed makes excellent clothing for fishing, but hooks stick in it easily. I hear well of "Gabardine" as a material for angling attire.

As a modern bait, I can give my firm approval as to the attractiveness of this lure, made in several sizes by Carter and Co., 137 St. John Street Road, Islington. A "Wagtail" of the size for pike costs half-a-crown, and my opinion as to the bait's killing powers is so favourable that I place the "Wagtail" at the head of all artificial baits I have tried. It is only fair to state that I think the construction of the bait might be improved upon. I find the hooks are too brittle, and that the colour of the bait dulls rather quickly. A little attention to these matters is perhaps necessary. The bait is a peculiar one, resembling a lizard as much as a fish. Lead can be inserted between the strips of rubber composing the bait; soft lead wire, the best for this purpose, is supplied with the baits at a small additional cost. To keep the bait in better order, I sew up the sides, all down the leaded part, which considerably adds to its efficacy. I find the red-spotted "Wagtails" kill best. "Wagtail" is a good name for it, for the tails waggle freely, and the fans at the head of the bait make it spin well. In sewing up the sides of the bait, take care to leave the tails loose, adjusting the strips of rubber so that the tails are slightly apart. These tails are coloured bright red on the inner side. If the line twists at all when spinning in very fast water, the fans at the head of the bait can be reversed

The
"Wag-
tail"
spin-
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with a pair of pliers, bending the upper fan down and the lower one up. This makes the bait spin the reverse way, and soon takes any twists out of the line. If twists appear again, the fans must again be reversed; but this twisting seldom occurs if the swivels on the trace are in good order. The price of the bait is rather high, but there is considerable work in it. It kills bass and pollack, and I have used it with great success for pike, perch, and chub; I have also taken trout with it when spinning for perch. The best pike I have had with it went over 18½ lbs.; this was in the Hampshire Stour, and the "Wagtail" amply proved its value on three successive days; the pike were playing with livebait and not taking the natural spinning bait well, but they were greedy for the "Wagtail." The keeper, to whom I showed the bait, had a very poor opinion of it at first sight, but I think he changed his mind when he saw what it would do. I get more pike in the Thames with the "Wagtail" than with anything else; it may be new to them, and will perhaps not kill so well when they get used to it.

This is a "clip" tackle, patented by Messrs. Hardy, with fans to make the bait spin (see p. 129).
 The "Crocodile" spinner A gudgeon, bleak, dace, or other fish is inserted in the open tackle, which is then closed, driving the spikes into the bait, and a barbed, turned over point goes right through the bait, clipping in a notch in the other half of the tackle and fixing the bait most firmly, and doing away with the discomfort of hooks pulling out of the bait. The tackle is well armed with triangles, and I have used it with considerable success.

Spinning is the term given to the art of angling with a revolving bait. Swivels are necessary to prevent the line twisting, especially when spinning in fast water. The line is generally leaded above the swivels or at the bait itself. Drop-leads,¹ i.e., leads whose chief weight hangs below the line, greatly assist in keeping the line free of twists. The spinning action is imparted by curving the bait or by fans at its head.

¹ For illustration of drop-leads, see "Thames Troutng," p. 207.

Among coarse fish, pike, perch, and chub take a spinning bait, and very large barbel are occasionally caught with it when they are in the weirs after spawning. I know of a single instance in which a roach was caught with a spinning minnow, the fish being hooked fairly in the mouth. Do not go spinning for roach on the strength of this statement, as the occurrence is, from an angling point-of-view, little short of the marvellous.

It has often struck me that considerable improvement might be made in the colouring of rods, and that manufacturers should give attention to this Colour
of rods much more than they do, particularly in the long Lea roach-rods. These rods, when new, are most conspicuous, almost white, and highly varnished. Some of the shine wears off in use, but a dull green or brown rod would assimilate better with natural colours, especially when fishing under trees or bushes. For some time past, I have most of my rods coloured or stained green, and the matter of colouring is well worth considering. Why should we take such pains to fish with fine tackle for roach and then hold a glittering white rod directly over them? In clear and shallow water, this proceeding seems little short of absurd. The "flash" of a fly-rod in the sunlight is seen for a long distance; and I feel sure that trout that are much fished for are occasionally alarmed by the sweep of a highly varnished rod. As an experiment, I have fished with a fly-rod coloured light blue, and have done well with it. Hardy Brothers have made me some excellently stained split-cane rods of a dark green tint. I cannot specify the least visible colour, as this somewhat depends on the light and situation; but at any rate *glitter* should be avoided as much as possible, and for this reason I cannot see the use of silver-plated ferrules on a rod. Presentation rods are sometimes got up "regardless"; but if ever I am presented with a rod, I trust it will be a workmanlike article and not a toy. Some years ago I saw a letter (I think it was in the *Field*) which stated that a well-known and much fished-for trout was secured by an angler who was trying a rod, newly made, without varnish, and he attributed his success chiefly to the fact that no flash had been given by the rod.

Rod-rings I prefer round rings to the snake pattern for spinning rods; unless snake-rings are very carefully made and properly whipped on, the line catches where the rings join the rod. One badly made ring on a rod will give much trouble. The rings must be of hard metal, or silk lines will soon cut grooves in them. The topmost and lowest rings should be constructed to revolve; turn these rings occasionally, as they get the most friction. The wire surrounding these rings should clip them tightly (or there is incessant rattle), but not so tightly that the rings cannot be turned round. If you find grooves in the rings, send the rod to the makers, and have the rings renewed, for the grooves will soon spoil your line. Vaseline on spinning lines (undressed) saves a lot of friction, but it might possibly do harm to a dressed line by softening the enamel.

General rods Rods, so-called, are built with several tops of different patterns to suit different varieties of fish or fishing. To some extent, they are of service, though I do not admire them. A rod should be built for a certain style of fishing; much greater comfort and efficacy is attained by this. A short top, and a long top, particularly in pike and barbel rods, to alter from livebaiting or legering to spinning or floating (float fishing) will be found very useful, and it is on this account that pike-rods are generally sent out with two tops.

Gut casts and hook lengths The economy that suggests purchasing bad gut because it is cheap will nearly always prove a "penny wise and pound foolish" policy. A man will, without consideration, give the best price for rod, winch and line, but will sometimes take but little trouble to see that his cast is the very best; yet his whole tackle depends on the strength of the weakest strand or knot. Good gut is round and even, without flat ends or twists; and a little extra care in selection will amply repay itself. Gut should be well soaked in water before knotting; the thicker the gut, the longer the soaking. This soaking of thick gut is very important; and a fresh knot should be tested before use.

Condy's fluid as a gut stain is excellent for a brown tinge. A teaspoonful in half a tumbler of water is quite enough. Place the strands or casts **Staining gut** in this mixture; let it be tepid, not hot; and see that the whole of the gut is immersed, or only part of it will be stained. With less fluid and more water the stain will be lighter in colour, or this may easily be regulated by immersing the gut for a shorter or longer time. On taking the gut out of the tumbler, give it a slight shake, and let it dry before use.

Green baize, boiled, will give a concoction for a green stain; and Stephens' ink may be used for blue or black.

Cutch is good for staining creels, it gives a rich brown colour. This is something like pitch, and is, I believe, partly composed of oak-bark and leaves. Break the cutch into small pieces; **Staining creels** boil and stir it well, and pour the hot dye over the basket two or three times. Let the basket dry thoroughly hard before use, or a wet day will make the dye run, and this will damage clothing. No amount of boiling or soaking will take the dye out of cloth or woollen fabric. I once used a creel that had not thoroughly dried, when a heavy shower came on while I was fishing and covered a white sweater in the creel with great brown blotches, which have never washed out.

A small table-vice **Table-vice** is a very handy tool, being of great assistance when whipping hooks, &c. They are supplied with a hook at one side, which is a help to loop silk on when waxing it for tying.

TABLE-VICE.

Cobbler's wax is used for waxing silk for whipping Cob- hooks, splices, &c. It should always find a bler's place in the angler's basket, in case of break- wax ages. A small lump, wrapped in thin leather or kid and carried in a tin box, will last a long while. Do not carry it loose in the basket, for the heat of the sun will soften it, and it sticks to everything. To soften it, breathe on it before waxing the silk; its sticking powers will soon be apparent if you get it too soft. Hold the wax in the leather when waxing the silk.

This float and its use were described under chub-fishing; but as the float is exceptionally handy, Slider and so greatly assists the angler to kill his fish, float it deserves special description. Slider, or traveller, means that the float is not fixed firmly on the line, though it is on the line and shows bites correctly. It is rare to see this style of float used in the Thames or other south country rivers. The special benefits of a "slider" are: first, that very deep water is easily fished with a short rod; second, that a much better chance of hooking fish is given when the angler is compelled to use heavy tackle. I like a slider float to have at least a little cork on it, for the width of the cork, which will stand a slight drag on it, acts beneficially in helping to straighten out the line. A slider is fitted with two upright rings, the upper acting as a guide to the lower. After many experiments with home-made floats, I find it best to whip the upper ring on the cork, the ring resting on the greatest circumference of the cork. The wet line is better kept away from the cork, and does not stick or cling in any way to it. The upper ring is the larger of the two; the lower one should be just large enough to let the running line pass quite freely through it, and no larger. The reason of this is that only a very tiny "stop" will pass comfortably through the rod-rings, and unless one of the rings on the float be small, the stop will be pulled through it by the bullet, shot, or corking lead, and the benefit of the float will be lost. The lower ring should be the smaller, as the upper ring only guides the line to it, to get the drag of the weight right; if both rings be small, the float does not act so well, as there is more friction on the line and the weight cannot run

down so easily. Large floats, fixed on the line, drag considerably against the water when the angler strikes, and their weight is an obstacle to successful striking. With the slider, the line slips up through the float-rings on striking, and nearly all this drag is obviated. You thus strike almost dead on your fish, even if the float be thirty or more yards away. Again, in reeling in, the hook and shots are drawn up until the top shot rests under the lower ring of the float ; and much disturbance of the lower water, where your fish are feeding, is avoided. In shallow, gentle runs, the slider need not be employed ; but take care to use thin floats in these runs, and, in selecting quills, pick out the thin ones. Big floats, for use in turbulent, rough water, should have the quill sticking up well above the cork, as the float is then more easily seen. Fish caught in rough water are mostly large, and you need not fear they will fail to pull the float under ; from the very nature of the swim, too, a fish is compelled to feed boldly. The "stop" is a small piece of double gut, string, match, or similar substance, knotted on the line above the float. A small stop, of soft material, will pass through the rings of a chub- or barbel-rod, provided the rings on the rod are not ridiculously small, and can be wound down on the winch before throwing out, or in playing a fish to the rod-top ; thus, a deep swim can be fished with a short rod. The stop regulates the depth ; the weight on the line falling until the stop is checked in the float. I do not like a piece of rubber-band for a stop ; the line cuts into it, and the knot is most difficult to untie. A much better stop is made from a short fibre of Manila hemp ; or, in swims up to ten feet in depth, a piece of wax match makes an excellent stop, which, however, will not run through the rod-rings.

It is possible to judge somewhat as to the depth, except in very deep water. Millpools and weirpools are deceptive, and the depth may be either greater or less than is expected. South country anglers mostly use the plummet to determine the depth ; and in roach-fishing with a travelling bait it is generally very important that the bait should be almost on the bottom, and a great nicety of plumbing is necessary.

Plumbing the depth disturbs fish for a short while, as, to get the correct depth, the plummet must reach the bottom, and a certain amount of dragging must ensue, except when taking the depth immediately under the rod-top. To keep the bait on or near the bottom, a greater length of line between float and bait must be allowed in swift swims than in slow ones ; in perfectly still water the depth at a certain spot can be adjusted exactly. After hooking on the plummet set your float, slider or fixed, at what you judge the depth to be, or, with a slider float, take the first dip to gain a somewhat accurate idea of it. The plummet being dropped in the water, if the depth set is too shallow, the float will go under ; if too great a distance between float and hook has been allowed, the float will lie on the surface flat or—when your depth is very nearly the correct one—partially upright. By raising or lowering the float on the line until the top of the float rests just on the surface of the water, the length between float-top and plummet when the line is held taut will show the exact depth. To find the depth without a plummet, set the float at the supposed depth and let the tackle run down the swim. If it runs perfectly freely without bobbing in any way, you are fishing, it may be only a very short distance off the bottom ; but by deepening the line (from float to hook) till the float bobs or is dragged under, the depth can be pretty accurately obtained. When the float bobs in running down, slip it down the line somewhat until it travels along the swim steadily, you are then fishing at nearly the proper depth. An aid to finding the depth at a long distance is a cork with two passages for the line cut through it, the passages meeting in the shape of a V on its side, thus $\angle$, and the point of the V coming out at the side of the cork. Insert quills in the passage, the line then runs freely through. Pass the line through the upper tube, commencing at the top of the cork, then through the lower tube, the line coming out at the bottom of the cork. Tie a plummet on the end of the line, let the cork act for itself, and pitch the whole affair out to the spot to be sounded. The plummet and cork go to the bottom, slacken your line, and the cork rises to the surface in the most ludicrous way, popping up most unexpectedly. Tightening the line jams the float on it at the $\angle$, the

cork is automatically fixed on the line as long as the strain is kept up ; it cannot go below the surface, and it cannot get above it, and in winding in the cork stops at the place fixed by the depth until the strain is relaxed, when it will drop towards the plummet. The cork will not run on a gut cast, as the knots catch at the angle of the V, preventing the cork from rising properly. In a great pool, where the depth is difficult to judge, I have found this cork of much use to take different soundings, finding out with ease where the ledges of gravel lie. I believe this idea could be well worked out for roach-floats, as a small peg in the lower tube would fix the float on the line. In its present state the cork is not much good for actual angling, but it finds depths automatically and quickly.

Stewart tackle is used for worm-baiting. Three hooks are whipped on alternate sides of a gut strand, their distance apart being regulated by the size of the worm to be used. Hook the worm in the head, middle, and tail, without attempting to thread it on the hooks. When fish are feeding shyly, this tackle is effective, and I have heard it commended for roach-fishing with a lobworm.

Stewart
tackle

The rypeck is a pole, heavily shod with iron, that fixes the punt in the stream, two being usually employed, one at each end of the punt. It is sometimes no easy task to fix a rypeck in the bed of the river, it will go down easily for a certain distance, but to drive it in deep enough to hold the punt the pole requires "working." Drive it down as far as possible, then grasp the pole firmly and work the top of the pole in a circular direction ; this works out a hole for the rypeck-iron, and the shaft can then be driven further down. Keeping a foothold in the punt is the most difficult part of the operation. In swift streams the rypeck must be set at a considerable angle against the stream, or the pressure from the punt may shift it.

The
rypeck,
rypeck,
or
rypeck

This throw is very useful for short distances, when there is little weight to carry the line out. From the centre

of the rod pull down a long loop of line, holding this loop in the left hand. Bring the rod back, making the throw as usual ; when the line gets straight with the rod, let the loop go, keeping the left hand near the rod. If gently and quietly done, the line will run out through the rings, too much force will probably wind the loop over the rod, or tangle it in the rings, particularly if these be upright and unguarded.

Greaves can be obtained from tallow-chandlers and many oilmen. The cakes must be broken or chopped up and thoroughly well scalded or stewed before use. Take great care not to overbait with this, as it sickens fish quickly. A careful baiting will frequently give good sport with barbel and chub. English greaves are best.

Every angler who fishes much in the Thames should do his utmost to keep a punt of his own ; for, until he can manage a punt, find his swims, and, in short, do everything for himself, he has not realised the full delight of Thames angling. A punt, sufficiently good for angling purposes, is not very expensive ; at the close of the boating season, say, about October, or a little later in the year, a very good punt may be bought for £5, and once I bought a good mahogany punt for a friend for less money. An angler's punt need not be very spick and span, with mats and cushions, and a wonderful parasol to keep the sun off ; so long as she is sound, and has a good well, little more is required. Do not buy a punt without both seeing and trying her ; the novice should get some experienced friend to see how she travels, and whether she leaks ; also, whether the punt is stiff enough for the purpose, for a very light, low-sided punt is of little use to the angler for weir-work. There is such a pressure of water against the punt in some of the weir-runs, when "fixed up" for barbel-fishing, that only a stiff-built punt will stand the strain, particularly with two or more people in her. The well, and the water in it, stiffen and steady a punt considerably ; and a bargain should be made, when the punt is bought, for a well to be fitted, if it is not there already. Bar gratings are better than those simply pierced with

round holes, as it is of great importance that the baits in the well should have plenty of fresh, flowing water; and indeed, whenever possible, the punt should be left at night where she can get a little trickle of water through the well. Bleak die very quickly in stagnant punt-wells, especially in hot weather. I have three large gratings to my punt, one on each side of the well, and one in the centre, so there is a thorough flow of fresh water. Minnows should be kept in the perforated zinc interior of the bait-kettle, as they get through most gratings with ease. The top of the well should have holes cut in it, to give the baits light, and these holes should be large enough to slip bleak through, as it is frequently very troublesome to have the well open, or to raise the lid whenever a bait is caught. The lid should not be attached to the well by hinges, for these frequently break, rust away, or get twisted. Two flat pieces of iron should be screwed to the inner side of the lid, projecting an inch or more; these keep the well closed when the lid is locked down at the other end. All the well-fittings, including the padlock, should be strong, and the baits locked up when the punt is left at night; it is also advisable to lock the punt to a ringbolt or other secure fastening. Punts must be registered by their owners at the Thames Conservancy. Like sculling, punting is very easy, when you know how to do it; the novice should practise in some shallow place, where there is little or no current, and, particularly, not near the top of a weir. It is best to get some one who understands punting to go out with you, and give advice during your first few trials; if he will take a paddle to keep the punt somewhat straight, it will be of great assistance, for the novice generally spins the punt round and round in a way that puzzles him immensely, and not infrequently gets overboard by clinging instinctively to the pole when he has plunged it into the mud or soft ground. A paddle or spare pole should always be taken when learning to punt, or an accident may happen through losing the pole and getting in the way of a passing launch or barge, or over a weir.

It is difficult to get a really good pole, as "made" poles snap easily when heavy cross pressure is applied. Natural larch poles, grown on chalky soil, are the very best: a pole grown on chalky soil is tough and elastic,

and does not strip away in shreds so quickly as a pole grown on other soil. The pole should be of a weight the angler can easily manage, and should be fitted with a U-shaped iron ; the V shape picks up stones continually. Plain board treads are better than gratings in the angler's punt, for shot, plummets, and other small articles are continually falling through gratings, and causing annoyance ; moreover, hooks do not catch, to any extent, in board gratings. Mats are of little use ; they collect dirt and fragments of paste, bits of worms, groundbait, &c. A good mopping now and then is necessary to keep the punt clean and sweet : a day's chubbing with cheese scents everything on board that is touched, particularly the lines to the weights. These lines should be kept out of the way of rats, or they will be nibbled to pieces when they smell of cheese.

For roach-fishing, the punt is generally placed directly athwart the stream ; if the wind be down stream, considerable shelter is thus afforded to the float. For chubbing, the punt should be kept lengthwise in the stream, unless two anglers are fishing at once, that is, not taking swim and swim. In weir-fishing, also, the punt is usually kept end on to the stream ; and in very strong water she cannot be in any other position with safety. Most barbel-swims are fished with the punt parallel to the stream, particularly in leger-fishing. When two anglers are long-corking at the same time for chub, a broad swim should be selected, and they should keep as far apart as possible ; if they fish close together, they will only spoil each other's sport in winding in, striking, and playing fish. I prefer weights and ropes to rypecks, though rypecks must be used in some swims to keep the punt as steady as possible, particularly in roach-fishing or legering. My great objection to the use of the rypeck is the disturbance caused by jamming the iron in the bed of the river ; this is particularly fatal to sport when chub-fishing, and I therefore employ weights whenever possible. A weight at the head of the punt and one rypeck near the well will often keep the punt very steady when she is end on to the stream. For gudgeon-fishing two rypecks should be employed, as the disturbance of the gravel does good in this case. Four cleats of strong galvanised iron should be fixed near the ends of the punt, two on each side, a tight turn of the rope

is taken, and the rope jams on itself, but can be cast loose instantly by pulling the end back out of the grip of the cleat. Manila ropes of the best quality should be used ; they are finer and take up less room in the punt and last longer than cheap ropes. The colour is conspicuous when they are new, so I daub the last ten feet or so over with green or brown paint, and the ropes soon change their colour when they get a little mud and dirt well into them.

All anglers' punts should be fitted with rod-rests, one on each side. The rods lie on the rest and the well, and are kept above the feet when you are punting ; if they are allowed to lie flat in the punt, an accident is certain to occur sooner or later through stepping on them. Brass rod-rests are better than iron ones ; they bend if kicked, while the iron ones break short off. The novice will get very wet when learning to punt, particularly about the knees and arms ; and light waterproof leggings, reaching over the thigh, will save a lot of discomfort. The pole should be kept as much as possible on the leeward side in windy weather, as much of the wet then blows overboard and not into the punt. A straight-sided biscuit tin is a good bailer.

Punts should be re-varnished or painted, as the case may be, every year ; if neglected, they soon go to pieces. A punt that is carefully seen to will amply repay the expense, and her value is practically the same for very many years. Punts not intended for use in the winter season should be taken out of the water and housed, not left in the water, perhaps half full of dead leaves and water, to "perish" the varnish and get sodden.

The charge for passing a punt through a Thames lock is threepence, which includes the return journey if performed in the same day. Passing through the lowest lock on the Wey costs eighteenpence, but the punt is freed for several locks.

In chubbing, it frequently happens that the punt can be tied to the boughs, which avoids any little disturbance caused by dropping a weight, but the angler should take care not to shake the boughs more than can be helped.

If the angler wish to keep his rods in good condition, he must look after them. Rods should be dried with

a warm cloth after a wet day's fishing, and must not be placed before a fire to dry. Split-cane rods should have

Care of rods a rag greased with fat, not vaseline, lightly run over them. Rods should be tied lightly in

their bags when put away; if tied up tightly for any length of time the finer joints may warp. All rod-bags should have a loop of tape stitched on one end, and the rod should be hung by this loop on a nail or peg, and not be put away resting at an angle against a wall. Whippings that are frayed or rubbed should be renewed, and the rings should be examined to see if any grooves have been cut in them by the running line. Rod-rings made of soft metal are soon cut into by a silk line; when this happens, the line will not run so well. Spinning-rods, in particular, require attention in this respect. When putting tackle together, the rod-top should be the first joint taken from the bag, the other joint or joints keep the bag straight; and if the stronger joints are removed first, the drag of the bag may possibly snap a fine top. The top joint should first be fixed in the next joint and the butt last of all; this reduces the chance of breakage, the process being reversed when the rod is taken to pieces. Grasp the rod close to the joints when separating them; do not twist the joints with the hands far apart. Take great care to keep the ends free from grit or dirt. A joint that sticks hard should be allowed to dry thoroughly, or the metal socket may be gently heated over a spirit lamp if the pieces still refuse to separate; white paper tightly pressed on the metal will save much discolouration.

Wind from the south or west, or from intermediate **Weather** points, is the best for sport; it is, only on rare **favour-** occasions that I have done much good when the **able to** wind is easterly, excepting with that puzzling **sport** fish, a Thames trout. I like blustery weather for pike-fishing, and still, quiet weather for roaching, though I have had excellent sport with roach in howling gales of wind, choosing the most sheltered spots, and fishing with heavy tackle and a short rod. A good heavy push of water often produces good sport in the Thames, particularly when the stream has been low for some time. For chubbing, I like the water as clear and low as possible.

It is most satisfactory to notice that many of the angling clubs are ceasing to give prizes for gross weights of fish, and, where they give prizes at all, only award them for specimen fish of good size. Gross weight fishing greatly tends to deplete the stock of fish in any water ; when the practice is indulged in, the competitors keep every fish that is sizeable in order that the weight may tell up. A. knows that B. has taken a certain weight of fish, and that a dozen or so of fish will exceed that weight, so every fish is kept for weighing-in purposes. With competitions for specimen fish only, hundreds of good stock-fish would be returned to the water, for if A. has taken a two-pound roach B. knows that his pound fish will not beat it. Very great harm has been done to our public waters by gross weight competitions, and the better class of anglers recognises this fact.

Prizes
for
gross
weight

SCALE HALF SIZE.

"HAMPSHIRE" FISHING KNIFE.

If the angler carries a creel in preference to a bag, it is best to have a large one, the slight extra weight being amply made up for by the room for fish and tackle. A small creel is all very well when sport is poor, but a large basket comes in handy if you get amongst bream or barbel when

Creel
and
sundries

roach-fishing, though a bag is still better for these large fish. I have given instructions for making a cheap but useful bag (p. 224). A few useful sundries that should be carried in the basket are : a disgorger, measuring-tape, a knife, steel-yard or spring-balance, thread, cobbler's wax, float-caps, split and drilled shot, a few swivels, two or three plummets of different patterns, bullets and leads of various kinds, a pair of scissors, and a cloth to wipe the hands on after handling fish, particularly bream. All these are in frequent use, and there are many others too numerous to mention. Many roach-fishers carry a square-sided basket, which serves as a seat.

Wasp-grubs are most killing baits for many coarse fish, but they are of an uncommonly "squashy" nature, far worse in this respect than gentles.

A very sharp-pointed hook, fine in the wire, should be used with this bait. A slight baking, or steaming (*not* boiling) will toughen the skins considerably. Bream, roach and chub are excessively fond of wasp-grubs. Taking a wasp's nest is rather exciting, a sting being excruciating to most people. Wasps generally make their nests in the banks of ditches, and the nest may be taken by placing a lighted portfire in the hole after dusk, and covering the hole with a lump of clay or turf after the portfire is inserted, which must be smartly and quickly done. The comb, full of grubs, should be dug out next morning ; any wasps that remain alive are stupid with the fumes, but stray ones, that have not entered the nest, may possibly make things lively. The "cakes" of grubs may be bought from several tackle-dealers, and this is certainly a nicer and safer plan.

A method that gives sport with dace, chub, trout, and sometimes roach, is to fish with a blow-line, with a long, stiff rod, and the wind of course at your back. The line is made of very lightly spun, fibrous silk, carried out by the wind, and a natural fly is daped on the surface of the water. The rod is held in an upright position to keep the blow-line off the water. A short, fine cast should be used, with a grasshopper, bluebottle, mayfly, or similar bait.

The Lower Thames may be defined as that part of the river between the City Stone at Staines and Teddington, or Richmond, Lock. This stretch of the river produces far better sport in the late autumn, winter, and spring, than in the summer; in summer, the river is incessantly disturbed by boats and launches, though the launches seldom interfere with fishing in the backwaters. Staines Bridge is a short distance below the City Stone, Bell Weir is above it. This weir is a magnificent one for all sorts of fish, particularly trout and barbel; but it wants a lot of knowing, the bottom is so foul. The nearest stations are Staines and Egham. There is a good place for barbel-fishing from the concrete steps just above the lock, but anglers must have a weir-pass to enable them to fish this spot. Below the weir, nearly to Staines Bridge, is excellent chub- and barbel-water. Immediately below the bridge there is a good roach-swim, which must be fished from a punt. Hone is one of the best Staines fishermen. All the water from Staines to Penton Hook is good for barbel, but it is much disturbed by launches. Some distance below Staines there is a fine shallow for fly-fishing; and on the towing-path side, there is an excellent swim for roach-fishing in the winter when the water is high and coloured. The spot may be known by a small house on the opposite side of the river, which has a large fish as a weather-cock, and is called the Half-way House. The swim is sandy and shallow; bread-crust is particularly killing in this spot, fishing close to the bank. Penton Hook is one of the best fishing stations on the lower river; swims of every description abound, deeps, shallows, eddies and still water afford swims to suit every sort of fish and fishing. Just below the first, or upper, pile above the lock, there is a very deep eddy; this may be legered with ease from a punt tied in a steady position to the first or second pile. The hole alongside the camp-sheathing on the left-hand side of the river (looking down stream) is very deep, and may be fished beautifully with a long roach-rod. Just below the little footbridge that crosses the overflow, which is dry when the river is low, the river-bed sinks rapidly, and the current is consequently very strong, being most difficult

Notes
on the
Lower
Thames

Staines

Penton
Hook

to stem in a punt or boat when there is any push of water. There is a great eddy here, easily fished from the bank. The Abbey River runs out of the Hook ; the fishing is private, part of the water being fished by the members of the Chertsey Town Angling Association, the view in the meadows being intensely beautiful. There is good fly-water in many parts of the Hook, and a splendid barbel-swim is to be found at the camp-sheathing at the lower end of the overflow. The lower end of the Hook has the swiftest stream of all the Lower Thames, and the very greatest care should be taken when descending the river, for the stream simply boils over the shallows, which are studded in places with stones. Boats coming down are frequently stranded so hard in mid-stream that much difficulty is experienced in getting them afloat again. There are plenty of good dace-swims in this part of the river, particularly when the boats are absent ; and many a large Thames trout has been secured by those who know the water. There is a deep hole where the lock-cut joins the river and another below the lock on the towing-path side.¹ All the water from Penton Hook to Laleham affords good winter fishing, and the Harrises generally find sport for their customers. There is a good shallow for dace-fishing with the fly at Laleham, just by the ferry. The rush-beds, below the ferry, afford good shelter to jack and perch, all the way to Chertsey Lock. The water here is good for chubbing in mid-stream during the autumn. Chertsey Weir should be approached with great care, as there is a tremendous suck of water at the upper end. A fatal accident occurred in 1895, a punt being sucked over by the stream and smashed to pieces. The remnants, lying on the lock bank formed a striking object lesson of the power of the water, and doubtless taught many rash boating parties to be a little more careful. Chertsey Weir is good for all sorts of fish ; green weed kills roach in the early season, and the boys wade along the shallow part of the fall and fish in the rough water, hooking the weed off the stones. I can recommend Lotan Hackett as a very good fisherman ; I had also many a trout-bait from old Purss, who is now dead. There is a nice swim for roach

There is no weir at Penton Hook.

and perch just below the bridge on the Surrey side for winter fishing when the water is thick. Bank-swims of all sorts abound between Chertsey and Shepperton Lock, and fair sport is to be had by spinning for jack when the water is low. There are also some good punt swims for chub and barbel. A brace of good carp were taken from the water above Shepperton Lock in 1896, both by bank anglers. There is an overflow of the Thames into the Bourne just below Haslett's cottage, which is much fished; but I understand that anglers are trespassing and are liable to be ordered off. Fishing from any part of the towing-path, at any time of day or night, below the City Stone, is entirely free, but not more than two rods may be used. There are two weirs at Shepperton, and they are both fished terribly hard. ^{Shepperton} Between the two weirs are Ham Haw, or Hard, Deeps (the Bourne enters the river here); then come Halliday's Hole and the waste water from the River Wey; then the mouth of the Wey. Both Ham Haw and Halliday's Hole contain bream, but the fish are most uncertain feeders. The lower weir at Shepperton is very deep, and has a great rush of water when the gates are up; the bottom is also very foul in places, full of great concrete blocks. As, moreover, some barges were lately sunk in the weir by the Thames Conservancy, anglers who try legering there may expect to lose much tackle. The Wey joins the Thames close to the weir, the two streams forming a tremendous eddy when the water is high. Curr, Poulter, House, and Haslett, are the fishermen near Shepperton Weirs, Haslett's cottage lying some little distance upstream, adjoining Harrod's Grazing and Fruit Farm. The water from Shepperton to the waterworks at Walton affords good sport with chub and barbel, but requires a punt to fish it properly. Edward and George Rosewell and Purdue are the Shepperton fishermen. "Lindsay's lawn" is a lovely sweep of the greenest grass imaginable, sloping down to the river side, most beautifully kept; there is a small backwater at Shepperton, full of springs, very clear indeed, and very cold. Although the water is cold, I have caught nice roach in the backwater. There is a great "deep" at Halliford, where I have had good sport with barbel and chub, long-corking in fifteen feet of water, or

more. Below Walton bridge is the Sale, a weedy back-water, which should contain tench ; the perch there are

Walton numerous once more, for the weeds and roots were festooned with spawn this year (1897). Walton Deeps were once famous for bream, but little has been done there of late years ; the steam-launch traffic may possibly account for this. The water certainly looks like containing pike, and I think a livebait, floated deep, in the winter, should find a good fish or two. There is a small overflow between Walton and Sunbury, which often holds a good trout early in the season. To fish it properly, a punt must be used. There is a great deal of bank-fishing done between Walton and Sunbury, but I have not seen any very favourable results. Sunbury Weir is an excellent one for bream and barbel, for barbel particularly in the early season ; fine fish are usually caught there on the opening day. The weir also holds trout, but is difficult to fish owing to the boulders and other obstructions ; it is no easy task to land fish from the weir platform, as they have to be taken to either end. The fishermen are Stroud and Clarke. There is good barbel-water between the lock and the waterworks,

which should be fished from a punt. Hampton
ton Deeps are a short distance above the church, and splendid catches of bream have been made in these deeps ; a punt is necessary to get over the deep water. The water between Hampton and Molesey Weirs contains perch and pike, and there are good roach-swims at Tagg's Island (where a small charge is made for fishing) the long roach-rods being of service. The upper weir often holds trout, and there are barbel just above and below the lower weir ; the angler should fish on the left side of the river, looking downstream, out of the way of the traffic. Sailing, as well as sculling, boats cause much disturbance in all the Hampton water. The big weir holds some of the finest fish in the Thames, particularly trout ; but it is difficult to fish, owing to stumps and other obstructions, and is perhaps more fished than any other weir on the Thames. Very large barbel and chub frequently take the livebait in this weir during the trout season, and it requires some " nerve " to return them. Milbourne and Jack Smith are the fishermen. As Hampton Court station is so near the river, the weir is a favourite one

with many anglers. The great pool below the bridge, where the Mole joins the Thames, nearly always holds big trout till the boating traffic drives them upstream. The Water Gallery, near the Palace, is also good for trout. I have seen chub taken in the winter between Hampton Court and Thames Ditton by bank-anglers running the float downstream and following it, throwing in a little groundbait now and again. The Thames Ditton and Kingston waters give best sport in the winter, there is too much traffic in the summer months; the roach- and bream-fishing is good, the deep water admirably suiting bream. The bream-fishing is best in the very early morning, before the mist has left the water, and before the boat traffic begins. There are several fishermen at Kingston; I can recommend Knight. Dace-fishing is good along the Esplanade at Surbiton, **Kingston** but bank-angling is not allowed from the Esplanade. Many years ago, when the sewer joined the Thames below the railway-bridge at Kingston, the bank-anglers made great catches of roach in the thickened water. There are many bank-swims worth trying between Kingston and Teddington, and fine carp **Teddington** are sometimes taken in the Teddington water. Dace and roach are caught in thousands in the tidal water below the weir; and, in mild seasons, good catches of bream are made in February when the tide suits. Dace-fishing in the shallows, when the tide is low, may be practised with much success, though I cannot say whether the new weir at Richmond has made any alteration in the fishing. It is best to wade when dace-fishing, and I seldom use more than one fly in the Richmond waters; care must also be taken not **Richmond** to get into the deep ballast-holes. A fly, tipped with a gentle, often kills plenty of roach just when the flood tide begins. There are many good fishermen at Richmond, and they may be found at the bridge by any one who wants a few hours' fishing, but it is advisable to arrange terms before you start. The punts at Richmond are very large, with high sides to stand the wash from the steamers. The supply of roach and dace seems inexhaustible; but, as a rule, they do not run very large.

I have given only rough outlines of the fishing in the

Lower Thames, as a full description would require a volume;¹ but what I have said may be of use to those who want fishing near London.

As the Lower Thames is much fished, the fish are correspondingly wary; roach-fishing in the winter, when the water is thick, is often very good indeed, though pound-and-a-half fish are nowadays getting scarce. Experience gained on the Thames pays uncommonly well in waters that are little fished; and a good Thames angler will generally hold his own anywhere.

The fact that swans destroy fish-spawn is distressing to Thames anglers. For such as are inclined to doubt that swans do harm to spawn, the following extracts from the minutes of the Thames Angling Preservation Society's register should set that question at rest.

Swans
and fish
spawn

A copy of a letter signed by the late Frank T. Buckland, the late Stephen Ponder, and others,² appears in the minutes of the T.A.P.S., which letter was in the *Field*; it is entitled "The Destruction of Fish Spawn by Swans."

Amongst other remarks on the subject, the letter states: "At a period when the attention of most persons is drawn to the best means of preserving our piscatorial resources, it becomes indeed a serious matter to reflect that we are permitting a swarm of feathered otters to baffle all our exertions and check the fruition of our wishes in the very nursery from which success alone can arise. Nor is it upon the spawning beds only that we should look for facts condemnatory of the habits of these birds, as they may likewise be seen stripping the overhanging and submerged branches of the trees of the spawn of the perch, their heads ever and anon appearing above the water with their prey hanging in gelatinous streaks from either side of their bills. So greedy indeed are they over their feast that they will almost show fight if disturbed, and it requires the aid of a punt pole and no little perseverance to drive them away even for a while."

Further on the letter states: "Perhaps it may be asked whether those who thus complain of their numbers would kill so beautiful a bird? Certainly not—but I would

¹ The Lower Thames will be dealt with at length in a later volume of the Library.—ED.

² For the Sub-Committee of the T.A.P.S.

take them from where they are unprofitably numerous and place them where they would be welcomed. . . . Miles and miles of canals exist where from the growth of weeds navigation has almost ceased, upon which they would prove of important service."

The Editor of the *Field*, commenting upon this letter, remarks: "We can entirely bear out the truth of our correspondent's observations regarding the mischief done by the swans. At this time of the year (that is, May) one pair of swans will probably devour a good load of spawn of perch, jack, roach, and other fish, in less than a month. We once remember seeing the entire year's produce of the river almost from Marlow to Cookham destroyed by swans. A swan can and does easily devour the spawn of from twenty to fifty perch per day. . . . One swan will, at the very lowest computation, eat 200,000 eggs a day, and this is very much under-rated. . . . Of what use are all the efforts of the T.A.P.S to improve the river, to introduce new and better fish . . . if these nuisances are to be the only reapers of the benefits?"

The minutes also state: "The members of the T.A.P.S. are unanimous in agreeing that fish worth thousands a year to the public are directly, or indirectly, annually destroyed on the Thames by the swans."

These minutes are of no recent date (July 6th, 1861); but anglers know, as a positive fact, the destruction of spawn by swans. Not only do the birds destroy spawn, but they also occasion much annoyance to anglers, flocking into the swim in the expectation of food; then one of the older birds frequently appears and there is a general flight, the water being disturbed for perhaps hundreds of yards. I have personally experienced this many times, particularly when trout-fishing in the open water. It seems rather queer law that swans should be allowed to do such great damage during the spawning-season, while any one then taking coarse fish (except for bait) is liable to prosecution. The housing of the barren birds during the close season would be a great boon to anglers, as so much valuable spawn would be saved; it would also give great satisfaction to those who are engaged in endeavouring to preserve the stock of fish in the river. Ducks are as bad, if not worse than swans, and

it is a puzzle to many anglers that the owners of ducks should be allowed to turn their birds on the river during the spawning season.

The writer of a letter which appeared in the *Field* on the 3rd of April, 1897, over the signature "Thames Angler," says: "For years, far-seeing anglers, possessing more or less scientific knowledge of their favourite sport, have been diligently hammering away in the press and elsewhere on the necessity of preserving the spawn of coarse fish from swans, ducks, and other wild fowl. At last the evil appears to have become recognised, and the T.A.P.S. and other bodies have been making, and, it is to be hoped, will continue to make, the most determined attempts to free the Thames and other rivers in which the fishing is more or less public from the *greatest known enemies* of the spawn and brood of fish. (The italics are mine.) It is one of those strange paradoxes . . . that while the law says no man may take a coarse fish between March 15th and June 15th, ducks and swans may eat as many small fish as ever they please, and gobble down mouthfuls of spawn soup, a pint of which contains the potentialities of many a shoal of sport-giving fish. . . . As a fish-eater the common farmyard duck is not a whit less voracious than the white swan, but its shortness of neck prevents it from depleting the weeds of spawn placed far below the surface; whereas it seems as if its handsome companion in destruction had a neck given him by nature for the express purpose of doing all the injury possible to fish-preserves. . . . Next . . . comes the steam-launch, which, during the Easter holidays, deposes from their resting-places among the weeds those few eggs which the swans and ducks have missed. Once washed from their weedy nests the eggs sink to the bottom of the river, and are eaten up by sticklebacks and other fish. The importance of the Thames fisheries has been recognised by Parliament for many years. . . . The obvious injustice of swans and ducks being given privileges which are denied human beings still remains. . . ."

Hundreds of anglers (myself amongst the number) will entirely agree with "Thames Angler" in what he has said, and will sincerely thank him for his spirited letter. The Thames affords sport and health to thousands of

anglers ; a river more capable of producing and supporting coarse fish is not to be found in Great Britain or Ireland. It would therefore be a great boon to every Thames angler were the "greatest known enemies," or the majority of them, housed during the spawning season.

In chub- and barbel-fishing with traveller float-tackle, from the punt or from a weir, I have no Length hesitation in stating that I frequently fish of swims of fifty yards in length from rod-top swims to float, and that I strike fish at the end of these swims. This length of swim is not judged by guess-work, but by actual measurement of line. A punt-swim that I frequently fish takes forty-three yards, thirty-four inches of line from rod-top to float to cover it, and I fish longer distances than this in weirs where the swims are suitable. A greased, floating line, enables the angler to work such very long swims and to strike his fish properly, the long throw-back of the rod also greatly assisting in this.

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JAM HITCH.

ANOTHER JAM HITCH.

SINGLE KNOT.

DOUBLE WATER KNOT.

DOUBLE FISHERMAN'S KNOT.

SINGLE FISHERMAN'S KNOT.

SLIP KNOT.

JAM KNOT.

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