



Thomas S. 1880

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THE
ANGLER'S COMPANION

TO
THE RIVERS AND LOCHS
OF
Scotland.

BY
THOMAS TOD STODDART.

WILLIAM BLACKWOOD AND SONS,
EDINBURGH AND LONDON.
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TO

JOHN WILSON, Esq., JUN.,

This Volume is inscribed,

AS A MARK OF REGARD, AND IN COMMEMORATION OF OUR MANY WANDERINGS

TOGETHER BY LOCH AND STREAM,

ON THE MOUNTAINS AND IN THE VALLEYS OF

OUR FATHERLAND;

BY HIS SINCERE FRIEND,

THE AUTHOR.

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CONTENTS.



	PAGE
INTRODUCTION	XV

CHAPTER I.

FRESH-WATER TROUT.

Introductory Remarks; Astonishing Variety of the Species.—Instances in point.—Effect of Transference on this or that Breed.—Cross Breeds.—Food and Habits.—Growth and Size Affected by Quantity and Quality of Sustenance, Range of Water, Breeding Accommodation, &c.—Loch Trout.—River ditto.—Size of Tweed Trout.—Illustration of the Effects of Superior Feeding.—Leet and Esk Contrasted.—The Breeding of Trout.—Spawning and Covering Seasons held Distinct.—Hatching of the Ova.—Growth of Trout during the First, Second, and Third Years.—The Gillaroo or Gizzard Trout.—The <i>Salmo Cœcifer</i> ; <i>Salmo Ferox</i> .—Swallow-smolt	1
---	---

CHAPTER II.

TACKLE, &c. &c.

Silk-worm Gut.—Its Manufacture.—Recipes for Dyeing, &c.—Tackle that belonged to Sir W. Scott, and mislaid along with the Waverley Manuscript.—Making up of Casting Lines.—Anglers' Knots.—Improved Construction of the Reel or Winch.—Rods.—General Remarks.—Woods employed in their Manufacture.—The Ferrule.—Hooks.—Philips' and Adlington's Varnishes.—Angler's Equipment, Wading Boots, Pocket Book, Tin Box, Gaff, Pannier, &c.	38
--	----

CHAPTER III.

FLY-DRESSING.

Comparative inutility of written instructions on the subject.—List of materials required; Feathers, Dubbings, and Tinsels.—Trout Flies.—Author's method of Dressing them.—General remarks on the Dressing of Scotch and Irish Salmon Flies.—Professional Fly Dressers.—Looped heads on Salmon Flies.—Horizontal or Flat Wings; projecting or upright ditto.	64
---	----

CHAPTER IV.	PAGE
TROUTING—FLIES.	
Fastidiousness of Anglers in respect to them.—Author's Limitation.—Ground-work of a Killing Stock.—The Hackle.—Spider Fly.—Hooks, round and Irish bends ; their adaptation in point of size to the Season, State of Water, &c.—Fly-fishing Months.—March, April, May.—Water Insects, &c.—June and July.—Night Lures.—The Stone Fly.—Burn Fishing in Summer.—Loch Flies, ten approved varieties.—Fly-hooks employed in August and September.—Condition of Trout during these Months.—Concluding Remarks	77
CHAPTER V.	
TROUTING WITH THE FLY.	
The Fly-cast ; fixing on of the droppers.—Double and single-handed Trout Rod ; their Comparative Merits.—Instructions as to Throwing ; Management of the Line, &c.—Angling Anatomized, or the Secret of its Delights Unfolded	97
CHAPTER VI.	
ON WORM FISHING FOR TROUT.	
Worm Fishing in turbid Waters.—Ditto in clear Water.—Rod and Tackle suitable.—Adjustment of the Leads.—Earth Worms ; Method of procuring the best Sorts. Hart's-horn Moss.—Preparation of Worms ; Scouring, Toughening, and Reddening Processes.—Season, Time of Day, and State of Water.—Where to Angle, How to Bait, Manage the Tackle, &c.—Various Advices and Precautions.—Striking, Landing, &c.	106
CHAPTER VII.	
TROUTING WITH THE MINNOW AND PARR-TAIL.	
Introductory Observations.—Rod, Fitting up of Tackles.—Approved Method of Attaching the Lure.—The Parr-Tail ; Shaping of ditto.—Various other Tackles.—Arrangement of Leads and Swivels.—Selection of Minnows.—Method of taking them, &c.—When to Fish with the Minnow.—When and where to Use the Parr-Tail.—Playing the Lure, Edging, and Striking.—Live, Diving, and Ground Minnow-Tackles.—Imitations.—Capping, &c.	128
CHAPTER VIII.	
ANGLING WITH THE SALMON-ROE.	
Use of this Bait in Salmon Rivers Vindicated.—Its Extraordinary Properties.—Disapproved of in Streams, purely Trouting.—Various Modes of Preparation.—Curing of the Leaf.—Mixed Paste.—Fine	

	PAGE
Paste.—Bead Roe.—Salt attractive to Animals.—Method of Angling with the Roe on Tweedside.—Author's System.—Season, Condition of Water, &c.—Use of Roe and Worm conjointly.—Concluding Remarks	156

CHAPTER IX.

THE SALMON.

Its position among Fishes; distinguishing points; marine and fresh-water existence; internal colour; effects of rich feeding on Trout and Charr.—Marine Food of the Salmon; its voracious habits.—Sea Trout in the Moray Firth.—Yarrell and others on the Food of the Salmon.—Capture of Sea Trout with the Worm in Salt Water.—Norwegian Fiords	171
--	-----

CHAPTER X.

THE BREEDING OF SALMON.

Mr. Shaw's experiments with the Male Parr.—Impregnation of the exuded Ova held unnecessary.—Actual intercourse presumed to take place.—Adequacy of Milt and Spawner to complete the process.—Numerical superiority of Females among Salmon.—Growth of the Ova in newly Spawmed Fish.—Mr. Shaw's unassisted Spawner.—Eggs of the Domestic Fowl.—Barren Ova.—Mutual consent, as insisted on by Mr. Shaw, incompatible with the result of his experiments.—Reasons why the Male Parr is provided with matured Milt.—Polygamous habits of the Kipper Fish.—Pairing explained and instanced.—Combats of Male Salmon.—Conclusions of the author.—Shaw's production of Hybrids.—Younger quoted	184
---	-----

CHAPTER XI.

THE GROWTH OF THE SALMON.

Its Parr state; duration in the River.—Shaw's opinion, with remarks.—Assumption of the Smolt appearance.—Rapid transition of the Black Fin into the Grilse.—Comparatively Slow Growth of the Orange Fin in Salt Water.—Reasons in support of the Author's views.—Marine Spawning of Salmon held questionable.—Difference of size in the Black Fin and Orange Fin accounted for.—Marine habits of Salmon; its range.—Varieties of the <i>Salar</i> .—Tay Breed transferred to Sutherlandshire.—The Grilse and Salmon stages.—Spring-run or clean Fish.—Large Salmon.—The "Grey Schule."—Salmon leaps	206
---	-----

CHAPTER XII.

SEA-TROUT.

The <i>Eriox</i> or Bull Trout; its size, strength, &c.—Abounds in Tweed.—Its Instincts and Voracity.—Distinguished from the <i>Salar</i> .—The	
---	--

	PAGE
Whitling; error with regard to it.—The Finnock; its habits.— Silver-white of Tweed.—Herlings and Bills.—Bull Trout of Tarras. Norway Salmon.—Increase of the <i>Eriox</i> in Tweed, &c.	224

CHAPTER XIII.

SALMON FLIES.

Power of the Salmon to distinguish the Colours of a Fly-hook passing over it.—Its Caprice and Fanciful Tastes.—Irish Fly-hooks on Scottish Rivers.—Modern Refinement in regard to Salmon Flies.— Lists of approved Salmon Flies, adapting them to different Rivers	232
---	-----

CHAPTER XIV.

SALMON-FISHING WITH THE FLY.

Introductory Sketch.—Salmon Fishing considered as a Manly Sport.— Its Practice on Tweed.—Salmon Rivers.—Casts and Resorts of the Fish.—Attractive Nature of certain Rocks and Places of Shelter.— (Note on the Practice of Leistering Salmon.)—Advice to the Angler. —Throwing of the Line, Working ditto, &c.—Depth and Distance from which Salmon will come to the Lure.—Rule to be observed on Raising a Fish.—Change of Fly.—Management of a hooked Fish.— Landing, Gaffing, &c.	243
---	-----

CHAPTER XV.

SALMON-FISHING WITH PARR-TAIL, MINNOW, AND WORM.

Tackles, Leads, &c.—Where and when to Fish.—Directions how to ex- tricate Tackle when foul run.—Worm Fishing for Salmon; when available.—Approved Tackle; Leading; Baiting of Hook.—Lob Worms.—Younger's Directions.—Rule to be observed as respects the Winch Line.—Method of Fishing.—(Note on the Power of the Salmon to Expel its Food.)—Seizure of the Worm by the Fish.— the late Sir F. Chantrey on Tweed.—General Remarks	277
---	-----

CHAPTER XVI.

PIKE AND PIKE-FISHING.

Pike-Fishing in Teviot.—Enormous Eel.—Ravages committed by Pike among Salmon Fry and Trout.—Increase of Teviot Pike (Note.) —Pike Tackle; Gorge Hook; Mode of Baiting.—Spinning Bait and Tackle.—Pike Fly.—Peculiar Disposition of the Fish.—When in Season.—Superiority of the Teviot Breed, &c.—Weather and state of Water suitable for Pike Fishing.—Approved Method of Despatching large Fish, &c.	291
--	-----

CHAPTER XVII.

PAGE

COOKING OF SALMON, &c.

A Tweedside Kettle.—Directions for the boiling of Salmon, Grilse, or Sea Trout, as pursued in Berwick-upon-Tweed.—The Curing or Kippering of Salmon.—Berwick Mode.—Pickled Salmon.—Method of roasting Salmon at Killarney.—Recipe for the Potting of Charr, Trout, &c.—A simple way of Cooking a Whitling or good Trout by the River-side.—Remarks on the frying of Trout, boiling and baking of Pike, &c. 310

CHAPTER XVIII.

TWEED AND ITS TRIBUTARIES.

The Angling Streams of its Upper Districts.—Biggar Water, the Lyne, Manor, &c.—Tweed betwixt Peebles and Galashiels.—The Ettrick, Yarrow, St. Mary's Loch, &c.—Salmon Casts near Melrose; the Pavilion, Drygrange, and other Rod Fishings.—Leader Water.—Mertoun, Rutherford, Makerston, and Floors' Rod Fishings.—The Teviot and its Feeders.—Sprouston, Hendersyde, Birgham, Carham, Wark, and Lees' Rod Fishings.—The Till, Whitadder, and Blackadder, &c.—Ellemford Fishing Clubs, Tweed Salmon Fishings.—The Eye and Tyne, &c. 320

CHAPTER XIX.

THE FORTH AND ITS TRIBUTARIES.

Its Sources and general Character as an Angling River.—The Salmon Fishings near Stirling.—The Teith.—Lochs Voil, Lubnaig, Katrine, and Vennachar.—Salmon Casts on the Teith.—The Keltic.—Lochs Chon, Ard, Arklet, Dronkie and Menteith.—The Allan Water.—Stirlingshire Fishing Club.—The Devon.—Gartmorin Dam.—The Streams of West and Mid Lothians.—Fifeshire Rivers.—Loch Leven.—The Quaichs. 342

CHAPTER XX.

TAY AND ITS TRIBUTARIES.

Dochart and Lochay.—Mode of catching Salmon near Killin, Loch Tay.—The Lyon Water.—The Tay above Logierait.—The Tummel.—The Garry.—Loch Broom and the Dowally Lochs.—The Braan, Isla, Ericht, and Dean Waters.—Salmon Fishing near the Linn of Campsie.—The Almond and Earn.—The Ruchil.—Loch Turret.—May Water.—Artificial Ponds near Crieff.—Salmon Fishings on the Tay 350

CHAPTER XXI.

PAGE

RIVERS OF ANGUS AND ABERDEENSHIRE.

- The North and South Esks with their Tributaries.—Salmon Fishings.—Lunan Water.—The Bervie, Carron, and Towie.—The Dee and its Tributaries.—Salmon Fishings, Angling Stations, Flies.—The Don and the Ury.—The Ythan; its Pearl Fisheries; its high repute among Anglers.—The Ugie and Ruthven Burn 363

CHAPTER XXII.

THE RIVERS OF THE MORAY FIRTH.

- The Spey; its Sources and angling Qualifications.—The Dulnain and Aven Waters.—The Fiddick and Dullen Salmon Fishings at Spey-mouth.—Spey Fly.—Ravages of the Water-ouzel among Salmon Spawn.—The Findhorn.—Lochs Moy and Bruach Salmon Fishings.—Mode of catching Salmon at the Ess or Fall.—Flies for Findhorn.—Angling Stations.—The Doveran and its Salmon Fishings.—The Lossie.—Nairn Water.—Loch Belivat.—The Ness.—Loch Ness.—Rivers and Lakes in the vicinity of Inverness 370

CHAPTER XXIII.

THE BEAULEY AND CONAN.

- The Bealey.—The Glass, Farrar, and Cannick Rivers.—Lochs Gorm, Bruiach, &c.—Falls of Kilmorack.—Angling Stations.—The Conan.—Lochs Ledgowan, Achnanault, and Luichart.—Falls of the Conan and Meig.—The Black-water.—Loch Garve.—Falls of Rogie.—Lochs Achilty, Nech Beann, Kinellan, and Ussie.—The Orrin.—Cruive Dykes.—Angling Stations.—Alness and Balnagowan Rivers.—Lochs Glass and Moir 384

CHAPTER XXIV.

RIVERS OF THE DORNOCH FIRTH.

- The Oikel, Cassley, Carron, and Shin.—Loch Shin.—Chain of Lakes.—Loch Craggie.—Notes by an Angler on the Rivers in Sutherlandshire.—Stations for Anglers.—The Brora, the Fleet, the Helmsdale, Langwell and Berrisdale Rivers.—The Wick, Thurso, Forss, and Halladale.—Lochs Sleitill, Calder, and More 395

CHAPTER XXV.

RIVERS OF THE NORTH AND NORTH-WEST COAST.

- The Naver and Strathy.—The Hope, Dinart, and Borgie.—Loch Stac.—The Laxford.—The Inchard.—The Lochs of Assynt.—The River Ewc.—Loch Maree.—The Gruinyard and Torridon.—The Carron.—Angling in the Island of Lewis.—Rivers of Kintail.—The Shiel and Croe.—The Loing and Elchaig 404

CHAPTER XXVI.

PAGE

THE AWE, AND RIVERS AND LOCHS OF ARGYLESHIRE.

The Awe.—Loch Awe.—The Urchay.—Its Salmon Fishings.—Angling Stations.—Flies for Loch Awe.—The Etive and Streams of Loch Etive.—Rivers and Lochs in the vicinity of Oban.—Ditto near Kilmuir.—The Goldie of Loch Eck.—Rivers of the Appin district.—The Lochy, Spean, and Loch Laggan	410
--	-----

CHAPTER XXVII.

THE CLYDE AND STREAMS OF THE SOUTH-WEST.

The Tributaries of Clyde, and their angling Qualifications.—Salmon Fishings on the Clyde.—Salmon or Sea-trout occasionally captured above Bonnington Linn.—Angling Stations.—Lochs in Lanarkshire.—The Kelvin Water.—The Leven in Dumbartonshire.—Loch Lomond and its Feeders.—The Rivers of Renfrewshire.—The Carts.—Lakes of Mearns and Eaglesham.—The Garnoch, Irvine, and Ayr Waters.—The Doon, Loch Doon, and Lochs of Straiton.—The Girvan and Stinchar, &c.	417
--	-----

CHAPTER XXVIII.

THE RIVERS OF THE SOLWAY FIRTH.

The Nith.—The Cluden.—The Annan.—Moffat Water.—Loch Skene.—Loch Maban Lochs.—Salmon Fisheries.—The Esks and their Tributaries.—The Dee.—Its Salmon Fishings.—Fly for the Dee.—The Ken.—Loch Ken.—Immense Pike.—The Lochs of Balnacellan.—The Rivers of the Stewarty.—The Cree, Fleet, Minnick, and Urr.—Cree Fly.—Lochs Dee, Trool, Lonhivan, &c.—The Lace and Bladenoch.—Salmon Fishings on the Dee.—Angling Statistics	423
--	-----

ILLUSTRATIONS.

- I. A DAY'S FISHING. (From an original Picture by James Giles, R.S.A.)
- II. THE TWEED NEAR KELSO.
- III. LOCH AWE.
- IV. TWEED FLIES.
- V. MAP OF SCOTLAND.



THE TWEED NEAR KELSO.

INTRODUCTION.

THERE is no river in Great Britain which affords so many facilities to the angler for the pursuit of his art, as the far-famed Border stream. Taken in connection with its tributaries, it includes a range of water sufficient, throughout the season, to engage the skill and assiduity of thousands of the gentle craft; and this it does, without giving occasion for a single dispute, on the ground of interference with his sport, to any one individual of the whole number. Extending upwards of one hundred miles, the Tweed itself furnishes

sufficient elbow-room for the daily plying of at least twice that number of rods, and when I include along with it the Ettrick and its twin sister Yarrow, the Gala, Leader, Teviot, Till, and Whitadder, not to mention the streams of the upper valleys, and the countless rivulets, swarming with trout, from which one and all are supplied, I have expressed in the above statement no over-drawn estimate of the resources, in point of amusement, which this river comprehends.

Of all our Scottish waters, from its fountain head to the sea, Tweed is unquestionably the most amply stocked with river trout; it is frequented also throughout the greater part of the year, by different species of the migratory *salmonidæ*—the *salar*, the *eriox*, and *salmo albus*; these distribute themselves, on their ascent from the ocean, over a large proportion of the main river; they occupy, for a long course of miles, its pools and shelter-places; at certain seasons, they push up in great numbers into the smaller feeders, and although, to the wandering brother of the angle, not always affording the same measure of successful sport that he meets with on some of our Highland streams, yet their presence and taking humour are more to be relied on, they continue haunting the fresh-water throughout a much longer period of the year, and are more independent of rains and temperature, while, by their distribution over a large extent of current, they yield, what is the case on few of our northern rivers, abun-

dance of exciting recreation for a whole host of salmon slayers.

But while such are the general features of Tweed as an angling river, its individual superiority in this respect will be more clearly exemplified, when I limit my observations to the particular portion of its course, which, extending five or six miles upwards, and as many in an opposite direction from Kelso, may be said to lie in the vicinity of that town. In this stretch of water are embraced, unquestionably, some of the finest salmon casts, as far as rod-fishing is concerned, in Great Britain. Spring, summer, autumn, and winter all furnish their fresh-run supply of the scaly tribe. The clean, firm-set, eye-delighting fish of March and April is succeeded, during June and July, by the whitlings and early grilse; these again, throughout the remainder of the season, are followed by others of older growth intermingled with breeders of every description, while to crown all, the "grey-schule," cleaving undauntedly the December torrent, brings up the rear; nor is it until they have escaped the perils of the net and coble, and found their way through the arches of Coldstream-bridge, that these—the migratory fish of Tweed,—discover much appetite for the baits of the angler, or seem inclined to come, right venturesomely, towards his tinselled lures. Here it is, in the stretch of water alluded to, that they most freely exercise their capricious tastes, and here they are found in more abundance and perfection than in the upper portions of the river.

Nor, while Tweed, in the vicinity of Kelso, excels as a salmon stream, is it less famed as affording, along with its tributaries Teviot and Eden, the choicest of sport to those preferring the humbler but not less delightful branch of the art—trout-fishing. There, at all seasons, and in all varieties of ways, has the angler an opportunity of showing his address; he is not, as on some of our northern rivers, liable to become surfeited with an over-abundance of rapacious and unwary fish, or tired with the uniformity in point of size and appearance which these present to his eye; on the contrary, he has to deal, as befits him, face to face, with craft and caprice, while there is this, moreover, to excite and interest him in the pursuit, that there are ever and anon hovering, within cast of his line, trout, which, on being hooked, will not submit without a struggle, and when captured, cannot fail to call up those feelings of exultation which none but anglers comprehend.

A ten years' residence on Tweedside, and in the neighbourhood of the town alluded to, along with the further experience of two seasons on the banks of salmon-streams in the North of Scotland, has naturally enough, since the publication of my *Scottish Angler*, in 1835, contributed in a large measure to deepen my acquaintance with the practice of the art. During the whole of this period, I have pursued it with a measure of enthusiasm little inferior to that which actuated my boyish years; and were I to relate instances in order to prove my attachment to river-side recreations, I should

only excite the wonder of many "grave and reverend seigniors" who draw their life and enjoyment from very different, but, by me, unenvied sources.

Located on Tweedside, I have had, besides those already mentioned, although, perhaps, dependent on them, various facilities afforded me for bettering my information on points connected with rod-fishing. I have been brought, for instance, much into contact with able and intelligent craftsmen—have listened to the exposition of their notions, as regards the tastes and habits of fish, the attractive nature of such and such a lure, as well as the advantage to be derived from this or that form of tackle. The opportunity also has often presented itself of witnessing their feats and good fortune; and I have frequently, with the solemn delight of a child, drank in the wondrous exploits of some river-enchanter,—credulous while I listened, and willing, in spite of reason, to be credulous still.

Surrounded with these advantages, and encouraged by the solicitations of numerous friends, I have ventured to throw together the following chapters. They involve, all of them, plain matter-of-fact subjects, which are dealt with in a corresponding style. I have avoided, as much as possible, dressing them up for favour, expunging, where it could be done consistently, whatever savoured of the superfluous; and although impelled, now and then, to embellish my remarks with a dash of the ideal, I have resolutely disclaimed its assistance in the relation of all matters of fact and experience.

The first portion of the volume, extending over eight pages, is taken up principally with what relates to river-trout, and the various methods of capturing them, as pursued on Tweedside and elsewhere. My treatment of this subject I have not allowed to interfere, except in a corrective and elucidatory form, with what lies embodied in my former treatise. The views presently under submission are the result of more extended practice and enlarged information. They present, it is true, little or no claim to originality; but, as the cullings of yesterday, from a new field of experience, may possess, perhaps, freshness enough in their details to attract and interest the angling enthusiast.

On the subject of trouting with the fly, as well as the method of dressing fly-hooks, I have dwelt briefly and generally. So many treatises have been written upon these matters, that no room remains for their further exposition; and when I behold the catalogue replete with entomological science, which forms the *sine quâ non* of the modern angler's pocket-book, I shrink to confess my own unpardonable ignorance in regard to them. On the practice of worm-fishing in clear waters, minnow and parr-tail spinning, the employment of the salmon-roë as a bait, &c., I have entered into circumstantial details. The two first-mentioned branches of the art are considered by all anglers of experience to rank as highly as the pursuit of the fly-fisher. They are certainly, although a degree more troublesome, as exciting; and they require, even under the most favour-

able circumstances, a greater exercise of skill and judgment in order to command success.

With respect to those chapters in the volume which are taken up with points of controversy on the natural history of the *salmonidæ*, I should only be doing injustice to my own conclusions and the grounds upon which these are formed, were I to make any apology for their introduction. The connecting point with what interests every true angler will be readily acknowledged, and should I have dealt somewhat speculatively with one or other of the subjects under discussion, it is to be hoped my doing so will be regarded, rather as a sin of ignorance than as one of wilful perversion. Without any pretensions to an intimate acquaintance with ichthyology, I cannot but consider, as a step to further this branch of science, every endeavour to correct its errors; and when, as in the matter of the parr question, I behold the mistakes of eminent naturalists rectified at the hands of simple, unscientific observers, I may reasonably anticipate for my views and suggestions, meagre and defective as these are, a courteous and forbearing reception.

In that portion of the volume which treats of salmon fishing, I have drawn out lists of the most approved flies for our Scottish rivers, especially Tweed. These have been extended by me considerably beyond what, to my own idea, forms in point of material, an efficient stock or variety, under ordinary circumstances,

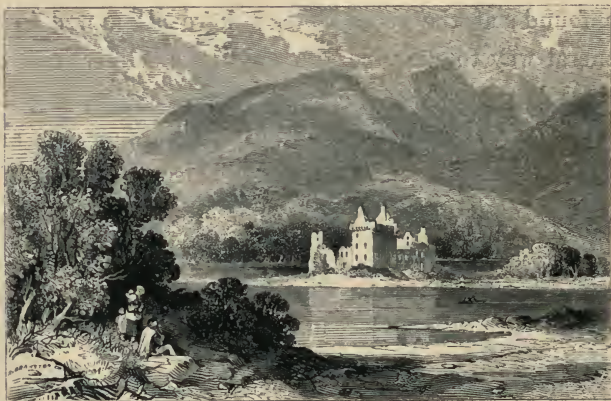
and my inducement to swell the number further than what seems absolutely requisite, has proceeded simply from a wish to include every favourite and tried hook. In selecting the fly-stock described in these lists, I have received considerable assistance from various quarters, and indeed, throughout the remaining chapters of the volume and much of the foregoing matter, I stand indebted to the friendly aids and suggestions of more than one intelligent angler.

But while drawing liberally upon the oral communications of others and from those sources which my own experience has opened up, I have not neglected the sinewing of a large portion of my work with details and quotations from written authorities. In doing this, however, I have taken especial care to avoid pressing heavily upon the original matter of the volume, or interlarding it with extracts which, although confessedly to the point, are not in critical demand. The great bulk of these details has been taken from statistical sources, and stands incorporated in the concluding chapters of the work. It consists, indeed, of facts, already recorded, which are at the service and within reach of every one who has leisure and inclination to seek out and arrange them. This portion of my task I have found to be more laborious than I at first anticipated, but the principal difficulty lay, not in the mere collecting of materials, but in condensing and putting these together, so as to form a summary of correct and useful information.

I have endeavoured, in this portion of the volume, to give an accurate account of our first-class rivers and their tributaries, embodying, to the best of my knowledge, all that relates to their salmon-fishings in the way of produce, rental, &c. Along with these matters I have comprehended, as respects Tweed, a detail of the various salmon casts and stretches of water reserved chiefly for rod-fishing. To specify and describe in a similar manner the numerous trouting-streams and lakes with which Scotland is intersected would be quite superfluous. I have accordingly, in regard to them, selected for special observation a few of the most productive, those particularly where large trout are to be found; at the same time, I have attempted in a general way to describe the angling qualifications of others less noted, arranging the whole, according to the districts of country where they flow or are situated. The concluding chapters, also, will be found to embrace the names of those places where the angler may expect to meet with good or tolerable accommodation.

I feel it unnecessary to add anything further in the shape of introductory matter. What remains to be done is to discharge, simply, an act of duty. It is to express my acknowledgments to more than one individual for the encouragement as well as assistance I have received, while penning these pages. This means of excitement withheld, I should have ventured to the task with a much greater measure of diffidence than

has been cherished by me throughout its performance. There are many, I feel assured, on Tweedside, more qualified to have engaged in it than myself—many, at least, not less enthusiastic, and who have attained, as anglers, to a much higher degree of excellence. I have been bold enough to take possession of their vantage-ground,—inconsiderate enough, it may be said, to unfold some of the secrets of their proficiency, but it shall not be added, that, in doing so, I have neglected to tender my acknowledgments, and give expression to my obligations.



LOCH AWE.

THE ANGLER'S COMPANION.

CHAPTER I.

THE FRESH-WATER TROUT.

WHAT is a river, a Scottish river, without its trout? What is the ocean without its navies? What are the heavens without their stars? There is scarcely a scene or landscape, in Highlands or Lowlands, with which this fish is not in some measure associated. Climb yonder hill, and gaze around and before you. See there an earl's proud mansion, his parks and pleasure-grounds. See there trees of twice a century's growth,

“Whose very shadows
Are histories on which to legislate;
The veteran boughs are hung with oracles
And legendary song.”

But mark! seemingly at your feet, the life-blood of the picture, a broad, shining, rejoicing river! Gaze in turn up along the valley; yonder, as if from a huge cavern in the distance, you behold it issuing; you catch with your eye the gleam of its progress; now, at

the base of a green ascent or sheep-walk ; further on, amid pastures and corn-fields ; now, skirting a forest ; now forming, as it were, the moat of a tower or castle ; and, again, at yonder point, gathering in fresh tribute from a silvery stream. How it progresses ! like the everlasting march of a king—music at every step—homage and increase at every turn. See, now it winds onward below us. The sward freshens where it flows ; the flowers are more varied and abundant. It laves the walls of a town. It glides under a bridge of many arches. It pursues far on, far as the eye can stretch, its radiant and welcome course.

And this river, one of the noblest of our streams, would it be the same—would it be equally endeared to us anglers,—were it a fishless, unpeopled water, devoid of the “mottled par,” the star-sided trout, the glittering salmon ? What a blank, dreary aspect it would have, unassociated with these ! What chasms there would be in the mind and memory—in the forethought and expectation of the beholder ! Not the landscape, not the lore, not the minstrelsy, not the warble of birds, not the chiming of the sunlit river itself, could fill them up. Unpeopled ! desolate ! The fortunes of a thousand rills are woven here. The dew of the mountain, the overflow of the lake, the upwelling of the spring, the boon of the cloud, have met and are mingled in this one great artery. Its material is life, its flow is life, its sound life ; the shadows that fleet over it are all life, and yet, imagine it, ye that can, it is an unpeopled river ! No anglers’ festivals are held here ; no fisher moves along the bank ; no wily nets are cast across the pool ; no torch-light reveals the secrets of its channels. It is an unpeopled river ! The salmon is a stranger to its fords and strongholds ; the water-fly

sports unharmed on its surface; the otter refuses to frequent it; the heron over its own shadow languishes and dies.

Visionary! there is no such stream in broad Scotland. The chemist's art, the bleach-field, the paper-mill, the railway, acids and vitriol, gases, lime, sheep-washing, manures, and machinery combined, have not yet produced this result as respects a single rivulet. Our very mill-runs still contain trout—our lakes and rivers abound in the scaly tribe. Ramble with me from shire to shire, and I warrant thou wilt cull from each a measure of sport, ample enough to satisfy a man of moderate wishes. Art thou otherwise, I have no key to thy humour; in these times, alas! of exclusion and selfishness, I have no power to assist thee. But there are trout enough for all, for the sport of the peasant as well as that of the peer; and a malison seize the churl who would grudge to the labouring man his snatch of pleasure, or deny him, although obtained through his own skill and industry, the morsel that economises or adds life-prolonging zest to his homely and everyday fare.

Unquestionably, there exists no species of fish, which, judging of it by the external marks, holds claim to so many varieties as the common fresh-water trout. In Scotland, almost every lake, river, and streamlet possesses a breed peculiar, in outward appearance, to itself. To prove and illustrate this, I do not require to go farther than the district in which I reside. Within a circle of about twenty miles from Kelso, I find embraced the following streams and rivulets:—Tweed, Teviot, Ettrick, Leader, Ale, Kale, Eden, Blackadder, Whitadder, Leet, Coquet, Till, Colledge, Bowmont, Gala, Rule, all trouting waters; yet, strange

to say, there is not one of the whole number but lays claim, as far as regards the point of distinction in question, to its own variety of trout; and this is the more remarkable, that, with the exception of Coquet, all the streams I have mentioned have connection with the Tweed, or ultimately contribute to it.

To describe, within reasonable compass, the marks and features which characterise and distinguish each of these varieties is utterly impossible; and the task, happily, is not required. They consist, generally speaking, in the size, number, disposition, and colours of the beads or spots; in the formation of the head and tail; in the shape and proportions of the fish; its tendency to become thick, deep, or round; to fatten, or remain lank; in the tints also, changeable as seasons and even states of water will render them, which most frequently pervade the skin. Nor, in fact, is it to be wondered at, when we consider the almost infinite number of changes which even the size, disposition, number, and colours of the beads alone will effect in the external appearance of the trout, that the breeds or varieties thus judged of should baffle all power of computation.

But in regard to the waters above mentioned, (and I have omitted none, within the limits assigned, of any note), the trout peculiar to each are distinguished, not merely by their external features, but by another point of character as well; to judge of which, in relation to so many different streams, may be esteemed a matter of some difficulty. I allude to their edible qualities, the flavour and degree of curd and richness they possess, when in season. Now, in regard to this feature or point of character, I can safely affirm that it is almost as varied as the outward marks which

distinguish the fish of one river from those of another. I make this observation, not merely upon my own judgment, although I have exercised it oftener than once, as regards the produce of all of the streams in question; but I do so on the authority of others, and there are many such, who can attest as to the truth of what I have stated. In Kelso itself, there is scarcely an inhabitant but what can at once, by the exercise of his palate and organs of taste alone, distinguish betwixt a Tweed, a Teviot, and an Eden trout, or the produce of the main river and its two tributaries that flow in the vicinity of the town. Externally, the legitimate breed of each is unmistakably marked, (there occur, I allow, mixed varieties or crosses, frequenting in common all the three waters, and the presence of which may be accounted for in various ways); but, more than this, the very colour and consistence of the flesh when cooked, the flavour and richness it exhibits, are all severally unlike. The true Eden trout, for instance, is a deeply-shaped fish, small-headed, and of dark complexion on the exterior. The stars or beads are by no means numerous, but they are large and distinctly formed; those on either flank being of a deep crimson or purple hue, and encircled with a whitish ring or halo. Its flesh, when in season, on being cooked, is of a fine pink colour; the flakes interlayered with rich curd. At the table, it is highly esteemed for its firmness and general excellence.

The Teviot trout, externally, is a more beautiful fish than that of the Eden. The back is finely curved, and the head small. It wants depth, but possesses considerable breadth of form. The spots, which are large, stand well out, and engage the eye. They are generally of a purple colour, inclining to crimson. A fine

gold or orange tint pervades the exterior of the fish, which, towards the belly, fades away into pearly whiteness. In its edible qualities, the Teviot trout is certainly somewhat inferior to that of Eden. When beyond half-a-pound in weight, it cuts red and possesses considerable richness of taste. What are caught in the lower parts of the river, from Oxnam downwards, are much superior, both in size and flavour, to those taken higher up; and I have noticed that in certain pools, they are firmer and better shaped than in others.

As regards the proper Tweed trout, it is quite easily distinguished from those of Teviot and Eden. The general shape of this variety is by no means faulty. Its head, except in the case of overgrown individuals or such as are found in the rocky parts of the river, is moderate-sized. Its paunch alone has the appearance of being out of proportion to the rest of the body. This receptacle is capable of holding a large quantity of food, and is usually met with much distended, or in a loose flabby state.

In Tweed, the cross breeds are very numerous, and they all, in some degree, grow to partake of the peculiarity I mention. The true stock, however, is easily distinguished. It inhabits the river from its very sources, as far down, I may say, as Norham. The cross breeds, on the other hand, are severally, according to their varieties, found in the neighbourhood of such tributaries as contribute to their production; for instance, in the Tweed below where Teviot discharges itself, trout are frequently met with which unite the characteristics belonging to the fish of both rivers.

The trout of Tweed, I allude to the pure *bond fide* breed, is plentifully decorated with stars or spots. Of these, the most attractive are of a vivid crimson hue.

The general colour or outward complexion of the fish is yellow; its back having an olive, frequently a grey shade or tint. In its edible qualities, it is much inferior to an Eden or Teviot trout. It seldom possesses any tendency to redness in the flesh, and unless cooked shortly after being taken, becomes soft and curdless. It is, however, when in season, quite sweet and palatable, and in some parts of the river, where there is good feeding-ground, acquires a considerable degree of richness.

I have described the trout of these three streams, all running within a short distance of each other, in order to exemplify the existing varieties of this species of fish. It is needless to extend my observations upon the subject any further. The most lengthened inquiry can only lead to the conclusion, that every lake, river, or streamlet, be their connection with each other what it may, possesses its peculiar breed of trout; and all I shall do further to establish this fact is, to instance, in general terms, a few additional localities where it has fallen most strikingly under my own observation. I take the neighbourhood of St. Mary's Loch, in Selkirkshire. The loch itself is contiguous to that of the Lowes, and united with it by a small run, not a hundred yards in length. The two sheets of water contain distinctly-marked varieties of trout. Of streams connected with these lakes, there are the Chapelhope and Corsecleugh burns, the Summerhope burn, the Meggat water, with its tributary Winterhope burn; Yarrow, with its feeders; Douglas burn and Altrive lake,—every individual water possessing its own peculiar breed of fish. Extend the range to Ettrick, and the same observation holds good. The main stream, the Back burn, Faa-hope burn, Rankle burn, Timah, &c., all have their own varieties. Go to Dumfriesshire, to Loch

Skene, Moffat-water, the Annan, the Esk, the Liddle, and the case is exactly similar. Ascend the rivers of Perthshire—the Tay, the Earn, the Almond, the Isla, the Tummell, and the Garry: or its smaller streams, such as May, Ruchil, Erochty. Go to Lochs Tay, Earn, Tummel, Rannoch, Freuchie, Broom, Turit; or retreat northward, as far as Ross-shire, to the Conan, Blackwater, Meig, and Orrin,—to Lochs Luichart, Ledgowan, Achnanault, Garve; or to a spot in that county embracing, within a short distance of each other, four small lakes, Lochs Laran, Nech Beann, na-Dhream, and Achilty; each of which has its own peculiar breed of trout, differing in size, shape, quality, and external appearance. To every stream and range of water mentioned, and I have caught trout in all, the fact here stated applies; and to adduce, as could easily be done, additional evidence in corroboration from other districts of Scotland, I esteem quite unnecessary.

In entering, as has been done, into details upon this subject, it may be asked what purpose I have in view; or, in other words, does the fact of there being such numerous varieties of the fresh-water trout assist in forming any conclusions beneficial to science? I leave this to be judged of and considered by others better adapted for the task than I am. One or two observations, however, I venture to make relative to the varieties in question; and first I hold, that trout, on being transferred, whether by accident or otherwise, from their parent stream or lake to another range of water, rapidly undergo a great change; one, however, that does not affect their external marks or embellishments, which features I therefore regard as best denoting the breed or variety.

For instance, the trout of Teviot carried accidentally

into Tweed lose in fact, after a few weeks, many of those distinctive points which the superior feeding of the first-mentioned stream afforded them. They lose their redness of flesh, their strength, liveliness, &c.; but in no case can it be proved that the change has so affected their outward appearance as to alter the character and arrangement of the stars or maculae. These they retain as the indices of their origin; and they are as essentially theirs in this character, as are its spots the distinctive property of the leopard. With regard to the general colour or complexion of the fish, that is quite another matter. Nothing is so readily operated upon, even within the precincts of its own parent stream, as the skin of the trout, in relation to colours. In this respect, it is like that of the chameleon. During a top-flood, when the river is clayed or thick, and fish are only to be captured by the pout, hand-net, or some such contrivance, they present a white, I might almost say sickly, look. On the water becoming brown or porter-coloured, they assume a fine yellow, healthy, and inviting appearance; and on its recurring to the ordinary size, they are again transformed, and partake of a complexion agreeing to that of the stream itself. The character of their retreats also, the nature of the stones or banks they lurk under, influence, not unfrequently, the general complexion I speak of, and sometimes lend a parti-coloured appearance to the fish, quite independent, however, of its fixed decorations in the shape of stars, &c.

I have stated, that fresh-water trout, on being transferred from the parent stream to another range of water, are capable of undergoing great changes. To what extent these, in any instance, will take place, must depend upon the nature of the transference. I have

mentioned very cursorily the effect upon a Teviot trout when shifted to Tweed; but in respect to such a case, the transference is far from being violent. Besides the relation that exists betwixt the two rivers, as the tributary and its recipient, there are other accommodating circumstances which prevent the occurrence of any great change in the size, appearance, and flavour of the trout. For instance, the action and qualities, nay, in some measure, the feeding capacities of Teviot become diffused on its junction through Tweed; then there is the similarity of climate; the fact, also, that both rivers abound in trout of a similar size,—all of which circumstances operate as I have stated.

In order, therefore, better to illustrate my position, I shall assume the transference to be one of more violent character. I shall take the produce of a small stream, say, up to the number of four or five dozen trout. The breed or variety inhabiting this stream, I shall suppose seldom attain the length of nine inches, or weigh more than half-a-pound; as food, they are of inferior quality; in point of shape, they offer nothing attractive. These individuals I transfer to a pond, or lake, hitherto devoid of fish, and occupying a space of several acres. Its soil or bottom I shall suppose to be composed of marl, or some such feeding substance. It is provided with ample shelter, and every requisite that can encourage the growth of trout. Well, what will be the effect of this change upon the character of the fish in question? It will not alter the setting or arrangement of their stars or distinguishing marks; but it will, and that most materially, improve, in a short space of time, their size, shape, and edible qualities. A single season itself would, in all probability, suffice to fatten them up to thrice the weight which it was possible for these trout to

attain to in their own native stream. They will acquire more seemly and captivating proportions, and derive from liberal and luxurious feeding a corresponding richness of flavour and firmness of flake. That these latter results are frequently accompanied by a heightening of the internal colour—a change from its pristine whiteness to pink or red, I do not deny. Where there is shell marl, or abundance of insect food, this transmutation is likely to occur; but it is by no means, even under these circumstances, an infallible result of the transference. I am acquainted with a natural sheet of water, forty or fifty acres in extent, and stocked, as I have described, from a small streamlet, or hill burn, where, while the trout acquired large dimensions, and improved both in shape and flavour, they still retained the original white colour. Nor is redness in the flesh always an indication of superiority, as respects the edible qualities of the fish. I have partaken at table of trout distinguished for their high colour, and yet, in point of taste, they were soft, rank, and mud-flavoured; while, on the other hand, I have met with white-fleshed trout, firm, curdy, and good.

In regard to this matter of redness, peculiar to the flesh of salmon, trout, and charr, I am led more naturally to refer to it in a future chapter: it is therefore, at present, quite unnecessary to expatiate on the subject. Nor, in renewing my remarks relative to the transference of trout from one range of water to another, need I multiply instances. What has already fallen from me, will suffice to bring out and illustrate some points in the natural history of the fish hitherto unrecorded. Their astonishing variety, every lake and river possessing its own distinct breed—the effect of change of circumstances on their appearance—the chameleon-like

transitions in point of hue, undergone by them during a flood, and while it continues to abate—their shape, growth, and edible characteristics, have all cursorily been brought under view.

Of the food and habits of the trout, however, I have said comparatively little; nor have I called direct attention, while treating of their varieties, to what may be termed the cross breeds, in contra-distinction to the true or original breed, peculiar to each stream or lake. This last-mentioned subject I shall dismiss with a very few observations; and, first of all, I may notice, that the cross breeds to which I refer are simply those which have their origin in varieties of the common trout (*fario*), brought into contact with each other at the breeding season, and do not implicate the questionable produce, or mule breed, arising from any hap-hazard connection betwixt the *fario* and bull-trout, or whitling; a connection altogether discountenanced by nature, and which (if my notions respecting the breeding of fishes be correct) is not likely to take place. I may also remark, that, although cross varieties may, for a season or term of seasons, rival in number the true breed belonging to this or that stream, and threaten to extirpate it altogether, yet there is no fear or likelihood of such a result; the peculiar nature and qualities of the water, aided by the remaining original stock, always tending to reinstate the breed.

Thus, for instance, it has happened in the case of the upper part of Eden, above Stichel Linn; where, owing to the accidental escape of considerable quantities of another variety of trout from inclosed water at Mellerstain, the stream itself became the haunt, and continued so for three or four successive years, of a cross breed, which vied in numbers with the proper stock, and

appeared, during the greater part of this period, as if it would ultimately supplant them altogether. This breed however, and its after-crosses, have nearly disappeared, and the original trout are resuming, in point of numbers, their old position.*

Again, in the case of Yarrow, in Selkirkshire, where, owing to an excess of trout having descended during the spawning season of 1832 from St. Mary's Loch, the stream in question, its sole drainer, became in a manner over-run with the Loch variety, so that the real "yellow fin," as the Ettrick shepherd used to term them, was, for a space of some years, a fish of rare occurrence. Crosses betwixt it and the Loch trout occupied completely the upper part of the river, as far down as Yarrow Feus, and extended themselves from thence, in thinner distribution, to the vale of Ettrick. I am happy to state, however, from recent experience, that the original stock once more prevails in Yarrow.

The trout is unquestionably a voracious feeder. It consumes, in proportion to its size, a greater quantity of sustenance than other fresh-water fish; nor, in respect to the quality of its food, is it quite so scrupulous as is generally imagined. Look, for instance, at the variety it indulges in, according as the seasons, hours of the day, and state of the water or atmosphere prompt and direct it. In this variety are embraced the whole of the insect tribes, winged or otherwise; frogs, leeches, worms, slugs, snails, maggots, cad-bait, every sort and size of fly, beetle, and moth, the water-spider, &c. Then there are fish—the smaller ones of its own species,

* I cannot add in point of size. In this respect there is a marked falling off, attributable, no doubt, to drainage and various agricultural improvements, which have been carried on at the sources and along the banks of the stream.

parr or fingerlings, minnows, loaches and sticklebacks, along with the roe or ova of salmon; and I doubt not even young birds and water-rats are occasionally made prey of by hungry river-trout. Examine the stomach, and you will generally find a large mass composed of insect-remains in a partly digested state, and super-added sometimes to these, the remnants of a parr, loach, or minnow. The carp, the tench, the perch, are not more ravenous or varied in their feeding than the common fresh-water trout. Even the pike itself, although a fearless, vindictive, and rapacious fish, is less gluttonous in its habits, and in its tastes infinitely more simple and congruous.

What is it then, it may be asked, that renders the trout difficult of capture? Its greedy propensities, one might imagine, would naturally allow little room to the angler for the exercise of skill and judgment. But experience has taught otherwise, and the simple reason of this is, that with these propensities the trout unites epicure habits, caprice in its hours and seasons of feeding, cunning, shyness, and watchful distrust. As an epicure, it battens one day upon surface or winged food, and the next upon ground sustenance. Sometimes the minnow will attract it, sometimes the worm; sometimes, turning from both with dislike or satiety, it will amuse its palate with delicacies of the minutest description, the larvæ of water-insects or pellets of ova, picked up with address and assiduity from among the interstices of rocks and stones, from the foliage or roots of water-plants, or while floating past it in the descending current. And this caprice as to its food, while it tests the skill and experience of the angler, is assisted in doing so by the cunning and natural mistrust of the fish; its quick, vigilant eye; its keen, distinguish-

ing sense of smell, and similar instinctive endowments and perceptions.

The wariness and caution observable in trout frequenting certain localities are often, in fact, the result of circumstances, and indicate the existence of memory and other reflecting powers. It is not necessary, however, that a trout be pricked with the hook, in order to give so uncommon a degree of acuteness to its faculties and render it more than ordinarily circumspect; the circumstance of its being frequently disturbed by the apparition of an insect clumsily imitated, or tackle of any other description, will of itself produce this effect. The disposition, also, of light and shadow near its haunt, the description and quantity of sustenance yielded within its feeding range, all subserve to create or banish distrust, to add to its wariness, or lull its suspicions. On the other hand, the pricking of the hook, unaccompanied by any exposure of the angler's contrivance wherewith the pricking was effected, will often fail to excite alarm; sometimes, when it does so, the pang will be of brief continuance; nay, in my experience, I have met with instances where the fish actually, a short time before, broke and carried away tackle, yet, retaining the willingness to feed, on a new lure being presented to it, returned eagerly to the charge, and, I may add, became captured.

One of these instances happened several years ago, when angling in Yarrow. A gentleman who preceded me on the river had the mischance to have his tackle, comprising a set or cast of flies, three in number, carried away by what he described to be a fish of unusual dimensions. On his relating the circumstance, at the close of the day's fishing, I produced, much to his amaze, the identical cast he had lost, and along with

it the fish, an ordinary-sized trout, from whose jaws I had abstracted it.

A similar instance occurred to me in 1845, at the Makerston fishings, on Tweed, when angling with the worm in clear water. Happening to capture a trout of about a pound and a half in weight, I observed, while extracting the tackle from its mouth, the presence of another hook, quite free from rust, and with a small portion of gut attached to it. On mentioning this afterwards to the fisherman's assistant, he inquired if I had caught the trout at such a spot on the river, naming the foot of a particular stream or gullet, the South Clippers. He also described the hook and piece of gut attached to it, remarking, that on the previous day, a gentleman whom he attended had, while trouting with the worm, his tackle broken by a large trout at the place in question. His conjectures were correct.

I could relate, were it necessary, other similar occurrences met with from time to time, which prove that trout, although pricked and actually retaining the hook in their lip or jaw, are not necessarily excited to distrust or suspicion, or thereby, through the continued irritation, deterred from feeding. Not two days ago, during the week in which the above was penned, I caught a trout presenting the same appearances as the one just referred to, only that, in this case, the abstracted hook, No. 12 Adlington, had actually been swallowed; and as a proof of this having been done recently, the worm with which it had been baited still remained, occupying the shank and portion of broken gut attached to it. The marvel to me is, how, with this choking substance, (it was a lob-worm, and of large dimensions,) filling its throat, the fish could live, much less feed or swallow. Such instances, however, although

occasionally met with, are not to be held as hostile to my prior statement, that the river-trout is of shy, cunning, and capricious habits; that it is a fish wary and vigilant, possessed of much natural discernment and strong instincts. They only show how circumstances will render these defensive qualities of little or no avail, and how, on certain occasions, its very instincts endanger their possessor.

I am not possessed of any authentic information, with regard to the greatest size attainable by the *fario*, or what is erroneously termed the parr-trout. The largest individuals are undoubtedly to be found in our lochs, where they batten most securely and luxuriously. There is one fact, however, to be urged in respect to the size of the trout, namely, that it depends entirely upon the quantum and quality of food yielded to it, whether from channel or surface, and not upon the age of the fish. The range of water also is a matter to be taken into consideration in connection with its growth; for let a single trout be planted in a spring well, and tamed to such a degree as to take its food from one supplying it regularly and abundantly, still it will not increase much, if at all, in weight; and this is owing solely to the circumstance of its being confined, and not at liberty to choose its aliment according to the caprice of the moment: whereas in localities where the food varies with the seasons, and where there is choice at all times, and room for exercising it without challenge or interruption, trout will grow rapidly, and to a great size.

In all lochs characterised by good feeding-ground and abundance of shelter, trout have a tendency to acquire large dimensions. This tendency, however, is frequently counteracted by the breeding accommoda-

tion in the shape of streams or feeders, which afford great facility for spawning. Under such circumstances, the stock, instead of attaining to great size, become numerous, as is the case in many of our lochs, where the feeding-grounds are both extensive and of good quality. The introduction of pike into such lochs aids, no doubt, in improving the dimensions and quality of the trout, but has not always this effect.

For instance, St. Mary's Loch, in Selkirkshire, contains pike and perch in considerable abundance, and yet the trout continue comparatively numerous, and are not distinguished on account of their size, seldom exceeding a pound in weight, and averaging little more than half-a-pound. The breeding waters, consisting of Meggat, Yarrow, and five or six hill burns which help to people the lake in question, are, in this instance, quite sufficient to keep up the supply, notwithstanding the ravages presumed to be committed by the fresh-water tyrant, which fish, I may mention, infests only the weedy portions of the loch, and is not found equally distributed, as is the case in Loch Leven, and many of our Highland sheets of water, around the margin. Were it so,—were every point of access to the shallows held in keeping by pike, most assuredly the trout would decrease in number; and should a fair proportion of their feeding-grounds remain at the same time accessible to them, they, as certainly, would increase in respect to size. We have illustrations of the fact afforded us by what has been noticed in a number of our Highland lochs: for instance, in Loch Tummel, in Perthshire; in Loch Vennachar, near Callander; also in Lochs Garve, Achnanault, and Ledgowan, in Ross-shire. In all these expanses of water, the pike are numerous and pretty equally distributed along the margin,

having the desirable shelter and accommodation. The trout associated with them are consequently not abundant; but, generally speaking, of large size. They vary in point of weight from one and a-half up to ten or twelve pounds weight.

It may be remarked, however, that lochs containing few or no pike, and where small trout, averaging from a quarter to one pound weight are found in great abundance, not unfrequently, along with these, possess large individuals of the species, chiefly predatory in their habits, and which unquestionably commit havoc to a great extent among the others. Such fish have frequently been taken by trolling in Lochs Laggan, Tay, Ness, and Earn, where the trout captured with the fly seldom exceed a pound in weight, and are generally not so heavy. These monsters, I may observe, are quite different in character from the *Salmo ferox* of Lochs Awe and Shin; they are merely over-grown loch trout, of the same variety as the general stock of the lake they inhabit, or one or other of its tributaries. They have been captured, I am told, weighing 20 lbs., and upwards; nor shall I dispute the accuracy of this statement, but feel inclined to give it full credence.

In July, 1835, at Fort Augustus, I remember seeing a fish of the above description captured from the boat with trolling-tackle in Loch Ness—its weight being fourteen pounds. This, with the exception of several stuffed specimens of the *Salmo ferox* of Loch Awe, is the largest fresh-water trout I recollect ever to have seen. In point of shape, I may state, it was, to my eye, symmetrically faultless, being deep in the flank, small-headed, and beautifully curved in the back and shoulder—properties not always possessed by the description of trout I am alluding to, which, as overgrown indi-

viduals of their species, are inclined to show a monster front; big, bony jaws; a long, straight, thick-hided hull; and huge, flapping tail: in fact, all the characteristics which age, hunger, and roving habits are apt to engender.

The above observations regarding the size of fresh-water trout hold reference entirely to those contained in our lochs, and to such, no question, the precedence ought to be allowed, for undeniably they excel our river-trout in many respects. Not only do they attain a greater size, and that, considering their advantages in point of shelter and feeding-ground, naturally enough, but in general, also, they possess a finer quality, and bear away the palm with regard to external beauty. River-trout, however, although inferior in all these respects, command to a larger extent the esteem of the angler. They afford him sport of a more varied and delightful character than that which he obtains from the exercise of his art over lakes and fish-ponds. The passing from stream to stream—from rough water to smooth—from shoal to deep—from rock to weed and gravel, is of itself enjoyment, and increases one's zest for the pastime; whereas in loch fishing, there is a certain degree of tameness and monotony arising from the circumstance of there being no great essential change in the position of the angler. Whether the surface be calm, gently rippled, or wrought into foam-covered waves, still, be it from boat or marge, he has to ply on, without relief, in the same uniform style. No wonder, therefore, that he attaches more consideration to the trout of the stream than to those of the lake, and holds in higher repute a three-pounder captured with gossamer tackle out of some wandering rivulet, than one of twice that weight—a lumbering,

wiry-jawed, disheartened monster, hauled by main force through a medium whose resistance, at the best, is of a sluggish and passive nature.

I am unable to state accurately the largest size to which trout, bred and nourished in our Scottish rivers, have been known to grow. It is probable that individuals, purely of the river sort, have attained the weight of ten or twelve pounds. In the "Aberdeen Journal," September 1833, one is made mention of, caught by the gamekeeper at Haughton, in the Don, with rod and line, which weighed eleven pounds, and measured in girth seventeen inches. On Tweed, they have frequently been captured in the cairn-nets, and otherwise, upwards of six pounds; and more than once, above seven pounds in weight. I have taken them with the rod on this river, and its tributary Teviot, weighing four and a-half pounds; and I make no doubt, but that there are many scattered up and down its pools and streams, fully as heavy. The trout in Tay, occasionally grow to a large size, but I am not aware that any surpassing in weight the biggest found in Tweed have of late years been taken from this river or its tributaries, those excepted which have made their way into its streams out of the loch above Kenmore, Loch Tummel, or some other sheet of water bearing the same relation to it, and containing trout of considerable weight.

Sluggish streams, that traverse a rich soil, or have a marly channel, are greatly favourable to the growth, I do not say the increase, of trout. Of this sort are several of the Fifeshire waters—the Orr, the Leven, and the Eden. In all these, river-trout were wont to be caught of a large size, excelling in point of shape and quality, those of our more notable streams. Machinery, drainage, and other agricultural improve-

ments, have, however, contributed greatly to thin the breeds in question, and in their place, pike, perch, and eels, hold to a certain extent the ascendancy.

Of all streams that I am acquainted with, the Leet, which discharges itself into the Tweed above Coldstream, was wont, considering its size, to contain the largest trout. During the summer season, it is a mere ditch; in many places, not above four or five span in width, and where broadest, still capable of being leapt across. The run of water is, comparatively speaking, insignificant, not equalling in the average a cubic foot. This, however, as it proceeds, is every now and then expanded over a considerable surface, and forms a pool of some depth; in fact, the whole stream, from head to foot, pursuing, as it does, a winding course for upwards of twelve miles, is a continued chain of pools, fringed during the summer on both sides with rushes and water-flags, and choked up in many parts with pickerel weed, and other aquatic plants. The channel of Leet contains shell-marl, and its banks, being hollowed out beneath, afford, independent of occasional stones and tree-roots, excellent shelter for trout. Not many years ago, the whole course of it was infested with pike, but the visit of some otters, irrespective of the angler's art, has completely cleared them out, and thus allowed the trout, which were formerly scarce, to become more numerous.

On the first occasion of my fishing Leet, which happened to be early in April 1841, before the sedge and rushes had assumed the ascendancy, I captured with the fly twenty-six trout, weighing in all upwards of twenty-nine pounds. Of these, five at least were two-pounders, and there were few, if any, small-sized fish. In 1842, on the 2nd day of June, the weather being

bright and hot, I killed with the worm, out of the same stretch of water, betwixt Castlelaw and Boughtrig, forty-two trout, weighing upwards of twenty-three pounds; also, on a similar day in June, 1846, betwixt ten and two o'clock in the forenoon, I managed to encreel three dozen and five fish, the largest of which was a three-pounder, and there were at least twelve others that weighed a pound a-piece. The gross weight, on this occasion, I neglected to take note of, but it certainly approached two stone.

I mention these facts, not by way of recounting anything extraordinary achieved with the rod, but simply in order to show, that the size of trout does not depend greatly upon the size of the stream they inhabit, but to a large degree upon the superiority of the feeding, and the accommodation, or shelter afforded them. As a contrast to the above-mentioned rivulet, I may name the Esk, in Dumfriesshire, a river, entitled from its width and discharge, to be reckoned among our second-class waters. The trout which this river contains, seldom attain the weight of half-a-pound. They are also, comparatively speaking, thinly scattered throughout its streams; and these circumstances are owing, partly to the scarcity of food, and partly to the inconvenient nature of the shelter which is furnished, not, as in Tweed or Teviot, throughout the course of the channel, but only here and there, in irregular pools, among rocks and shifting gravels. It is the same on the Dee, and other rivers of a similar character; while streams, wholly insignificant in point of dimensions, often produce large and well-conditioned trout, or, what is equivalent, an abundance of small and middle-sized ones. Leet, Eden, Kale, Bowmont-water, are instances of this sort, in my own neighbour-

hood ; in Perthshire, the May-water ; in Selkirkshire, the numerous burns that fall into Ettrick, and so on.

In connection with the size attainable by the *fario* or common fresh-water trout, it is requisite to say something regarding the growth of the fish—a matter already in a cursory manner alluded to, while treating of the effect which change of circumstances produces upon this or that variety of the species. Before doing so, however, I am naturally led to venture one or two remarks relative to the breeding of trout. As regards the spawning time, it differs, although not very materially, in various rivers and localities. The Tweed and Teviot trout begin to deposit their ova in September, and continue to do so throughout October. By the end of this month, the generality of the females have concluded their spawning operations, and become what is termed kelted. But it is different with the male trout, whose milt is not properly matured, until the greater proportion of the she-fish have actually left off spawning. I opine, therefore, that the use or intention of the milt is not, as is generally supposed, to form an amalgamatory process with the exuded ova, but to impregnate the ovaria of the female fish, an opinion which I have attempted at some length, to establish in another chapter, while treating of the breeding of the salmon.*

* Confirmatory in some measure of my views on this subject, a curious circumstance was lately related to me by George Dundas, Esq., the present Sheriff Depute of Selkirkshire, who was an eye-witness on the occasion. It happened several years ago, while angling along with his brother on the Earn at Strowan Bridge, near Crieff, that the latter got hold of what he at first supposed to be simply a river trout, but on drawing it ashore, was surprised to find that he had captured two fish of the species, and these, strange to say, attached to each other by the vent, evidently engaged in an act of sexual intercourse.

In accordance with this notion, I hold the spawning and covering seasons to be in a manner distinct, following, it is true, close upon each other, yet by no means one and the same season. The latter, in fact, is as the rutting time, the former the calving. Although I mention September as the month in which the female trout usually deposits her ova, yet I have frequently, as early as July, captured individuals on the eve of spawning, the leaves of roe being fully developed, each bead or particle having attained its maximum size, and readily, in obedience to the slightest pressure, issuing from its natural outlet. This state of maturity during the summer, I have further observed, is more marked among large trout than those of the ordinary size; but never that I can recollect have I met with a milter proportionally matured, before the latter end of September, and rarely even then.

While angling with the salmon-roe, I have frequently, during the winter months, picked off below the same stance a dozen he-fish, all of them on being landed shedding their milt in its ripest state. On such occasions, they generally took the bait at the tail of a stream, and in thin or shallow water. Among these, I have caught also kelted females and numerous other trout, not marked as breeders; but seldom have I fallen in with a fish actually on the eve, or in the course of spawning; whereas, during August or September, while angling with the same bait, I have found the result to be in a manner the reverse,—that is, I have frequently taken a number of ripe spawners, and it might happen several male trout; the latter, however, being in a state of comparative backwardness as regarded the milt.

Trout, during the spawning and covering seasons,

undergo a considerable change in their external appearance. The spawning fish loses much of the lively colouring natural to it when in good condition. It becomes black, soft, and slimy to the touch, and big in the paunch, whereas the milter frequently gains in colour, acquiring a golden tint, by no means offensive to the eye. In shape also, it differs largely from the female. The body becomes deep, like that of the perch, and although slimy to the touch, is neither soft nor flabby. The skin, however, is thick and tough, exhaling a rank, disagreeable flavour. Its head also undergoes a singular transformation. The bones composing it seem to have grown in size and altered in form. The lower jaw especially, acquires a curved or beaked shape, and both the snout and it project more fully than usual. When kelted or free of their spawn and milt, these appearances and alterations in both sexes gradually wear off. They become externally more assimilated the one to the other; but it is not until insect food becomes plentiful, and the spring months are nearly at a close, that they regain fully their brilliant colouring, and recover that firmness and condition which enable them to prove active under control of the rod, and show sport to the angler.

In spawning, fresh-water trout, both lake and river varieties, have recourse to shallow streams and feeders. They are incapable of breeding in still, deep water, and require to enter a run or current, before they can effect the shedding of their deposit. Pond trout, debarred from this advantage, will, it is well-known, continue unproductive. It is the natural instinct of the trout, as it advances in pregnancy, to leave its usual haunt and push upward. Frequently, it does this in a marked and determined manner, but not always. Loch trout,

more than the river sorts, are distinguished for this venturesomeness, which resembles, in their case, that of the salmon issuing from its marine abode. They, the loch trout, have been known to ascend to a distance of ten or twelve miles from the expanse of water they inhabit, in order to spawn; while the latter, the river varieties, often betake themselves to the nearest shallow,—the head or fordable parts of the stream they daily disported in during summer. I ascertain this to be the case from the fact, that, during the spawning and covering seasons, the trout, whether milter or spawner, taken from the lowest streams of Teviot, immediately above its junction with the Tweed, are, generally speaking, trout of the true Teviot variety; and as regards the loch trout, what I have stated is well-known, and easily proved.

In depositing her ova, the female fish does all the work, without any assistance from the male. She forms her own redd, or furrow, expels the secreted particles by a process of self-exertion, and covers the ova by the action of her tail, as they descend. The milter, I hold, during these operations, yields her no assistance whatever. It is possible he may be at hand on the watch, waiting the completion of the process, but he avoids, during its continuance, every show of contact with the female; and his interference with the operation can amount to nothing more than the scaring away of small fry from the spawning bed; or perhaps he may indulge his own voracious appetite, by picking up the stray ova, as they roll towards him,—a propensity not to be wondered at, while it is of common occurrence to capture large trout, with individuals of their own species projecting from their mouths.

On their expulsion, the ova, as we have stated, are covered up by the spawner with sand and small gravel, through the action of her tail. This member, in all fishes, possesses great power, and is quite adequate to the task in question ; and that it is so used, the marks of attrition it presents immediately after fully manifest. But although, by its medium, a considerable portion of the expelled ova is secured and made available, the larger quantity makes its escape. Of this, much is devoured in its progress seaward ; a portion is cast on the bank, or carried to the salt-water, and rendered useless ; and the rest, finding lodgement behind stones and pebbles, in due time becomes vivified.

The spawn of the fresh-water trout is brought to life much in the same way as the spawn of the salmon. It requires to be acted on, wholly by the temperature of the water in which it lies. There is no process of incubation at work to produce vivification ; and as the temperature to which it remains exposed is both unequal and uncertain, so there can be no fixed or determined interval betwixt the depositing and hatching of the ova. In fact, the roe shed in November, is likely to become engendered nearly as soon as that shed five or six weeks earlier, and both may make their appearance as fry, in March, April, May, or June, just according to the clemency of the season and the action of solar heat.

The trout, if well fed, grows with astonishing rapidity ; under any circumstances not absolutely hostile to its existence, it acquires, in the course of four or five months, dimensions which entitle it to a place in the angler's creel—at any rate, in the frying-pan. Its growth, in point of fact, is not greatly disturbed by lack of food, during the first season of its existence ;

and, accordingly, in almost all rivers, it attains a certain size, I do not say condition, in the same extent of time. This is easily accounted for. During what may be termed its infancy, it requires little nourishment, and this, the quantum it requires, the most barren streams can afford; whereas, to a fish of more mature growth, such waters are quite inadequate to furnish it in the requisite sufficiency. Accordingly, in streams of this nature, trout seldom or never attain to a large size. They naturally become dwarfish and ill-conditioned, obliged as they are to subsist upon a measure of food, not a whit more ample than what they had the power of obtaining and actually did engross, without either craving or surfeit, during the first year of their existence.

In the generality of our Scottish rivers, for example the Tweed and Teviot, furnishing an ample, but not extraordinary supply of food, the growth and age of the trout inhabiting them, may be reckoned as follows. The fry, I presume, hatched in the month of April. They continue growing, during the first year, as long as a regular supply of ground and surface food is afforded them, until the latter end, probably, of October. By this period, they have acquired a length of six or seven inches, and a corresponding weight of from two and a half to three and a half ounces. Feeding precariously during the winter, they gain no additional weight, but rather the contrary, until the spring months. About the latter end of March, the river-flies making their appearance, they begin to feed regularly, and, as a consequence, recommence growing. By the time the supplies have again become stinted, they have acquired an accession to their length of about a couple of inches, and weigh from five up to seven

ounces. A considerable proportion of the trout of this, the second year's growth, are in spawning trim during September, and others part with their milt a few weeks later, but a great number there are among them which do not arrive at breeding condition until the autumn and winter following. The trout of the third year's growth form the generality of those captured by the angler with fly about the end of April and beginning of May, averaging, as they do, from seven to nine ounces each, and occupying at that period, to the exclusion of smaller fry (which still hold to the pools and deeper portions of the river), the main streams and currents.

During the first showers of March-browns, these, the trout of the third year's growth, are generally foremost on the feed, interspersed, however, with a few of their seniors—the survivors of a former generation. Of this latter description, are those approaching to or upwards of a pound in weight—a stage of growth, on reaching which, I believe that many of our river-trout cease progressing. Others, however, which have taken up a convenient haunt or post of attack, and instinctively prefer coarse and abundant feeding, attain to a much larger size. A few individuals also, the inhabitants of the rivers I speak of, owing, in the same manner, to the advantages they possess in acquiring food of a finer quality, locating themselves, for instance, under a range of alders, or at the mouth of a feeder, reach, without any loss of proportion, more than the average weight of full-grown trout. These latter subsist, almost entirely, upon ground and surface food, and only occasionally, as a change, and when the other is scarce, resort to the minnow or parr.

The above remarks bear reference, as I have already

stated, to the trout frequenting a large number of our Scottish streams, both main rivers and their tributaries, and, with such modifications as are imposed upon them through some peculiarity in the feeding afforded by this or that water, may be held as of general application. When the feeding supplied by a stream or burn falls—I am talking of quantity only—below the average, trout seldom attain to more than a quarter of a pound in weight. They may abound in numbers, but these, in general, are lank, large-headed fish, that give little or no sport. Many of our Highland streams are of the description above mentioned. They have no winter supply of food at all. They travel, at least half their course, over rocks. Their banks have undergone little or no tillage. They are incapable of receiving it. Here, like the channel itself, they are solid rock; there, they are the debris of the torrent; sometimes they present to the eye a fringe of heather; sometimes a miry swamp; sometimes a forest nurtured by its own sheddings; seldom do they give indication of being supplied, during a flood, with loam or rich soil, yielding insects and their deposits; but, on the contrary, the occurrence of a winter spate only despoils their courses of such unappropriated aliment as found lodgement therein during the summer months. Such, along the greater portion of its career, is the Dee; such are the Coe and the Spean; such, also, are many of the mountain feeders in Perthshire, Inverness-shire, Aberdeenshire; in fact, throughout the northern highlands of Scotland. Hence we find the trout inhabiting them dwarfish in size, lean, and unhealthy. Even in the course of summer, when insect food is tolerably abundant, they make little improvement, and seldom do we see them encroached upon by varieties from neighbour-

ing streams or lochs, unless with the intent, on the part of larger trout, to assail and devour them; or, it may be, when forced by circumstances to deposit their spawn.

Should the feeding, however, greatly exceed the average, I still speak in respect to quantity, although it rarely does so without the implication also of a superior quality of subsistence, trout will not only attain to a weight exceeding what I have mentioned to be that common to a full-grown Tweed fish, under ordinary circumstances, but they will arrive at it, in a far shorter period of time, in the course, it may be, of two, or at most three years; whereas the Tweed trout needs four to acquire its sixteen ounces, and then ceases growing. Thus, in Leet or Eden, a trout of the second year's growth is as heavy as a three or even a four years old fish pastured among the channels of Tweed or Ettrick; and were the trout of these insignificant waters suffered undisturbed to reach their full size, which there is no question they would do in the course of five or six years, numbers would be found among them, as was the case not long ago, weighing severally upwards of two pounds. Thus, also, in respect to many lakes, fish-ponds, and old marl-pits, into which the fry of trout have been put. As long as these possess a superabundance of both ground and surface food, the young fish will thrive astonishingly, and arrive, in an incredibly short space of time, at dimensions exceeding those of average sized river trout.

But without enlarging any further upon this subject, I shall conclude, with a single observation, all that is essential to be said, in regard to the growth of fish, namely, that as sheep and cattle will not fatten and thrive on stinted pastures, or barren, exposed moorland,

so neither will the finny tribe, be the stream ever so pure and abundant, acquire size and condition, unless sufficiently sheltered and amply and regularly provisioned. On the other hand, possessed of these advantages, they have all that is required in order to do them justice ; while breeds or varieties of fish, hitherto pronounced shapeless and impracticable, will, when transferred to such favoured localities, become seemly in their proportions, active in their dispositions, and relishable, if not rich-tasted, as food.

Besides the *Salmo fario* and its countless varieties, there are three other species of fresh-water trout, held by naturalists to inhabit our Scottish lakes and rivers. These are the Gillaroo or Gizzard trout, the *Salmo cœcifer* or *Levenensis*, and the *Salmo ferox*.

THE GILLARROO, I have every reason to believe, is nothing more than the common *fario*, and that the gizzard or indurated portion of stomach which distinguishes it, is entirely the result and not the occasion of its peculiar feeding. This is true, at least, that all fresh-water trout engross some measure of testaceous food, and, when the opportunity offers, will greedily devour, and abundantly thrive upon small shell-fish and horny substances. These, as well as grains or pellets of gravel, I have frequently taken out of the stomachs of common river trout, mixed with their ordinary fly sustenance ; and I have reason to believe they can digest them without difficulty.

Of the strong digestive powers possessed by the river trout, I recently met with a singular illustration. Last year, while taking a cast with the fly, for the amusement of my children, in Maxwheel pool, below Kelso Bridge, among other trout, I caught one not exceeding six inches in length, which, from the circumstance of its being

slightly extended in the paunch, I was induced to cut open. On my doing so, a large Irish-tempered bait-hook presented itself, the barb and turn of the wire imbedded in the fleshy parts of the fish, while the shank lay in the stomach, exposed to its action. On making an attempt to remove the silk dressings, with which the latter portion of the hook was still encircled, the iron beneath crumbled away, like lamp-black, betwixt my fingers, leaving only an irregular skeleton of wire, in some parts not one fourth of the original thickness. The remainder of the hook, which I have in my possession, was not in the slightest degree injured or corroded. The effect described being, as I am inclined to think, produced solely by the action of the digestive organs, and not in consequence of any chemical process put into operation by the contact of the resin and silk with the iron below, what must the effect of that action be upon the ordinary food of the fish, and even upon shells and other hard substances, especially, when encased in the stomach of a full-grown trout? To return, however, to the gillarroo, I am inclined to believe that, on strict examination, what is held to characterise a species of trout, found only in certain lakes, will be discovered to exist, in a greater or less degree, in the stomachs of many varieties of the *Fario*.

SALMO CÆCIFER, or LEVENENSIS.—The far-famed trout of Loch Leven are distinguished, I understand, many of them, from the common fresh-water trout, by the numerical superiority of their cœcal appendages. In the *Salmo fario*, these do not exceed forty-five or forty-six, whereas, in what is appropriately termed the *cæcifer*, they range from seventy to eighty. The largest trout known to have been captured in Loch Leven weighed eighteen pounds ; but it was not uncom-

mon, before the loch was partially drained and the feeding grounds, in consequence, reduced in extent, to take fish of the species described, eight or nine pounds in weight.

SALMO FEROX.—According to Mr. Yarrell, this species of the *Salmonidæ* is met with in various lakes in the Highlands of Scotland. It is well known to inhabit Loch Awe in Argyleshire, but it is found also in Lochs Laggan, Shin, Layghal, and Assynt. It has also been captured occasionally in Loch Lubnaig, near Callander. I very recently was shown, by Charles Ker, Esq., Edinburgh, the skin of a trout of this species, taken by him while trolling on the above-mentioned sheet of water. This fish, when newly captured, weighed fifteen pounds and a half. The *ferox* is identical with the great trout or Buddagh of Lough Neagh, in Ireland, where the small ones are termed Dolachan. I have been told, upon good authority, that it exists in the chain of lakes, including Lochs Rannoch and Lydoch, which extends upwards, along the moor of Rannoch towards Kingshouse. Its discovery in Loch Awe has been attributed to a Mr. Morrison from Glasgow, upwards of sixty years ago; but the *ferox* must have been known to the inhabitants of the district long before that period. It has now, I understand, as far as regards the loch in question, become scarce; besides which, the individuals occasionally captured are, in point of size, very inferior to those taken twenty years since, few of them exceeding ten or twelve pounds in weight, and the generality not so heavy by one half. I have seen stuffed specimens of the *Salmo ferox*, which were said to be those of fish which weighed, when newly caught, about twenty pounds; but the late Mr. Maule, a persevering and successful frequenter of Loch Awe, has taken them, I am

told, half a stone heavier. In the spawning season, when numbers of these fish push down to the outlet of the loch, they may be tempted to rise at the salmon lures ordinarily used on the river Awe; but, at other times, they are only to be captured by trolling for them from a boat, at a considerable depth and with strong tackle, the bait employed consisting of a trout of five ounces in weight, fortified with hooks in all directions. The *ferox* is a more powerful fish than the *Salmo salar*, but not quite so active; still, it often manages to make its escape when hooked, and will ensconce itself securely among weeds, leaving to the angler no remedy but to break and part company.

THE SWALLOW-SMOLT OF TWEED.—Allied in some respects to the *ferox*, is what, in the lower districts of Tweedside, has been designated a Swallow-smolt. It forms, I am inclined to think, not a mere variety of the common *fario*, but a distinct species of trout. I am not, indeed, aware that the swallow-smolt, or any breed of river trouts at all resembling it, is to be found, except in Tweed itself. This fish is of highly predatory habits, and will seldom, if ever, rise at the common trouting-fly. It is caught generally by means of the parr-tail tackle, about the latter end of May and beginning of June, when the last of the smolts are on their way seaward. Its appearance resembles, in some respects, that of the bull-trout; the head is large, the teeth particularly strong, the *maculæ* irregularly but profusely distributed, the whole formation that of a powerful and rapacious fish. As regards its edible qualities, it is, at all times, coarse and rank-flavoured. The swallow-smolt, when on the outlook for prey, frequents the hings or breaks, at the head of strong, rough water, and is frequently taken, by rod and cairn net,

from the rockiest portions of the river, such as the turbulent eddies and foam-runs of the Trow Craggs. Its average weight is from two to four pounds, but individuals have been caught that weighed nearly half a stone. Were the production of a breed of hybrids betwixt the *fario* and *eriox* a thing of likely occurrence, I might possibly have fixed upon the swallow-smolt as the issue; questioning, however, the existence of such a production, I cannot help regarding it as distinct species of the *Salmonidæ*.

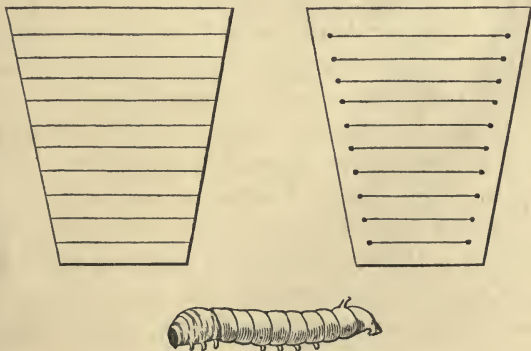
CHAPTER II.

ANGLER'S TACKLE AND EQUIPMENT.

GUT, a material so useful to the angler, it is necessary to state, is a preparation from the entrails of the silkworm. It is fabricated, principally for our British market, in various parts of Spain, Portugal and Italy, also in Sicily and the Greek islands. Spanish gut is, unquestionably, in higher repute than any other; its quality either being intrinsically finer, or more attention is paid to its manufacture and getting up. It is not nearly so long as some of the Sicilian article, which evidently is produced from a larger variety of silkworm. This advantage, however, in the latter, is counterbalanced by the coarseness of its texture, as well as by the want of roundness and equality in the thread or fibre. Good, useful gut is always distinguished by the possession of these two properties. It should also be quite transparent, not lacteous in its appearance, and free withal from flaw, film, and flossy matter. The descriptions of gut most difficult to procure, are those used for fine trouting and for salmon fishing. What intervenes betwixt the above-mentioned sorts is abundant enough, and very excellent hanks of this accommodating description may be picked up, now-a-days, at a small expense, and with little trouble. Still it is desirable that the angler have a larger choice of the qualities above mentioned; and I think a little trouble on the part of those importing it would secure

an ample supply of both. The following is a recipe I have copied, from a small anonymous treatise on Angling, relative to the manufacture of silk-worm gut.

“Take the largest and best worms you can procure, just when they begin to spin. This may be known by their refusing to feed, and by their having a fine silk thread hanging from their mouths. The worms must be kept in strong vinegar, and covered close over for twelve hours, if the weather is warm; if not, two or three hours longer will be necessary. When taken out, they must be pulled asunder, and you will see two transparent guts of a yellowish green colour, as thick as a straw, bent double, the rest of the inside resembling boiled spinage; you can make no mistake. If you find the guts soft, or break upon stretching them, you must let the worms lie longer in the vinegar; when fit to draw off, you must dip one in the vinegar, and stretch it gently with both hands to the proper length. The gut thus drawn out, must be stretched out on a thin piece of board, by putting each end in a slit therein, and placed in the sun to dry. This is the real gut, and the mode of dressing it is the cause of its ends being cramped.”



I am of opinion, from experiments made by me at various times, that it is advantageous for the angler to employ stained or dyed gut, in preference to the material in its natural state. I have ascertained also, that there are two colours, or rather tints, that take the precedence over all others, in producing the desired effect, that is, in concealing or rendering it invisible to the eye of the trout or salmon, as well as the observation of the onlooker. With regard to the experiments in question, they were made, some at the bridge below Coldstream, and others at Teviot Bridge, near Kelso; a party on each occasion being stationed to report, on the key-stone of one of the arches, and immediately superintending the cast underneath. The conclusion I have come to is, that the walnut leaf, or brown dye, is best calculated for the purpose required; although, in a bright day, and in clear water, a bluish or neutral tinge is perhaps more desirable. The former of these colours is obtained simply from a decoction of walnut leaves, or bark, using two handfuls to a quart of water. Into this liquid, when in a cool state, the gut should be placed, and allowed to soak for two or three hours; or it may be immersed, for a few seconds only, in the hot fluid, and then rinsed well in cold water. Let care be taken that the shade or tint be not too deep. It should approach to a light amber colour, and on no account be allowed to lose its transparency.

As to the bluish dye. This is obtained from a decoction of shavings of logwood, a handful to the quart of water. Boil these for about a quarter of an hour, and throw in a small piece of alum, about the size of a horse bean. On removing your pan from the fire, dip the gut in while the liquor is still hot, allowing it to remain five or six seconds, and then transferring it, as

before, to cold water. After you have washed it, shake off the superfluous moisture, and allow the hank to dry thoroughly, before laying it by. Silk-worm gut, I may here remark, when in the hank or considerable quantities, should be wrapt up lengthwise, in a piece of chamois leather, which keeps it in much better trim than paper does. The following are the recipes for the dyeing of this material :—

1. An azure, or neutral tint, 1 drachm logwood, 6 grains copperas.
2. A pinkish azure, . . . 1 drachm logwood, 1 scruple alum.
3. A dingy olive, . . . ditto, adding 3 scruples of quercitron bark.
4. Light brown, . . . 1 drachm madder, 1 scruple alum.

These being the proportions of the materials, the water can be applied to suit tastes. Immerse the gut fully a minute.

HORSE HAIR, LINES, &c.—Before the introduction and general use of silk-worm gut, I can readily understand how valuable a really good selection of this article must have been to the angler. Indeed, judging from the specimens that, from time to time, have come under my notice of the fishing-tackle used by our forefathers, I am led to the opinion that there is no horse-hair to be obtained, in our modern days, which, in point of roundness, length, and power, at all approximates to what was employed by them. This is owing partly to the practice, now in vogue, of docking our stallions before the tail has had time to acquire its full strength, and partly, also, to the care and attention formerly exercised in the selection of the article. One of the finest specimens of good horse-hair I ever remember to have met with, was presented to me, along with a bait hook and some red hackles, by the late Mr. William Laidlaw, the friend and factor of Sir Walter Scott. This and its accompaniments were

part and parcel of the identical fishing tackle discovered along with the mislaid MSS. of Waverley, and alluded to by Sir Walter, in the General Preface to his Novels. I make no doubt, but with the single hair in question, I could have managed, provided my rod was a pliant one and my reel-line ran easily, a salmon of ten or twelve pounds in weight, not indeed in such water as the Trow Craggs, or any of the rocky straits and clippers that afford facilities for fish to cut or wear through the line; but in an open, unobstructed cast or pool, where the salmon could show no cunning, and, at the same time, exert its full strength and speed. The hair alluded to, I may mention, was white, clear, and long, not of the coarse, black description, which even now-a-days is common enough, and possesses, without question, strength to capture the largest of our river fish.

As to colour, however, the natural chesnut is preferable, especially for casting-lines. With regard to the reel or winch-line, it is of little or no consequence what colour of hair is put into requisition. A mixture of black and white is most commonly employed in its manufacture, and perhaps, next to good chesnut hair, is really best adapted for the purpose. I am not partial to pure white hair, either for casting or running lines; but my objection rests chiefly on the circumstance of the material, as found in the market, being, in nineteen cases out of twenty, bad or unequal. Casting-lines, especially, should always be formed of choice hairs. They should be selected to correspond one with the other, and ought to possess, besides, length, roundness, and perfect equality.

In speaking of hair casting-lines, I may observe, that although the above remark applies equally to the trout-ing and other sorts, it is intended to hold reference

chiefly to what is employed, under that denomination, in salmon fishing; indeed, for my own part, I have long ago abjured the use of hair altogether, in the formation of my casting-line, except for the purpose I am referring to; nay, I would reject it even for this purpose also, were there any expedient or contrivance known to me that could advantageously be substituted in its place.

The upper casting-line, generally used by salmon fishers, and requisite as an assistance in throwing the fly, is composed of three or four links of hair, and extends, when these are joined, to about six feet. Each link contains from eighteen to twelve hairs, according to the strength and thickness of the winch-line to which it is intended to be attached. The upper casting-line ought also to taper gradually, so as to admit of the lower or gut one forming, when looped on, a continuation with it, in point of thickness. This is managed by diminishing the number of hairs in every successive link; that is to say, supposing the uppermost length is formed of eighteen hairs, the one following should contain fifteen, and so on, down to twelve and nine.

In the making up of casting-lines, great attention should be paid to the knotting and tying, as well as twisting, which some prefer executing solely with the hand, in preference to the machine. I can affirm, however, from experience, that the machine answers the purpose better, not only in point of expedition, but it produces more equal and trustworthy work. Take care, however, not to overtwist the links, and see that the hair, which ought previously to be washed with soap and water, is quite dry. Silk-worm gut, on the contrary, when spun up into casting-lines, ought to be soaked in luke-warm water, and attached to the machine

while wet, and before losing its pliancy. And as to gut casting-lines, they ought always to be constructed of long, choice gut, carefully assorted. Every separate length should consist of three threads, equal in thickness, I mean as regards that individual length; for, to regulate the tapering of the line, lengths of various thicknesses are required to be spun, and a careful selection made from them before joining.

The triple gut casting-line ought to extend fully six or seven feet, and is intended either to succeed the hair casting-line, in salmon fishing, or to be appended immediately to the winch-line, by the trout fisher. Linked to it, is the single gut casting-line, composed of three or four successive strands of picked material, carefully knotted, and if intended for large fish, tied over at the joinings with silk thread. Of course, by salmon fishers, this addition is dispensed with, when triple gut is found necessary or more useful. In fine waters, on the contrary, it is often expedient to add to the length of this portion of the casting-line, as well in salmon as in trout fishing, in order to keep up the deception and not alarm the fish.

But I think it unnecessary further to enlarge upon the subject of lines, in the present chapter, as various instructions respecting them lie interspersed throughout the treatise; and as to the knotting together of the threads or strands, I deem it proper merely to mention one or two of the most approved methods of joining.

THE WATER KNOT, SINGLE AND DOUBLE.—This knot is completed, simply by laying the ends of the two threads, links, or strands, required to be joined, alongside of each other; then, doubling the one round the forefinger of the right hand and passing one of the links and its corresponding end through the loop thus

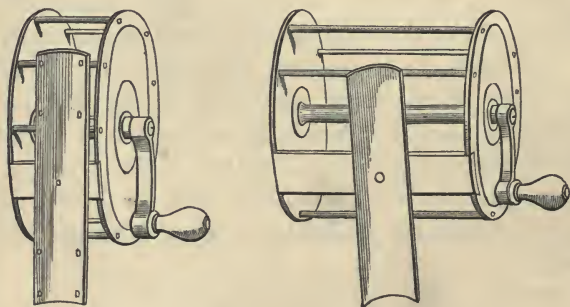
formed, draw all tight. Should the material be silk-worm gut, allow the knot to soak a moment in the mouth, before drawing. In making the double knot, pass the lengths twice through, instead of once: this will give greater security to the line, and prevent all possibility of the ends slipping. The double water-knot should always be adopted in making up fine or single tackle for salmon, but gives a clumsy appearance to the trout line. After the knot is completed, clip away the useless portions of the lengths, but not too closely, and in the case of casting-lines, tie over what is left with fine silk thread. I seldom tie over the knots of the single gut or foot-line in this manner, unless at such a distance from the hook that they do not generally come into contact with the water, and are thus rendered liable to be mistaken for flies. The water-knot is unquestionably the simplest and most expeditious, if not the safest, knot used by the angler, but there is another mode of joining lengths of single gut, occasionally practised on Tweedside, and which it behoves him to become acquainted with. This is executed by laying the ends of gut, intended to be joined, side by side; form a simple knot over each, with the other, thus:—



Draw the knots tight, and pull them together. They will hold fast, in the right direction, but can be separated, so far, without trouble, by simply drawing them asunder. In affixing bobs or droppers, this mode of joining together the lengths which compose the foot-line has its advantages; the bob or dropper requiring no

loop, but simply a small knot at the head of the gut it is attached to. When inserted betwixt the closing ends above described, this knot, on their being drawn together, will prevent the dropper from slipping off: at the same time it can readily be disengaged, and another, at the option of the angler, substituted in its place.

THE REEL, OR WINCH.—A great improvement has of recent years taken place in the form and construction of the reel, or winch. By reducing the length of the barrel and pillars, and enlarging the diameter of the brass plates between which they are confined, the line can be wound up with much greater speed and regularity than when the plates used were narrow, and the distance betwixt them considerable.*



The catch, also, or rack, is generally abolished, although some anglers naturally enough retain a prejudice in its behalf. This appendage, however, and all

* This improvement was originally suggested by the late Mr. W. Brockie, tenant at Laughton, Berwickshire, and the first brass reel, on the narrow principle, constructed under the superintendence of Signor Justinelli, a friend of the late Earl of Hume, by Mr. Sharp, watchmaker at Coldstream.

machinery intended to assist the winding up, can beneficially be dispensed with. The simpler, in fact, in these respects, the reel is, the better; it not only lets off the line more readily, but is less liable to become deranged in its action. That the line may be and often is thrown off too easily, I make no question, but this is the fault of the angler, who ought with his hand to restrain and regulate its measure, according to the power and caprices of the fish he is playing. As to the reel itself, the more smoothly and swimmingly it parts with the line the better, for whatever advantages the multiplier and rack-wheel may be esteemed to possess, these, without question, are counterbalanced by the liability such adaptations incur to become disturbed in their action and rendered completely at fault, during moments of need and extremity.

Among other improvements recently made upon the reel or winch, are those which relate to the handle. This is now constructed so as to fold over or be readily detached, according to the pleasure of the angler, and thus facilitate the carrying or packing up of the machine. Checks, also, have of late years been introduced, and the mode of affixing the reel to the rod altered and improved.

THE ROD.—Caprice and custom regulate largely the fancy of individuals in respect to this implement. One holds stiffness as a requisite, another pliancy; one prefers the single-handed, another the double-handed rod; some use a butt piece of hiccory, some of ash, and others of fir-wood; this angler, again, in the matter of the top-piece, esteems lance, that bamboo; and, as to the ferrule, I meet with one who commends the plain joint and socket, another who countenances the Scottish screw, and a third who disclaims the use of brass

joinings altogether, and stands up in behalf of the tie system. In short, there is no termination to the variety of tastes and prejudices on the subject of fishing-rods. The rings, the colouring, the varnish, the lower fittings, all fall, as matters of dispute, within the contentious circle; nor, indeed, does the observation of many years, and the most ample and unprejudiced testing of rods of every description, stiff and pliant, light and heavy, single and double-handed, enable me so decisively to pronounce an opinion upon one and all of these matters, as even to approach an adjustment of differences, in respect to them.

I can only state, from personal experience, that a very few days' practice will frequently suffice to reconcile one to the use of a rod which, at the first handling, he felt somewhat dissatisfied with. I do not say that it discovered any glaring fault in the build or material, for these are matters requiring strict scrutiny and attention; but it wanted a particular virtue, which he imagined the implement he was accustomed to use possessed; it could not, in fact, heave out the line so satisfactorily, or drop the fly with so much nicety, or assist in hooking the fish, on rising; perhaps it exhausted the wrist or arm sooner; there was about it, in fact, some vice, it might be an indescribable one, and yet, on a succession of trials, this vice or defect completely vanished. It had been got the better of by practice; nay, in reality, it was not a fault in the rod, but a pre-existing prejudice on the part of its possessor, which, as it arose through habit, could only become extinguished under the same influential dominion.

I have made these remarks as a prelude to this subject, because I consider that many anglers lay a great deal too much stress upon, and are fancifully

exact as to the length, the pliancy, the weight, the balance,—even the colour of their fishing-rods, not to speak of rings, &c. At the same time, I allow that the purpose for which a rod is made, whether for salmon-fishing, for trolling with minnow, or for trouting with the fly; for streamlet, lake, or broad river, ought to regulate, not merely its proportions, but in certain cases, its material, number of lengths, and description of finish. I shall now treat very shortly of the kinds of wood best adapted for rod-making, their peculiarities and advantages.

The material in general used for the butt-piece, both of the salmon and trouting-rod, is ash. For hollow butts, most rod-makers employ saplings, or young trees, of six or seven years' standing, well dried and seasoned. These of course possess a core or inner growth of tender wood, the extraction of which, by means of a gimlet bitt, does not greatly impair the main strength of the piece, while there is this additional advantage, that it can be performed more in accordance with the lie, run, or grain of the material than were the operation attempted on a portion of plank or sawn tree, out of which solid butts are constructed. Hollow butts, when formed out of plank wood, which they sometimes are, require to be bored with an instrument termed a *phipple* bitt. The boring may advantageously be enlarged by a tool of the same description, only smaller in size, as that used by the cooper in the formation of bung-holes. It is called in Scotland a *schulop*. It would be an improvement in the manufacture of the hollow-butt piece, were the lower or root end of the ash sapling made to receive the ferule, instead of the upper extremity, which is less

tough and consistent, consequently more apt to break, or split.

I am of opinion that Memel fir although not generally used in rod-making, is an excellent substitute for ash, in the construction of the solid butt-piece for a small salmon or grilse-rod. It has the advantage over it, in respect of lightness, while, if judiciously selected, there can be no question as to its strength and durability. I have used it for many years, in preference to any other wood, and find that it stands the test thoroughly. Indeed, with regard to two rods manufactured by Mr. Forrest, of Kelso, under my own directions, some years ago, the butt-pieces of which are made of the wood in question, I can safely affirm that they have stood the test of rough and frequent usage better than any fishing-rods I ever had in my possession; and that still, although I have killed with each of them scores of pike and salmon, as well as creel-loads of river-trout, the lower lengths are sound and trustworthy as ever.

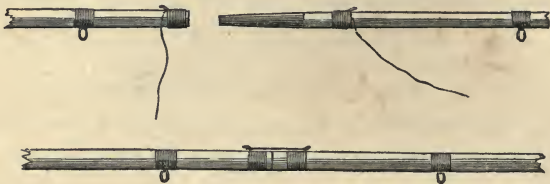
Hickory-wood, on account of its heaviness, is seldom employed in the construction of butt-pieces: but the middle divisions of the generality of fishing-rods are made of it. Of hickory there are several kinds; the most serviceable of which, for the purpose of rod-making, is the red. White hickory, however, is a tougher and more durable material, only it warps when cut up into lengths. Hickory-wood is brought principally from North America, in billets of the thickness of a man's leg and upwards.

Lance-wood is closer grained and somewhat heavier than hickory. It is a native of Cuba and other West India islands. For top-pieces, it is reckoned invaluable, possessing a spring and consistency, together with

a capability of being highly wrought and polished, not found in any other wood. The great objection to lance-wood is its weight and consequent tendency, when used as a top-piece along with different woods, to injure or discompose the just and desirable balance of the rod. In order to obviate this, rod-makers are now in the habit of constructing the top-lengths, partly of lance-wood and partly of bamboo. The bamboo portion consists of a thin slit or slits detached from one of the jointed divisions of the cane. This is rounded off and otherwise cut and planed, so as to admit of being accurately glued on to the lance-wood section of the intended top-piece, the parts thus annexed being afterwards strengthened by a wrapping of waxed thread and coatings of varnish. Rods constructed almost entirely of bamboo are in use in some parts of England, but they do not suit our Scottish rivers, being possessed of little throwing power, and adapted more for trolling with and the pitching out system, peculiar to some localities where pike are fished for. Of other woods used by rod-makers, I may mention log and purple wood, which are frequently employed in the construction of the angler's weapon by Irish artists. They are not, however, much appreciated in Scotland.

THE FERRULE.—In my younger days, I preferred to any other the Scotch screw-joint, as a mode of affixing the lengths or parts of a fishing-rod. I am now convinced that the English system is a better one; namely, that of simply introducing the lower end of each length into a corresponding sheath or socket in the division it surmounts. This socket is fenced round with a projecting portion of brass tube, which accords in thickness to the end or joint it is intended to receive. A fastening

of small twine or thread is then required to make all secure,



for which purpose there are affixed hooks or projections of brass wire on each length, immediately above and below the place of conjunction.

I am by no means partial, however, to an innovation lately introduced, namely, the coating with brass of that portion of the inserting joint, which comes into juxtaposition with the tube or ferrule. This is done with the view of counteracting the petty annoyance which is liable to occur during wet weather, or in case of the accidental submersion of the rod; an annoyance arising from the swelling of the confined part of the joint, and that frequently to such a degree, as to render it impossible for the angler, by means of mere manual exertion, to separate the pieces. That the brass coating in question does, to some extent, obviate the evil I allow; but the remedy, and a partial one it is, has its own very objectionable points. These, also, proceed from a similar cause, the alternate action of drought and moisture, which action, while it but temporarily affects the wooden joint, produces a more lasting and injurious result upon the brass one; for, in the latter case, by its operation upon the coated portion of the joint, it subserves, in a short time, to slacken and disturb the overlapping metals, and thus the adaptation of length to length, as well as the general firmness and entirety of the rod, becomes

materially impaired; whereas, when the joint is used in its simple or naked state, the slight contraction or expansion of the wood resulting from drought or moisture, occasions no such injurious effect, inasmuch as there is no necessity, when fitting in the lengths, to be over nice or exact about the point of conjunction.

It is proper, however, especially in the prospect of encountering rain, to grease that portion of each length which is intended to be inclosed. By so doing, you prevent in some measure the swelling of the wood below the ferrule, and render comparatively simple the disengaging of the several divisions. In event, however, of this operation having been neglected, should the angler find it impracticable, by the exercise of a moderate degree of manual strength, to effect the taking down of his rod, he ought by no means, on the instant, to press his object, so as to render possible the racking or injuring of the wood or ferrule, nor should he, if he can possibly avoid doing so, resort to the application of strong heat, in order to reduce the expansion of the wood. I would recommend him to take home the implement in its undetached state, and if convenient, to lay it by for a few months, either in an upright or recumbent position, until the wood has become thoroughly dried, when he may readily, without much effort, unfix the lengths. When necessitated, however, to apply heat, let him employ a pair of common fire-tongs made red-hot at the extremities. In using these, one must be careful to seize hold of the ferrule or brass tube, at or near the centre, so as not to interfere with the waxed wrappings which secure the lower fastening-pin. A very few moments will suffice to communicate the requisite heat equally throughout the joining; the moisture confined in the wood will gradually find vent

in steam along the edges of the ferrule, and as it does so, the extrication of the joint from its socket may be accomplished without difficulty.

As a guard against the injury done by rain, &c., many of the Irish rods are constructed with the ferrules inverted, that is, with the tube or socket fixed on the lower end of the length, so as to cap or lie over its corresponding joint. In this case, the rain or moisture trickling towards the butt is prevented from insinuating itself, by the crevices of the joining, into the wood below. This alteration in the position of the ferrule will also, there is no question, give additional stability to the hollow butt-piece, and materially favour its construction. The butt-pieces, however, I may mention, of the Irish rods are generally made solid.

RINGS.—Stiff or fixed rings I have always held in disfavour, and decidedly condemn them, as appendages to the fly-fishing rod. They are employed, I am aware, by many anglers, in preference to loose or moveable ones, and it is asserted that, in trolling, they possess a marked advantage over these, in regard to the facility of escape they give the line. I cannot say, for my own part, that I perceive it; on the contrary, they are apt, I think, greatly to embarrass its movements, and often occasion its entire stoppage.

In point of weight and size, the rings of a rod ought severally to correspond with its power and dimensions. Regard also must be paid to the thickness and material of the winch-line which they are intended to give escape to. In order to maintain this regard, it is not necessary, however, to sacrifice proportion in any great extent. The reel line itself is of faulty thickness, should such sacrifice to its accommodation be found needful. In fact, the two ought so to suit each other

that the rings on the taper or light portion of the rod will admit the passing through of the line in a looped state, or even when a single knot occurs.

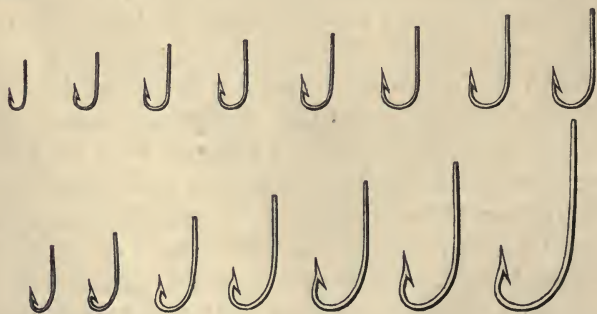
Hooks.—I have tested, during a long course of practice, hooks of all sorts, shapes and sizes, and have come to the conclusion, that there are few to be met with, in the market, excelling those of Philips and Adlington—the former being a Dublin maker, and constructing his wire, as to the bend and temper, on the Limerick or Irish system, while the latter chiefly manufactures what is well known under the name of the round-bend hook. I may mention, however, that there are many other makers, throughout the kingdom, who vie with them, to a certain extent, in the fabrication of this article. For instance, of Irish hook-makers, there are Martin Kelly of Dublin, and the O'Shaughnessys in Limerick; Holyoake and Bartleet also, needlemakers in Redditch, hold claim to public support.

I like, however, Philips' hooks and those of Adlington better than any in use; the former as adapted for all sorts of large flies, from those used in spring trouting, up to the biggest salmon ones—the latter, as suited for the smaller kinds of trout-flies, also for bait-hooks and minnow-tackles.

The round-bends are assorted numerically, from 00, the smallest midge, up to 20, the largest salmon size. Philips' hooks are classed in a different way; the trouting ones by letters, the salmon ones by figures: thus, FE represents the smallest Irish trouting fly, F the next, then FF, and next to it FFF; after which follow C, double C, B and double B, which letter, from C upwards, have their half sizes. BB, the largest of the lettered or trouting descriptions, being frequently used as a grilse hook, is admitted also among those which

rank by number, and stands at the foot of the salmon sizes as No. 9. Above it, follow 8, 7, 6, 5, and 4, the last being the largest size manufactured for salmon fishing. All the numbers have their half or intervening sizes. The Redditch hooks range as follows: Salmon sizes from 1 to 7; trouting descriptions from 7 down to 16, the smallest.

I would recommend the purchaser of hooks, in any quantity, always to test them, more especially if they are badly dressed. This is easily done, by pressing the point into a piece of wood, and exerting a due degree of strength on the bend, and other portions of the wire, the shank of the hook being firmly held betwixt the thumb and forefinger. Nothing can be more annoying to the angler, than to find himself, on a fishing excursion, equipped with an assortment of worthless wire, and yet, as regards trouting flies, how frequently this occurs. I think, however, the hooks of Adlington and of Philips may be safely commended, in their separate styles of manufacture, as among the best in the market. I append a delineation illustrative of their shapes and sizes.



VARNISH.—No angler, as part of his equipment, should neglect having a small phial containing spirit

varnish. It is serviceable to him in many respects ; it strengthens and improves the appearance of all worm and minnow-tackles ; it may be applied, with advantage, at the finishing point of fly-hooks, the head or tail ; in the construction, also, of casting-lines, where the ends require to be tied over with silk thread, its employment is beneficial ; but that part of the angler's stock to which its application, from time to time, is most needed, consists of the rod itself. When the upper portion of the top-piece is manufactured of bamboo slits, it should be applied, as far as these are concerned, frequently, and in layers or coats of moderate thickness. Rods in much use ought to be varnished over, at least twice or thrice during the season, and always at its close. This rule attended to, they will be found to last much longer and retain their springiness in its early perfection. Of varnish so employed for rods and tackle, the most generally useful consists in a solution of various gums among spirits of wine. Copal varnish is also made use of, but, in comparison with the other, dries slowly. The best mode of laying on the preparation, is by means of a small paintbrush or hair pencil.

RECIPE FOR MAKING SPIRIT VARNISH.

* Sandarac 4 ozs.	Elemi (true) 1 oz.
Pale seedlac 2 ozs.	Alcohol 1 qt.

Digest with agitation till dissolved, then add Venice turpentine 2 ozs.

THE GAFF, OR LANDING-HOOK.—This implement is exceedingly useful to the salmon-fisher. It consists of a large hook, fastened upon or screwed into a shaft or handle, varying in length from three to five or six feet. It is much used in the neighbourhood of Kelso, and facilitates greatly the capture of a tired fish, economising the time of the angler, and

* Sandrac 50 grain Alcohol 1 ounce
 Pale Seed Lac 25 do When dissolved
 1000

lessening the hazards which are frequently incurred by an attempt to land or bank it. In using the gaff-hook, the person employed should take care not to come into contact with the line, and keep well out of sight, until an opportunity occurs of stretching his weapon over the fish. He should then jerk the point into its body, no matter what part of it, and haul in rapidly. Some gaff-hooks are furnished with a small scythe or pruning-blade, which is intended for cutting through any weeds or branches that may happen to interfere with the tackle, in landing. This appendage will be found of more service in pike than salmon-fishing. Instead of the gaff, a small hoop-net is sometimes used to take in exhausted fish. It is especially of advantage in angling for trout from a boat, or even when wading in a broad stream, where, without its assistance, one has to march to shore with every half-pounder he hooks, or else to incur the increased risk of its escape, should he attempt to haul it up within grasp.

I do not think it necessary to enter into further details regarding tackle, &c. in this chapter. What remains to be said is treated of more appropriately as I proceed.

ANGLER'S EQUIPMENT.—There is no material that I am acquainted with, more suitable, as respects colour, warmth, and durability, for the general dress of the angler, than properly manufactured Scotch plaiding. It has this advantage, to boot, that it dries quickly, after immersion in water or exposure to rain, and from the varieties of pattern it embraces, there is always sufficient scope for a display of taste on the part of the selector.

I would recommend that the coat and trousers be usually fabricated of this article. In the spring season,

however, a dress of warmer texture is often found essential; and there are fifty stuffs, suitable for cold weather, on the shelves of every clothier, which the most fastidious of our fraternity could not object to wear. But I have no design to interfere with the taste or tailor of any man, and shall, therefore, refrain from entering into details upon this matter, or giving directions as to how a fishing jacket ought to be made and furnished, or what description of head covering the angler should use. With regard, however, to what, strictly speaking, forms the equipment of our craft, apart from rod and tackle, I think it requisite to offer a few observations. First of all, then, as to an article, which, in many localities, it is almost essential for the angler to possess: I mean

WADING BOOTS.—It is quite true, that, in my younger days, I regarded these a cumbersome and unnecessary part of my equipment, and so they would prove in all pedestrian excursions, undertaken by juvenile anglers, in the hey-day of health and vigour; but as one becomes sobered down, and more chary of his exertions, he not only reconciles himself to their use, but actually feels out of place in their absence. To a salmon fisher who has no boat at command, and who, to obtain sport, requires to plunge knee-deep in the element, during the months of March and April, as well as October, in seasons, in fact, when the temperature is by no means high, they are absolutely necessary; and even to the trout fisher, in May and June, who is liable to suffer from habitual exposure to wet, they constitute a desirable means of protection. I need not, therefore, to recommend them as an article of expediency, the more especially as the various inventions and improvements of the age render

them of easy acquisition, and that at a cost more moderate than a rheumatic attack, or even a twinge of toothache, coupled severally with doctors' and dentists' fees.

It would be quite superfluous, were I to enumerate the different descriptions of India-rubber wading boots, which, from time to time, have been submitted to my inspection. I am not partial to wares fabricated of such slender material as the generality of these happen to be, and prefer instead a sturdy, workman-like pair of leg-defenders, such as are worn by the Berwick fishermen and those of our principal salmon rivers. There is no necessity, however, that wading boots of this description, to last well and answer all the purposes of the angler, should be nearly so coarse and heavy as those manufactured to resist damage from salt water and incessant usage. They ought not, in fact, to weigh more, when properly ironed, than eight or nine pounds. To maintain leathern wading boots in good order, it is necessary they should be used every now and then, or else filled occasionally with water, and allowed to stand an hour or two in this condition. The leather also requires to be kept soft and pliant, for which purpose I recommend the use of the following mixture,—the materials named to be melted together above a slow fire, and smeared, when cool, over the leather :—

1 pint of neat's-foot oil.
2 ozs. of turpentine.

2 ozs. of yellow wax.
1 oz. of Burgundy pitch.

Before pulling on the boots, draw a large-sized worsted stocking over the trousers.*

The above recipe is of tried value ; but as neat's-foot

* I can recommend Mr. MacDougal, boot and shoemaker in Kelso, as a good maker of useful wading boots, at an extremely moderate price.

oil is an expensive ingredient, and not easily obtained, I subjoin a more economical preparation.

1 pint of linseed oil.	2 ozs. of best tar.
4 ozs. of beeswax.	2 ozs. of Burgundy pitch.
2 ozs. of spirits of turpentine.	

Melt all slowly together.

FISHING-BOOK.—It is astonishing what fancies some anglers entertain, in respect to their tackle. They accumulate hank after hank of gut, gross after gross of flies, a whole bolster charge of feathers, and an anchor weight of hooks, without for one moment considering the damage done by age, moths, and corrosion, and the unlikelihood of their ever existing to employ all this amassed hoard of fishing gear. No doubt, these whimsical enthusiasts draw a world of satisfaction from the review of their varied accumulations, and love to expatiate upon the merits of this or that contrivance; the shade of a tackle, or the shape of a hook, forming with them sufficient subject of discourse for more time than they have spent in testing the advantages of either the one or the other. I confess I have but little sympathy with men of this humour, and have always met with the most efficient and sterling anglers, in those who possess a simple but select stock, intermixed with nothing doubtful or new-fangled in the shape of tackle—the gut hank fresh and clean—the hooks free from rust—the flies recently dressed—the pocket-book ample in size, yet not crowded in its contents—everything having elbow-room and being in its proper place.

The angler's trouting book, in order to give suitable accommodation to the tackle required, should measure at least eight inches in length, by five and a half in breadth. The number and arrangement of the divisions

and cases are pure matters of taste, upon which no remarks need be offered. For salmon flies, I would recommend a pocket-book of still larger dimensions, and instead of vellum, let there be introduced divisions of flannel moderately fine. These, in fact, should be glued on, or otherwise affixed to strong parchment, and the rest, in stitching up, disposed of betwixt them. By the adoption of this plan, the salmon fisher is enabled to arrange a large stock of fly hooks, one by one, over a comparatively small space; he can distribute them, according to his fancy, equally over the various divisions, so that this portion of the pocket-book when closed shall not press too heavily upon that, and thus tend to injure the wings or general dressing of the flies; moreover, he has access, at a few glances, to the whole collection, and when induced to substitute one hook for another, does not require to consume time in ransacking his cases for the necessary fly, but can detect and extricate it without the slightest delay.

TIN BOX.—Although not generally so convenient as a pocket-book, an oblong or circular box of tin is better adapted, in some respects, to hold tackle, especially trouting flies made up into casts, salmon hooks, the wings of which are otherwise liable to be crushed, and casting lines of all descriptions.

This box may be constructed to open with a hinge on both sides. If circular, it should measure four and a half inches in diameter; if oblong, as many in breadth, the depth, in either case, being two or two and a half inches. Slips of white paper, fitted to shape, ought to be placed in the interior, for the purpose, as they are required, of dividing the contents.

Of the remainder of the angler's equipment, it is unnecessary to say much. With regard to the creel or

pannier, few improvements, that I am aware of, have recently taken place. More attention perhaps, than formerly, is now paid to its shape, which has been considerably elongated, the depth reduced, and the curve behind increased, so as to fit close to the back of the wearer; but in point of material, no changes have occurred. It is essential to the enjoyment of the trout-fisher, that this part of his equipment be kept always clean. During summer, a few handfuls of moist grass, or a wet cloth will aid, both to effect this object, and to preserve, until the expiry of his day's sport, the fine tints and fresh appearance of the fish captured.

The angler, for his own satisfaction, ought to provide himself with a patent spring weighing-machine. This instrument is now made so small, that it can be carried, without giving any inconvenience, in one's waistcoat pocket; at the same time, it will indicate the weight of fish captured with great exactness.

As a general advice, in concluding this chapter with regard to tackle, the angler, before committing lines and flies to his box or pocket-book, should always take care that they are properly dried; for which purpose it is recommended that he dispose of them about his hat or hat-band, on changing his tackle or leaving the river. He ought also, especially if it be a salmon one, and, in consequence of rain, soaked to the centre, to unwind his line from the reel or winch, and lay it up, in loose coils, over the back of a chair or peg, until thoroughly freed from moisture. Mixtures of hair and silk will retain the wet much longer than lines manufactured of hair alone, and in consequence, they will rot more readily, on the above precaution being neglected or but partially acted upon.

CHAPTER III.

FLY-DRESSING.

I FIND it impossible, by means of a few cursory directions, to make the art of fly-dressing sufficiently intelligible to the reader. In order to become an adept, he requires to be instructed, not by book but by practice; nor should he trust slavishly to the method of this or that artist, but allow room for the exercise of his own taste and ingenuity, especially in the selection of feathers and dubbing for salmon hooks. Before venturing to describe the process generally followed in dressing the artificial fly, I shall jot down, as a matter of course, the materials useful to the general dresser, enlarging upon them here and there, as I think it expedient.

MISCELLANEOUS ARTICLES.

1. Hooks, Philips and Adlington, of all sizes.
2. Gut, dyed and of its natural colour, both salmon and trouting descriptions.
3. Nippers, of thick wire, brass or iron.
4. A pair of fine scissors, curved at the points.
5. Silk threads of various degrees of fineness, colour, and shade.
6. Floss silks to correspond, wound up on small bobbins.
7. Phial of fine spirit varnish.
8. Wax, shoemakers', worked up with white resin, to give it consistency.
9. Dubbings, pigs-wool, mohair, wools and worsteds of all shades and colours, muscle silk, hare-leg, water-rat skin, combings of cow-hair, &c., &c.
10. Tinsels, gold and silver, flat, corded, and fretted, of various breadths.
11. Wing-divider or point.
12. Feathers, among which may be principally mentioned—

HACKLES FROM THE BARN-DOOR COCK.—These, upon the whole, are the most essential feathers used by the fly-dresser. They require to be selected with great care and judgment. I know some anglers who are particularly fastidious with regard to them, and would on no account use a hackle, which did not come up, in point of shape and colour, to the exact standard of their taste. One gentleman in particular, of my acquaintance, indulges in the fancy of collecting large quantities of these feathers. This he has done for many years, and as his avocations lead him from time to time to visit various parts of Scotland, he has been enabled to store up a very considerable collection. The hackles thus gathered are placed, according to date, in a portfolio; the history of the cock from which each lot was taken given along with them, and all are neatly prepared and made ready for the dresser. Many of these he holds in such regard, as to look upon them purely as specimen hackles, which he has no intention of ever putting to use, but retains them for the purpose of showing off their matchlessness of build and colour.

Subjoined are lists of various feathers useful to the dresser, those used in the construction of trouting-flies being distinguished from the more gaudy and coarse ones employed in the trimming of salmon hooks.

FEATHERS FOR TROUT FLIES.

Wings of Woodcock.

“ Landrail.

“ Snipe.

“ Thrush.

“ Lark.

“ Starling.

“ Blackbird.

“ Dotterel.

Feathers of Grouse.

Feathers of Partridge (hackles and tail.)

“ Mallard (back and breast).

“ Teal.

“ Starling (hackles).

“ Golden plover.

“ Lapwing (crest hackles).

“ Wren (used as hackles).

“ Ostrich (hackles).

FEATHERS FOR SALMON FLIES.

Turkey, all varieties, including	White top from mallard wing.
White and double-white tops from rump.	Swan.
Duns and dun-white tops.	Snipe, pencilled feather under wing.
Mottles, streaks, and pure white.	Salmon-tailed gledd.
Silver pheasant, male and female, tail and wing feathers, pencilled and mottled.	Capercaillie.
Golden pheasant, crest, tippet, and tail.	Mallard and teal feathers mottled.
Argus of Sumatra.	Domestic drake.
Jungle cock.	Raven.
Jay, blue feathers on the wing.	Guinea-fowl.
Blue lowrie of Australia.	Wood-duck of Canada.
Blue and buff macaw, tail, &c.	Bustard.
Green ditto.	Heron, male bird, pendant breast feathers, &c.
Parrots, for tail tufts, red and yellow, &c., parroquets.	Ostrich.
King-fishers.	Java dove.
	Cormorant.
	Bittern.
	Peacock.
	Common pheasant, &c., &c.

In dressing small or trout hooks, I pursue the following method. My intention, for instance, is to complete a dozen fly-hooks. Accordingly, in commencing arrangements, I select, from a hank of fine gut, twelve choice threads. These I prepare, by clipping off, with a pair of fine scissors, the ragged extremities, and by straightening the lengths with my fingers, I then place them together on a table before me, and proceed next to lay out, and at hand, an equal number of hooks of the sizes intended to be dressed, along with nippers, resin, &c., after which, I cut and wax a dozen portions of fine silk thread, varying in length, according to the size and description of the fly-hook in contemplation, say from eight to fourteen inches. The colours I prefer are orange, yellow, straw-tinted, and crimson; but as to this matter I am more

indifferent than with regard to the quality of the silk, which cannot, if it possesses sufficient strength to take on the wax without giving way, be used too fine.

I now open my repository of feathers and hackles, placing before me the required number of the latter or a small quantity of prepared dubbing instead. My next step is to make ready and lay out before me, in convenient order, the wings of the intended fly-hooks. In detaching these from the feather, I do not, like many fly-dressers, use knife or scissors, but generally strip them off by means of my thumb and forefinger. Such, I allow, is not the most economical mode of procedure, but it embraces this advantage, that it preserves to the fibres or strips of feather composing each individual wing, their co-adhesive power, so that, on tying on the wings, less derangement or separation of the parts is liable to take place; for although the fibres of some feathers are naturally linked to each other all along, to the very rim or extremity, others, especially those of the maldrake and birds of soft and oily plumage, have but a small measure of this peculiarity, and depend, as the principle of their connexion, chiefly upon the roots or lower ends of the fibres in question.

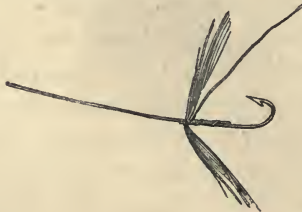
Having assorted and paired off the wings, as well as arranged, and made ready the hackles, dubbing, &c., I proceed forthwith to accomplish the dressing. This I commence, by lifting one of the hooks with the thumb and forefinger of my left hand, and applying at the same time to its shank the requisite length of gut. These, by means of one of the waxed silk-threads, above mentioned, I firmly unite together, commencing about the centre of the shank, and turning the silk over them, at least four or five times, in an upward direction,

towards its head or extremity. I then fasten, with a single hitch-knot. The hook, &c. will appear thus :



Having cut off the superfluous gut, I now proceed to fasten on the wings. These, which lie paired before me, I lift together, their heads pressed close betwixt the thumb and forefinger of my right hand, and the inner sides of the feather of which each happens to be formed, turned face to face.

I then place them, in their proper position, over the head and shank of the hook, substituting, as I do so, the corresponding fingers of the left hand, in order to keep all fast. This done, I take up the portion of waxed silk hanging below, and give it two, or at most three turns, over the root of the feathers, gut and wire-shank ; then, without fastening, bring it over, betwixt the intended wings (which, if pressed together during one of the above operations, so as in a manner to adhere to each other, I divide with a fine point, such as that of a needle or penknife), and running it below them, fetch it up again, in the form of a cross.



In making large fly-hooks, when it is desirable that the wings stand well apart from each other, I sometimes repeat this part of the process, recrossing the silk thread betwixt them. Having cut off the superfluous ends of feather, I now form the head. This is done, simply by continuing to wrap the silk over the extremity of the hook shank, above the wings, until what remains of the fag portions or roots is concealed and made secure. I now bring down the thread and fasten it, with a simple hitch-knot, underneath.

The wings being finished, I have only to complete the fly, by the affixing and laying on of the hackle or dubbing ; these materials sufficing, either in their separate or joint capacity, to represent both the legs and body of the insect. In the case of simply attaching and running on a hackle, I require, first of all, to lift one of the assorted feathers of this description previously placed within reach, and laying the root end towards the bend of the hook, so that the fibred or unstript portion has its position in immediate conjunction with the wings at the point of fastening, to cast round it the dressing thread already employed, having carefully re-waxed it for the purpose. I then continue the wrapping so far down the shank of the hook as it is my intention to bring the hackle. This done, I take hold with my nippers of the fine end of the feather, and commence, close under the wings of the fly, to wind it on. Four or five turns generally suffice to fetch it down to the desired point, when, having cast the silk thread round it twice, for security, I either twitch off the tip with my nippers, or cut it close with the scissors. A succession of hitch-knots, or what is preferable, the common whip fastening, concludes the process.

Hackles, in the case of the trouting fly, may either

be carried down nearly the whole length of the shank, to where the turn of the wire commences, or else, for variety's sake, confined immediately under the wing, so as to resemble only the legs of the insect. When so applied, it is expedient, in some cases, to complete the body by the addition, either of a little floss silk or of dubbing taken from a hare's ear, water-rat skin, &c. In putting on dubbing, take care to twist it well up with the dressing thread, by means of the thumb and forefinger, before commencing to form the body. It should be applied, as well as the hackle, very sparingly. I cannot reconcile myself to the taste for bushy flies exhibited by some anglers. As imitations of the natural insect, they are caricatures at the best, and although not refused on general occasions by hungry and hasty fish, are nevertheless ill adapted, from the circumstance of the barb of the hook being choked and muffled up, to strike and secure them.

No trouting flies, used purely as such, on most of our Scottish rivers, are a whit the better of tinsel. To adopt an intermixture, however, of gold and silver thread in the body of loch flies is generally advisable, on those lochs especially, such as Loch Tummel, Ledgowan, Ness, &c., where the trout are of a large description. Tinsel, I may also state, is a favourite addition to the materials of sea-trout, whitling or finnock fly-hooks. This is not, be it remarked, a general rule, for the fish alluded to, in clear waters, will often prefer a plain, dark-hackled fly of small dimensions, to one that is gaudy, or seemingly apportioned in size to their weight and feeding powers.

Although the method of dressing a trouting fly above described, is the one I generally adopt, and such as for many years I have found to be at once expeditious and

satisfactory, still there are artists of great skill and merit who fashion their lures upon quite a different system; nor, in fact, does there exist any fixed scroll of regulations for the fly-dresser to hold by. No doubt, it is quite allowable for him to experimentalize a certain length, and vary, not merely his materials, but his mode of putting them together; for instance, instead of finishing off at the body or tail of the insect, he may do so, more tastefully, at the head or with the wings; he may also, by way of change, leave the wings undivided or append them so as to turn over, and thus maintain a more upright and life-like position, when drawn along the water's surface.

But while conceding, in this respect, to the fly-dresser, I must maintain that there is no real service done to the angler, as regards trouting flies, by a multiplication of their names and varieties, or by useless disquisitions upon certain virtues peculiar to this or that imitation; nay, further, I regard, as unessential and elaborately trifling, the attempts made by many theoretical writers on the subject of angling, to sort out and classify, according to the month, the different ephemeral and water insects which they think it necessary should be included in the stock of the fly-fisher. I am of opinion that, with a hare-lug, a brown and a black hackle—these three—it being a matter of indifference whether the wing adapted to them is formed of the brown mallard, the woodcock, landrail, or grouse feather, or indeed whether the hackles are provided with wings at all,—I express my belief, founded on the experience of more than twenty years, that, with the three simple fabrications above mentioned, accommodating them in point of size to the season and state of water,

trout can be captured, and that as readily as by means of the most slavish and subtle imitation of the natural insect, from any river or loch throughout Scotland. In my chapter upon trouting flies, these observations will be found considerably enlarged upon, explained, and applied.

It now remains for me to say something relative to the dressing of salmon flies. This is a subject involving such a variety of practice, and so much detail, that to attempt the discussion of it in full, is much beyond my intention. The task, fortunately, is not required, and I shall therefore confine myself to a very few remarks, which, if they do not bear so immediately upon the matter in question as to expound and illustrate it, may, nevertheless, be admitted to possess some connection therewith.

First of all, as to the dressing of the Scotch salmon-fly. It is generally imagined that, because of its sober, if not homely look, the fabrication of this lure is a matter of no difficulty, in comparison with the fabrication of an Irish killer, such as the Doctor, or any other well known magnet. I admit the materials are not so costly, nor, in many cases, nearly so numerous; still there are points in the dressing of the former, which, in order to make it please the eye, require more nicety of execution, as well as the exercise of more taste and discrimination than are necessary to be employed in the construction of the latter. Among these, is the proper adaptation and tying on of the wings, the selection of the hackles and dubbing, the harmonising of the colours, the meting out and apportioning to its special purpose the quantity of each material. True, all these matters command considerable attention, on

the part of the Irish fly-dresser, but he is relieved by the showiness of floss, feather, and tinsel, from the necessity of exercising anything like that degree of taste which the working with dull and sombre colours calls forth; and in the case of the wings, he is not hampered with one tithe of the difficulty which attends the neat adjustment and fixing on of these appendages, severally and without break of fibre, all of which is requisite in regard to most of the Scottish salmon flies.

Still, in either capacity, whether as a dresser of Irish or Tweed flies, it is essential, if aspiring to excellence, that the artist be endowed with a tasteful and correct eye—the eye in some measure of a painter, who can understand the arrangement and mutual relation of colours to each other; he must also possess the ready use of his fingers, so as to be able to execute delicate and minute work, to give, as it were to a spider's thread, the sufficiency of a strong cord, to conceal and varnish over all breaks and finishes, so that the entirety of the performance may, in a manner, challenge or defy question.

I could introduce by name to the reader, a great number of excellent fly-dressers, as well amateurs as professional hands, but shall confine myself to the mention of two or three among the latter, the superiority of whose style of dressing, as regards salmon-hooks, is well known and appreciated by the frequenters of our Scottish rivers. Among these, is Mr. Forrest, of Kelso, a most able and ingenious artificer in every department relating to angling, and one whose stock of materials, gut, wire, wood, feathers, &c., can be relied on as fresh, and of the best description. Mr. Blacker, from London, and Hogg, of Edinburgh, are also held in good estimation, as dressers of hooks. The Wrights,

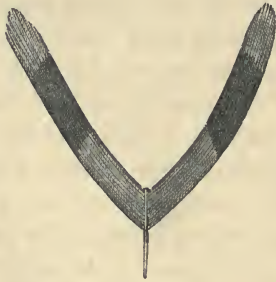
of Sprouston on Tweedside, father and son, especially the latter, deserve mention. The flies dressed by Younger, of St. Boswells, are, upon the whole, serviceable; still, it is plain, that this worthy angler is but partially, or, if the term may be used with propriety, locally versed in the mysteries of the art. There is too much mannerism about them to render his winged productions general favourites, and I cannot say, in regard to his salmon flies, that they at all take my fancy, or that I could employ them with any sanguine expectation of success.

As regards the salmon fly, one great improvement, of recent date, consists in the substitution, as a mode of attaching it to the line, of a small loop or eyehole of gut at the head or shank-end of the hook, instead of a full length of the same material. This loop, as in the case of the length in question, may be formed either of triple or of single gut, according to the size of the wire. It is of advantage in two or three respects: first, its adoption gives increased facilities to the dresser to finish off his work in good style; again, it renders an assortment of salmon flies capable of being carried without crushing or disarranging their plumage; and lastly, while hooks tied on the length or strand are apt to become chafed or weakened at the neck, or to crack off altogether, the adoption of the loop prevents this evil; for, should the strand it was originally fitted to appear worn or damaged, one has only to remove it and attach a new one in its stead. The loop in question ought, on every occasion, to be made as small as possible, just sufficient to admit the passing and repassing of a triple or single gut length through the eyehole.

In the dressing of Scottish salmon flies, there are two modes of laying on the wings, before fastening.

They may be set either horizontally, the one with the other, as they are placed in the moth, the bee, common house-fly, and various other insects, or in such a manner that they shall correspond, in point of position, with the wings of the butterfly and of the generality of water-ephemeræ, that is, with their inner sides turned face to face, at a considerable angle of elevation from the body. The mode first described is, I find, preferred to the other by many salmon fishers, because, say they, the horizontal position of the wings assists in giving buoyancy to the hook, enabling one to hang it with more effect over the fish, especially in currents of sluggish rate or in dead water under an uncertain breeze. At the same time, to set the wings so as to retain this position requires greater address and attention on the part of the fly-dresser, and is, in fact, a good test of his skill and proficiency. In tying on the wings of a salmon hook, care should be taken not to break or disarrange the slips of feather of which each wing is separately composed. Some feathers, such as the brown mottled ones taken from the back of the mallard, are less adhesive than others, and consequently more liable to become disarranged. The hold which the slips in question possess seems, in this feather, to exist merely at the root; the portion in demand therefore for the formation of the wing requires to be stript away from its support with the thumb and forefinger, whereas, in the case of a turkey or silver pheasant tail-feather, the wing may be cut off and shaped with more neatness and economy by means of a sharp pen-knife. Rump-feathers, those of the turkey especially, and some tail and breast ones taken from other birds, admit of being readily shaped out into connected pairs, so as to form horizontal wings, corresponding accurately together in

point of colour, mark or mottle, and length of slip or fibre. These in the tying on give the dresser less trouble than when he has to work with detached slips.



Of mixed wings in Irish fly-hooks, all that is necessary to be said I have incorporated in my chapter on salmon-flies, among the general observations appended to a list, there introduced, of Irish favorites. The dubbing, hackle, tinsels, &c., employed in the construction of our standard killers are also treated of in the same chapter, and I shall not at present fatigue the reader by enlarging upon these subjects.

CHAPTER IV.

TROUTING FLIES.

THE fastidiousness of many anglers with respect to their trouting flies has always occasioned me astonishment. I cannot, for my own part, be made very exactly to understand the grounds of it. Certainly, when brought to bear upon our Scottish waters, it is altogether out of place; yet how frequently do I meet with those in my fishing excursions, who exulting in the possession of five or six dozen varieties of insect imitations, consume the primest portion of the day in testing their attractive powers, now unlooping one, because it is, they opine, a shade too dark, now another on account of its want of tinsel, attaching in turn the latest urban conceit redoubted as a killer, the fail-me-never of some sporting parson or half-pay hero.

What, I naturally ask, are the notions of such anglers with respect to the tastes or, it may be, the optics of the trout? Do they suppose this fish, in regard to its surface food, so singularly capricious as to refuse all others but the insect of the day, so whimsical as even to resist the claims of hunger itself, unless wrought on by the appearance of some peculiarly streaked water-fly? Do they fancy it discriminative of every shade or hue in the wing, body, and feelers of its prey?—keenly sensible of the smallest deviation in colour, more so than of a

defect in shape, from the natural insect? If such their conclusions, I cannot help affirming that they give credit to the fish in question, for possessing a power of discrimination, not less than a degree of daintiness or epicurism, altogether extraordinary. I am not, however, denying that to a certain extent their conclusions are correct. The error lies in their being over-drawn. The trout, confessedly, is a capricious feeder, circumspect in its habits, and possessed of great quickness of eye, as well as an acute sense of smell; but that it holds these properties, in such measure, as to require not only the utmost skill, but the greatest choice and variety of fly-tackle, in order to capture it, is a position, with regard at least to our Scottish rivers, altogether untenable.

The experience of twenty years and upwards has led to the conviction, on my part, that a stock, consisting of three or at most four diversities of trouting flies, is quite sufficient to insure success at all seasons on any of our lakes and streams. I am talking of diversities, and in doing so, allude to the colour, shape and material of the imitation employed, not at all to its size; *that* I leave to be regulated wholly by circumstances, such, for instance, as the season of the year, the low or flooded state of the water, calms or winds, &c.

The fly-stock of the trout fisher may then, I opine, in point of colour, be restricted without detriment to the following varieties:—

1. The red or brown hackle, with or without wings.
2. The black hackle, ditto, ditto.
3. The hare-lug or water-mouse body, with wings.

These, as noted down, are essentially the groundwork of a killing fly-stock. They are the elements

most requisite in the construction of those lures which pedant authors on angling have chosen to dignify with entomological names, and by the addition as well as substitution of other materials, increase and vary to such a degree, that all count of what really is a taking and trustworthy fly is overwhelmed in their teeming and bulky store page.

The above simplification however of a fly-stock is not introduced by me, as one which I propose to be adopted or even to run greatly counter to general ideas on the subject. It is an enumeration merely of certain constituent elements in the construction of the lure which, whenever used, I have found to be inviting. Indeed, I may safely affirm, that on every Scottish stream and loch, one or other of the flies above specified may, in the absence of others, be used with a fair measure of success; the sizes, of course, as before observed, being regulated by the condition of the water, the state of the season, weather, and other influences.

And as to the wings which at option, for they are not absolutely necessary, may be used as appendages to the hackle flies, I would recommend them, in the case of the brown or red hackle, to be taken from the snipe, starling, or brown-speckled feather found on the back of the mallard; in the case of the black hackle; to be constructed of grouse, woodcock, land-rail, or speckled breast-feather either of the teal or wild-drake. When used on lochs, in dull, windy weather, a streak of tinsel or gold thread wound over the body of the lure will be found, in regard to the larger descriptions of hackle flies, of some little service, especially where good-sized fish abound or when there are chances of obtaining sea-trout.

The silk-thread employed in the fabric of the fly should, on general occasions, be pretty freely exposed,

especially below the hackle, and as it approaches the bend of the hook. It may be used of various colours, but by far the most accordant and captivating when exposed are yellow and orange. Crimson, blue, green, and even white thread can be employed however without detriment to the sport, on many occasions, while dull, mixed hues are seldom or never rejected.

And now, with regard to the hackle itself. This, I consider, a matter of some little importance, not as concerns its exact tint or shade of colour (for along with what is unquestionably black or unquestionably brown, regard may be paid justly enough, though in a less degree, to those more dubious hues denominated by anglers, ginger, chocolate, dun, grizzle, &c.) but with respect to its shape, fibre, and quality. These points I cannot help reckoning worthy of some measure of consideration. Disregarding them, the neatest-handed fly-dresser will produce but a clumsy piece of craft-work, uninviting to the eye of the angler, and thereby, as a matter of consequence, seeing it will be used with distrust, unlikely to do much execution among trout.

The selection of the hackle, then, requires considerable care and knowledge. Not one cock in ten walking the farm-yard yields feathers of this description, truly available to the angler. They are generally found to be too stiff and long in the fibre, seldom prettily tapered, and when colour is brought into consideration, perpetually at a discount. The annexed is a sample of what may be reckoned, in point of shape, a good trout-ing hackle.



Birds yielding such feathers, although infrequent, may always, with a little exertion on the part of the fancier, be picked up and purchased. The hackles themselves ought to be selected about or after the middle of winter, before at least any symptoms of moulting take place. Those pulled from an old cock are often too wiry and stiff for use. Herls from the plover's crest, and the neck of the male starling will be found excellent substitutes for the hackles of the barn-fowl in the manufacture of small dark-coloured flies; indeed, feathers of many descriptions, and from a great variety of birds, are useful for this purpose. The ostrich and peacock furnish, in their way, valuable herls; but an admirable resemblance to the legs, feelers, and body of the insect may be constructed, by lovers of variety, from the neck-feather of the partridge.

Having thus treated of those lures in which the hackle forms an important item, I proceed to notice the hare's-ear fly, commonly, in Scotland, denominated the hare-lug. The virtues possessed by this imitation have long been known, and are generally appreciated. For my own part, as a purely trouting fly, I hold it in higher regard than I do the hackle itself. On waters much thrashed, and where the fish have become shy and cunning, it is infinitely more serviceable; on the Tyne, for instance, in East Lothian, &c. &c.; also, during summer, on lochs and rivers slightly reduced by drought. The wing used with it may, as in the case of the hackle, be varied according to taste. I prefer that formed of the woodcock feather, when dressed on a good-sized hook, but the snipe, landrail, and brown mallard furnish excellent substitutes.

A very killing lure for trout may also be fabricated, by surmounting a twitch of the hare's ear with the

hackle of the partridge or grouse, taking care that the fibres of the latter be of moderate length, just exceeding that of the hook itself. This, by some anglers, is termed the spider-fly, and should be used as a stretcher at the extremity of the line. On gleamy days, at the commencement of June, when trout, in our southern rivers, are apt to prove lazy, I have found it very successful, especially on the lower parts of Tweed, near Kelso.

A good hare-lug will provide body-material for several dozens of flies, and that of various shades and complexions, from a swarthy black on to a dingy white. The back or furry part of the ear, however, is that which, in point of colour, is most acceptable to the fly-dresser. Excellent moth or night flies are also fabricated from its lighter portions.

Classed with this material, so valuable to the angler, I may mention the furs of the water-rat, the mouse, weazel, squirrel, monkey, opossum, combings of a red cow, &c., all of which are made use of in fly-dressing. As to their attractive qualities, however, there is no necessity for saying much. I certainly hold in some esteem the pile of the first-mentioned animal; but its equivalent may always be discovered in the substance just treated of, which, although differing equally in colour and texture, will be found, in the same state of water, quite as effective.

I shall now treat shortly of the description of hooks most serviceable to the fly-fisher, their sizes and the adaptation of these to the humour of the fish, the forwardness of the season and state of water. And first, as to the description of wire best adapted for hooking and securing trout. I have already, in a former chapter, approached closely to this subject, while discussing, in a general manner, the merits of the article,

as manufactured in various parts of the kingdom. Without giving the absolute superiority to either, I have, in the place alluded to, divided my recommendations pretty equally betwixt what is called the round-bend, and that adopted by Philips, or the Irish form of hook. The former, the round-bend, I prefer using for all sorts of bottom and under-surface fishing; for worm, roe, and minnow tackles of every description; but I do more, I allow it the preference also, and that decidedly, as a ground-work for the smaller kinds of flies; not that it possesses even half the strength of a properly tempered Irish hook, but in shape, it is much better adapted than the other, both to fasten upon the lip of the fish, and what is of as much importance, when fastened, to retain its grasp. All trouting flies, therefore, from the size 00 up to No. 5, I recommend to be dressed upon hooks of the above description. At this point, however, I find it advisable to substitute the Irish bend; the turn of the wire being now sufficient to allow a ready admission to its entire barbed portion through the cartilaginous parts of the fish's mouth; which accomplished, every thing else, as regards the hook itself, is in favour of the substitution. It possesses, for instance, to a greater extent the virtues of temper and durability, is more retentive of its colour, and less liable to become corroded or rust-worn. These remarks, be it observed, have no reference to the many spurious imitations of the hook in question, which crowd the general market; they are confined entirely to the best descriptions of manufactured wire, such as proceed from the hands of Philips, O'Shaugnessy, Martin Kelly, and Bartleet; and in the case of round-bends, those made by Adlington, and other well-known Kendal manufacturers.

On quitting this subject, namely the form of hooks most serviceable to the fly-fisher, I have only to add, that the Kirby sneck-bend, and other numerous innovations upon the two established shapes above recommended may be held as faulty. They possess, at any rate, no certain advantage over them, and in point of temper are generally inferior.

I am now brought to treat of the adaptation of the different sizes of hooks to the season of the year, state of the water, and humour of the fish. Upon this subject, a very great deal might be said: indeed, to handle it with effect, and at the same time bring it within the desirable compass, is altogether impracticable. It would be otherwise, were I to confine my observations to a single stream or locality, but in extending them to the whole range of lochs and rivers in Scotland, they must necessarily prove defective, frequently misplaced, and if not really inaccurate, liable at least to be thought so. I shall therefore avoid running into this error, by venturing merely a few general remarks on the subject.

Fly-hooks used early in spring ought to be of full size and body on all our main or first-class waters and many of their branches, especially those which contain large trout, and are accessible to marine fish. On rivers, like the Tweed or Tay, I recommend the use of a whitling hook, as the trail-fly or stretcher, during March and April. This may be exchanged for one of smaller size and duller colours, during mild weather, and when the waters run low and clear. On a casting line made up with three flies, use generally the red hackle at the extremity, attaching the others as bobs or droppers. The distance betwixt each ought to vary with the length of the rod and the width and condition of the stream. On an average, there ought to be four

lengths of small single gut, carefully knotted, betwixt the trail or stretcher and the hook immediately above it, while three of the same material are sufficient to divide the droppers.

Always, in making up the fly-cast, attend to proportion. As regards the gut, this advice is particularly necessary, but it is not less so when applied to the arrangement of the hooks. The heaviest wire ought, invariably, to form the trail-fly; that which is lighter being disposed of, at due distance, as a bob or dropper. Attention to this rule will greatly facilitate the management of the line and tackle.

Reverting to the matter in hand, namely the adaptation of fly-hooks in point of size, to the seasons, state of water, &c., I have to remark, that the use of large hooks, during the early portion of spring, is, on many rivers, absolutely expedient. Trout, in Scotland, seldom rise freely before the middle of April; until, in fact, the appearance of what are termed, not very appropriately, the March-browns. These insects, which, it is well known, have their prior state of existence at the bottom of the streams and pools, and assume the winged condition only when acted on by a certain warmth of temperature, create, on their appearance, the earliest natural cravings in the fish for surface food. Accordingly, before this event takes place, the trout has no inducement to rise, except what is afforded it by the angler in the shape of an artificial fly; nor is it easily provoked from its retreat by a single imitation or two, and that unseasonably small, of what at the proper period, it is accustomed to have offered it in amplest abundance. It is therefore in a manner necessary, by way of bribe, to present a large-sized fly, taking care, however, that no violence is done to nature

in this or any other respect. The shape, colour, and proportions of the lure ought respectively to be considered. Sometimes, it is true, in the season referred to, trout, and those of ordinary dimensions, are taken on the huge gaudy flies used for kelts and spring salmon; but to angle with such, exclusively for the purpose and in a purely trouting stream, were absolute folly. On the occasions in question, the fish evidently seize the lure, as they do a minnow or parr-tail, not as an insect or anything resembling one.

While recommending the use of good sized fly-hooks during March and the early portion of April, I allow that there are several of our Scottish streams where the trout, from natural shyness and other causes, repudiate or disregard them; yet when effective, as on most lochs and rivers they unquestionably are, one great advantage they have over the lesser sizes of wire lies in their superior capacity to retain fish when hooked—a matter which some anglers affect to make light of, but one, in reality, of very considerable consequence when the contents of the creel have, at the close of the day's sport, to pass muster.

Advancing from the middle of April into the months of May and June, considerable changes, regulated chiefly by weather and state of water, will be found to take place with respect to the size of their surface food, in the tastes and inclinations of our river trout, especially in the southern districts of Scotland. The fish, during this period of the year, having left the still, deep places, betake themselves towards the streams and rapids, not yet, however, be it observed, into the true shallows and thinnest portions of the water, which they do about the middle of summer, when minnows, small-fry, and ground-bait of various sorts become abundant.

Here, in the resorts first mentioned, at the necks of pools, they watch the passing of the March-browns and other flies, snatching now and then, in the intervals, at a stray insect wafted in advance of the general shower or body. The ample supply of this sort of food, now afforded them, naturally induces a measure of satiety. They begin, ere long, to play the epicure, picking and choosing only such individuals of the winged horde as suit their fancy, and rejecting with disdain those maimed imitations wherewith the angler attempts to dazzle and ensnare them.

All this has been over and again observed by experienced fly-fishers, and it certainly is in some degree tantalizing to be approached, almost to within rod's length, by numbers of feeding trout, and yet, find oneself unable to secure even half-a-dozen of the smallest. How then, the question occurs, is this to be obviated? Fully and efficiently it cannot, but in a certain measure I have reason to think it may, and that by the adoption of a different size and species of fly from the one astir. Instead, for instance, of an artificial March-brown, let the angler use a dark-coloured hackle or hare-lug dressed upon No. 4 Kendal wire. On Tweed, the brown or red hackle is generally more killing; but one or other of the three flies already recommended I have found, on many occasions, a suitable remedy under the circumstances above detailed. In truth, it is but natural in the trout, half gorged by a superabundance of one species of insect, to prefer for the moment what it conceives to be a rarer and more delicate variety. Sated with and grown indifferent to the former, it is only in accordance with its instinct, to resort to the latter as a novelty, or it may be, a provocative.

On many of our streams, those especially which flow south of the Grampian range, May, as far as the fly is concerned, is the principal angling month for trout. I make no reference, at present, to loch fishing, which may be pursued with success during the whole of the summer quarter. The beginning of the above-mentioned month is generally, like the latter weeks of April, distinguished by the prevalence of the March-browns and other ephemeral insects, of what may be termed gregarious habits. These, floating on the surface in occasional swarms, influence very considerably, as I have already stated, the movements and inclinations of the fish. Among other results omitted to be mentioned, they induce them to frequent certain localities, and by their crowding into these pell-mell, the range or extent of cast becomes, in some rivers, very materially lessened. As the month however proceeds, the birth of the *ephe-meræ* is rendered less dependent on vernal gleams and sunbursts; the days are longer and the weather more steady and genial. Consequently, river insects of various sorts burst into winged existence, not as before, in simultaneous swarms, the effect, to boot, of their long thralldom during winter, but in gradual and almost imperceptible succession. The deeper portions of the stream are also moved by the sun to yield their measure of sustenance. Into these, and throughout the whole course and current, trout accordingly distribute themselves. Now, they select, apart one from another, places of ambush—the covert of a rock, stone, bank, or tree-root, where concealed and defended, they may watch for their fluttering victims; nor are the exposed and open channels left altogether unfrequented. Thither too, as the day advances, resort the bolder and greedier fish, less eager after fly food than aliment of a

more substantial nature, yet not unwilling, during the month we speak of, to gratify their epicurism upon such tiny and delicate morsels as, partaking of this character, are borne towards them by the current.

The sizes of hook adapted for fly-fishing throughout May are, in general, smaller than those used in April. They vary, of course, in different waters. On Tweed and Teviot, I have found Nos. 2 & 3 answer well, while on other streams less, or it might be larger sizes, proved more successful.

There is one rule respecting the artificial fly the angler ought always to hold in regard. It is applicable to every season and to all waters, and is simply this. Never use small hooks, when larger ones serve the purpose and prove equally enticing. It is plain that a small wire can never have the same hold on a fish that one of greater size has. The latter, being proportionably thicker, is less apt in playing the trout to cut through the fleshy or gristly part of the mouth; its barb also enters deeper and is not easily detached or thrown out by any sudden spring or exertion.

As to the imitations of what is termed the May-fly—a fly, by the bye, which, like the March-brown, makes its appearance on our Scottish waters fully a month later than is indicated by its appellation—I never reckoned them very deadly. They look well enough cased up among other fancies and curiosities in one's pocket-book, but it is seldom that an experienced angler will put them to the test, knowing, as he does, that their chief virtue lies more in the name than in anything else, and that, with all their acknowledged resemblance to the natural fly, in reality, as a river lure, they are comparatively speaking worthless and inefficient, attractive

chiefly on Highland lochs, and among waters frequented by sea-trout or whitlings.

June and July are not, in general, on our larger streams, greatly esteemed as fly-months. On warm nights, however, trout, and these frequently of great weight, are taken by the angler using this lure. It is not necessary for night-fishing that the artificial fly should have any definite colour, or that it be made, as many suppose, to resemble a small moth. I have found black, brown, and hare-lug flies equally as effective as white and yellow ones. Trout, at night, roam more freely than during the day, often forsaking the lower portions of the pool for the head and stream, and *vice versâ*. They also frequently indulge in a cruise among the shallows, and although thus exposed, are not so ready to take alarm as one from their general caution might conjecture, when approached by the wader. Indeed, I have captured them, in more instances than one, close to where I stood, in water agitated altogether by my own movements.

In night-fishing, two flies are sufficient to form the cast, a greater number being very apt to perplex the angler, without insuring him any accession to his sport. These, in general, should approach in their sizes to the spring hooks, and be dressed upon tried gut. During the months in question, trout, on fine evenings, immediately before and after sunset, are generally observed to rise freely at the natural fly. On such occasions, a very small black midge, No. 00, will be found attractive.

The large flesh-maggot, previously toughened in a little oatmeal, and used at night as a fly, is reckoned very deadly. The hook employed should be No. 4, 5,

or 6, and have a long shank, at the bend of which is attached a piece of gut or bristle, pointing upwards, so as to prevent the bait, when run over it, from slipping back. A single turn of a fine red hackle at the head of the wire, will be found an improvement.

Dipping with the natural insect, is also appropriate to the summer season, but is not much pursued in Scotland. On calm water, overhung with wood, I have killed occasionally large trout by this expedient. The stone-fly, or a couple of them, fixed on a small bait-hook, I also know to be very deadly; but lures of this description, have always their substitute in the worm itself, and are, moreover, scantily met with on many of our rivers most suited to their employment.

Although, as I have stated, the months of June and July afford but indifferent sport to the fly-fisher frequenting our larger streams, it is otherwise among hill burns and on Highland lochs. The former, during this portion of the season, and especially after a summer flood, are generally at their prime; and many of the latter also, but not all of them, claim regard from the angler. One inducement to fish at this period, is the fine condition and appearance of the trout. It must be admitted, indeed, that even still, when captured in certain localities, they are, at their best, but soft and tasteless fish, yet such occasions are comparatively rare; for in general, throughout Scotland, and more especially in our Highland lochs, they acquire, when in season, a colour, flavour, and curdiness, which the salmon itself has no pretensions to.

The fly-hooks best adapted for hill-burn fishing, are in general small, varying from No. 1 to No. 5, round-bend. After great rains, larger ones may be used

advantageously. On a narrow stream, the banks of which are overgrown with reeds, brushwood, heather, or long grass, anything in fact that is apt to interfere with the management of the line, I would recommend the angler to employ only two flies, and these set at a short distance from each other.

Loch flies for trout, I have as yet only alluded to, nor is a great deal required to be said upon this subject. In common with river flies, they are capable of being reduced to two or three varieties. These, in their simple state, are, as before-mentioned, the black hackle, the red or brown ditto, and hare-lug fly. A division however, so very primitive and elemental, when applied to loch flies is apt, I am aware, to be ridiculed and sneered at by pedants in the art; nor in fact, do I intend it, in practice, to be pushed to the extreme. It is only tasteful and becoming to admit variety into the fly assortment, provided this variety be placed under proper control. When I allude therefore to the hackles in question, as forming along with the hare-lug the only flies required by the angler, I wish it to be understood that the fundamental, I do not say requisite, portion of the dressing consists of the material after which the hook is named. It cannot be denied that, in the case of the hackle fly, the wing, tinsel, and dubbing, whether of silk or wool, possess, on many occasions, an attractive influence over trout, nay, even a combination of these without hackle at all, may constitute a taking lure; but what is proved by all this but that fish are allured, not on account of the close resemblance which the artificial hook is designed to have to particular insects appropriate to particular months and seasons, but from other causes of a different nature? These are size, motion, form and colour; the latter qualification being the one

upon which, by introducing certain well-tried standards, my classification, as regards the artificial fly, has been conducted.

I shall not however pursue this matter any further, but proceed to mention, irrespective of my own theory regarding them, the sizes and sorts of hooks best adapted for loch fishing. In the spring months and early portion of summer, large wires, Philips's C., CC., B., BB., or Adlington's 8, 9, 10, are most serviceable. Indeed, in some lochs, they continue so throughout the season. One, on an occasion, may employ even larger sizes than those mentioned, but their effect depends much on the place, the sort of trout frequenting it, and the nature of the weather. Of what are esteemed, among anglers of my acquaintance, killing flies, on our Scottish lakes, I subjoin the following list:—

LOCH FLIES.

1. Wings : light mottled feather, from breast of mallard.—Body and legs : black hackle, silver twist,
2. Wings : mottled teal feather.—Body : black hackle above purple dubbing, silver twist.
3. Wings : woodcock feather.—Body : dark brown hackle over purple dubbing, lapped with gold tinsel.
4. Wings : from pheasant's tail.—Body : ginger hackle over orange mohair. (Loch Awe).
5. Wings : dark mottled feather from mallard.—Body : brown hackle over yellow floss silk.
6. Hoffland's Fancy. Wings : from Woodcock.—Body : reddish, dark brown silk, red hackle, two or three strands of ditto for tail.
7. Wings : brown mallard feather.—Body : black hackle over orange floss.
8. Wings : white tip from wing of the mallard.—Body : black hackle over dark coloured dubbing, silver tinsel, orange tail.
9. Wings : dun-coloured from wing of the landrail, &c.—Body : dark, with black hackle.
10. Wings : dark grouse feather.—Body : purple mohair, black hackle, silver twist. (Loch Tummel).

These, the larger or spring sizes of loch flies may, I observe, one and all of them, be employed with success in angling for sea-trout or whittings; indeed, when inclined to rise, there is almost no variety of hook, provided it be of fitting dimensions, which the fish spoken of will positively refuse. That they possess in common with the *fario*, humours and caprices, there is little doubt; but these, I have noticed extend rarely to a matter which many anglers think highly important, viz., the prevailing colour of the fly. I have caught them, in their seasons, with lures of every hue,—brown, black, white, crimson, blue, green, purple, grey, dun, yellow, and orange; nay, more, with combinations of two or several such colours, and admixtures, to boot, of all varieties of tinsel. Their tastes in fact, with respect to this matter, resemble more those of the *salar* or proper salmon than those of the trout, although exercised generally in a state or condition of water somewhat different.

During summer, and in weather comparatively calm, loch trout may be taken more readily with a small than with a large fly. On such occasions, the sizes and kinds of hooks already recommended for stream fishing, will be found sufficiently available.

To continue the matter necessarily deviated from in these observations, I proceed, having treated of June and July in respect to their qualifications as fly-fishing months, to extend my line of remarks to August and September, or the concluding portion of the trouting season. It has been pretty well ascertained with regard to the river trout of Scotland, that it is in prime or first-rate condition during the middle of summer and that, subsequent to the latter end of July, it gradually loses curd, bulk, and firmness; the red-fleshed varieties becoming pale, flabby, and ill-flavoured. Some indivi-

duals, it is true, retain their edible qualities for a month or two longer, and the small fish of a season's growth, along with parr or fingerlings, continue as sweet as ever, until late in October.

Trout, during the months of August and September, often rise freely, especially after floods and in dark-coloured waters. To the sportsman who is not a mere pot-hunter, they of course afford amusement, and occasionally, notwithstanding their declining condition, test freely the strength of his tackle. I have found the red or brown hackle more killing in these months than any other fly, I mean when the waters were in high order; for if clear and reduced, trout will prefer the hare-lug and dark-coloured hooks. Spring sizes also are commendable in autumn, on some of our rivers, those especially that are frequented by whitlings and bull-trout,—fish which, I find, frequently give the preference to a common trouting fly over the highly-bedizened lures employed against them by many anglers.

To pursue this subject into the months of October and November is quite unnecessary. Angling with the fly loses, on the approach of winter, many of its recommendatory properties. It becomes stripped, as an amusement, of half its interest. One can neither wade nor expose himself to damp feet with any degree of safety. The trout, in general, are poor, lank, and uneatable. They rise badly, and when hooked, afford little or no sport. The streams and gathering spots are strewn over with dead leaves. There are no pure southern breezes, smelling of verdure, to delight the senses—to cheer and invigorate the heart. In fact, as nature with regard to all other recreations hath appointed, so also in regard to angling. It owns, in common with them, its fitting and appropriate season,

when the heart's readiness is linked with the hand's energy, the humour of the fish with the inviting and cheerful disposition of wind and water, sun and landscape; when bank and meadow lie starred and enamelled with flowers; when the trill of the song-bird issues from every thorn; when all sounds and all prospects are joyous and exhilarating, and the cloud itself sleeping high in the arch of heaven, is as the bannered presence of some benevolent watcher—

“One of the spirits unwithdrawn,
That, erst the fall, were charged to minister
To the earth's gladness, and continually,
Out of their ample and unfailing horns,
To pre-endow the advancing tracks of men.”

CHAPTER V.

ON TROUTING WITH THE FLY.

AN inquiry into the origin and progress of the art of angling, especially that department of it now to be considered, would prove, I have no doubt, interestingly curious. The primitive trouting-fly, and its inventor, when and where it was first used, its success as a lure, and numerous other circumstances attendant upon its history, are all subjects of attraction to the angler. To trace, also, the period of its introduction into Scotland and to our Border streams, could not fail proving a matter of regard to the antiquarian scholar. The questions and points of research embodied in such an inquiry indubitably stand connected with the customs and manners of the age to which they carry us back, and are linked, moreover, in all probability, with events of wider, if not national interest.

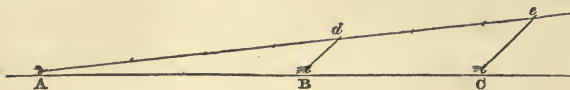
Who first captured a salmon with the artificial fly on Tweedside? Was he a king or a baron bold—a fat abbot or a cowled monk—a reiver rude or stalwart servitor—a page or a minstrel? Or was he, like worthy old Izaak, in his heart an angler—one that loved and studied nature, that sought for music by shining streams and under leafy boughs, to whom the sport was the more delicious, because it brought him into companionship with

pure thoughts and golden fancies, because it led him from scenes of human care, strife, and distemper, into places of solace, silence, and retirement? Here, on this simple query, rests a field of unsolved wonder; one, too, traversed often by fancy, but in vain. Oblivion—the past conceals from us all record of him, that gifted and joyful man, to whose name, if restored, there is due the homage of our craft, that homage which is ever rendered to the illustrious dead.

So many full and excellent treatises have been written upon the subject of fly-fishing, that it would really be a work of supererogation on my part, were I to enter very minutely into its discussion. I shall, therefore, as much as possible, avoid running into what may be termed fine-spun detail, while endeavouring to supply the reader with the requisite amount of information on this department of the gentle art. In the preceding chapter, I have sufficiently exposed to view my theory respecting the artificial fly, disclaiming the common notion, that it is quite imperative to construct it after a fixed, natural model—to adapt it to hours and seasons, or, except in the matter of size, to extend the variety beyond a very limited and clearly defined range. I have also described to a certain extent, the making up of the fly-cast, and referred, while treating of tackle, to the gut strands, and their preparation,—how knotted, &c. It remains for me, however, to complete the subject, and this I shall do very briefly.

Trouting flies, when fished with, are used, according to the caprice of the angler, in pairs, threes, or fours, seldom singly. In small waters, two hooks are sometimes thought sufficient. I seldom, under any circumstances, employ fewer than three. How these are

appended and put together, the annexed illustration will render evident.



The trail, stretcher, or lowermost fly, is here indicated by the letter A ; the bobs, or droppers, by the letters B and C. Betwixt A and *d*, where the shorter bob is fastened, extend three or four threads of fine picked gut, forming, in connection with the one upon which the hook has been dressed, a distance varying from $3\frac{1}{2}$ to 5 feet. The interval between the two droppers, that is from *d* to *e*, is similarly occupied, but it is not necessary to extend it beyond 3 feet, and should another bob-fly be added higher up, the same regulation holds in force.

Many anglers have their droppers dressed upon short gut, and append them to the main casting-line by loops, so as to be removed or exchanged at pleasure. This, the ordinary way of making up the fly-cast, answers well enough with those who are more fastidious about the description of flies employed by them than the fineness of their tackle. But, though convenient in this respect, it gives a clumsy appearance to the fly-cast, and is not adapted, either to improve its lightness or better its proportions. Loops also, unless they draw or sit well, are apt to catch and disturb the water, so as to alarm the fish. I recommend them in the construction of all trouting tackle, to be employed as sparingly as possible. The bob, or dropper, in the making up of the fly-cast, ought, if the length of the gut it is dressed on will admit it, to form, in the first instance, a continuation at the letter *a*, with the main line, and then be made

to branch off or depend from it, by the knotting on, at the proper point, *b*, of a new thread.



In the formation of the fly-cast, always commence at the stretcher or trail-hook, allowing the droppers to incline upwards. To connect the casting-line, properly so called, with the uppermost bob, employ three or four threads of good picked gut, and in fine fishing, if thought necessary, increase the number.

For trouting with the artificial fly, the rod used may either, according to circumstances, be single or double-handed. In casting the line, after drawing off the requisite quantity from your reel or winch, lift the flies well up from the surface of the water, and observe that you do so without any jerk or undue violence; at the same time employing some degree of rapidity in the execution of the movement. When the rod has been sufficiently thrown back to accomplish this object, allow it a single moment of suspense, and then, by a natural turn of the wrist and arm, cause the line to describe a circle above your head, after which, the flies having been brought fully round, urge them immediately from you towards the spot where you wish them to alight. This advice is especially applicable in throwing from the left shoulder. It is not always so as respects right-shoulder casting, which may be managed, when the space behind is quite clear and level, without checking the line, but on the contrary, allowing it its full swing or play directly in rear of the angler.

Such instructions hold good, equally, in regard to

throwing with the double and with the single-handed rod. There is, however, in other respects a considerable difference as to the manner of using them, betwixt the two implements, and they both possess different capabilities. In trouting with the double-handed rod, there is this advantage, that it commands a much greater space of water than the other, and, if made of light material, is in consequence more adapted for using over lochs and broad rivers. The single-handed rod, on the other hand, excels not so much as a weapon of power as one of craft and pliancy. Its superiority, where fine throwing and quick striking are required, is unquestionable. Armed with it, the practised angler may impel his fly with the most wonderful precision and nicety of calculation; he may command it, in fact, to drop seemingly over the very snout of a feeding fish, and that as lightly as if it were a snow-flake or the natural insect which had fallen instead. When the trout is hooked, also, and there is danger arising from the smallness of the wire, or any other cause, of its escape, a pliant, single-handed rod possesses this great advantage, namely, that by means of it, the angler can play his fish with singular delicacy; not requiring, in order to control its movements, to lay stress on his tackle. At once, assisted by this yielding quality in the implement, he can humour every caprice and effort to escape, while, at the same time, he outwearies and subjugates his victim, rendering its capture, in cases even where the hook has taken very slight and unsatisfactory hold, a matter of common occurrence.

It is otherwise, however, in trouting with the double-handed rod. Its general stiffness operates greatly to its prejudice, while playing and landing a badly hooked fish. The angler, also, in handling, has a very limited notion

of when to concede and when to employ pressure. He wants in a great measure the nice, regulating powers which a good, flexible, single-handed rod invests him with.

I am referring, be it remembered, in these remarks, solely to trouting; and that with small flies and fine tackle. They cannot be said to apply to any other department of angling, least of all to salmon-fishing or trolling with the minnow. As a general rule bearing reference to this subject, all streams manageable from bank to bank, and such lochs as are frequented by trout under a pound in weight and do not require the use of a boat, should be fished with the single-handed rod. As to the degree of pliancy requisite I say nothing, but leave that to be regulated by the discretion of the angler; indeed, practice will not unfrequently reconcile one to the use of a rod which, at the first handling, he thought much too stiff, or, it might be, much too flexible. The double-handed rod may be used with advantage on broad rivers, and where the sea-trout—a fish which in clear water holds the small trouting fly in esteem—are abundant; also in lochs where large fish exist, and where long throwing is necessary.

In the preceding chapter, by indicating the resorts of trout during the fly-fishing months, I have sufficiently informed the angler when and where to expect sport. I have also attempted the adaptation of fly-hooks in point of size, to the condition of the water, the progress of the season, &c., &c. It is therefore unnecessary to re-enter upon these subjects, and the more so that, in the course of my Appendix, I have thought proper to apply many of my remarks to individual streams and localities.

Fly-fishing, considered as a branch of the angler's art possesses peculiar advantages. As an exercise, it is healthy, and just to the proper degree exciting. It braces the muscles, enlivens the spirits, gives rise to an agreeable alternation of hopes and fears, calls into activity the judgment as well as the fancy, the good taste and discrimination of the artist, not less than his ideal and creative powers. It affords room, also, as has often been remarked, for the display of elegant motions and graceful attitudes—impersonations of earnestness and intense enthusiasm, of hope, of anxiety, of joy, of disappointment, of admiration, of pity, of content, of love, of holy feeling, and of crowning felicity.

Is it not, for instance, in the attitude of hope that the angler stands, while in the act of heaving out his flies over some favourite cast? Of hope increased, when he beholds, feeding within reach of his line, the monarch of the stream? But now, mark him, he has dropt the hook cautiously and skilfully just above the indicated spot; the fish, scarcely breaking the surface, has seized it. A fast, firm hold it has, but the tackle is fine, and the trout strong and active. Look! how the expression of his features is undergoing a change. There is still hope, but mingled with it are traces of anxiety—of fear itself. His attitudes, too, are those of a troubled and distempered man. Ha! all is well. The worst is over. The strong push for liberty has been made, and failed. Desperate as that summerset was, it has proved unsuccessful. The tackle—knot and barb—is sufficient. Look now at the angler. Hope with him is stronger than anxiety, and joy too beams forth under his eyelids; for lo! the fish is showing symptoms of distress. No longer it threatens to exhaust the winch-line; no longer it combats with the

rapids ; no more it strives with frantic fling or wily plunge, to disengage the hook. It has lost all heart—almost all energy. The fins, paralysed and powerless, are unable for their task. So far from regulating its movements, they cannot even sustain the balance of the fish. Helpless and hopeless it is drawn ashore, upturning, in the act of submission, its starred and gleamy flanks. The countenance of the captor—his movements, (they are those which the soul dictates), are all joyous and self-congratulatory. But the emotion, strongly depicted though it be, is short-lived. It gives way successively to the feelings of admiration and pity—of admiration, as excited on contemplating the almost incomparable beauty of the captive, its breadth and depth, the harmony of its proportions, as well as the richness and variety of its colours—of pity, as called forth in accordance with our nature,—an unconscious, uncontrollable emotion, which operates with subduing effect on the triumph of the moment.

And now, in their turn, content and thankfulness reign in the heart and develope themselves on the countenance of the angler ; now haply he is impressed with feelings of adoring solemnity stirred up by some scene of unlooked-for grandeur, or the transit of some sublime phenomenon. I say nothing of the feelings of disappointment, anger, envy, and jealousy, which sometimes find their way into the bosom, and are pourtrayed on the features even of the worthiest and best-tempered of our craft. Too naturally they spring up and blend themselves with our better nature ; yet well it is that they take no hold on the heart, scorching it may be true, but not consuming its day of happiness.

Hence it is, from the very variety of emotions which successively occupy the mind, from their blendings and

transitions, that angling derives its pleasures ; hence, it holds precedence as a sport with men of thoughtful and ideal temperament ; hence, poets, sculptors, and philosophers—the sons and worshippers of genius, have entered, heart and hand, into its pursuit. Therefore it was, that Thomson, Burns, Scott, and Hogg, and, in our present day, Wilson and Wordsworth exchanged eagerly the grey-goose quill and the companionship of books, for the taper wand and the discourse, older than Homer's measures, of streams and cataracts. Therefore it was, that Paley left his meditative home, and Davy his tests and crucibles, and Chantrey his moulds, models, and chisel-work,—each and all to rejoice and renovate themselves ; to gather new thoughts and energies, a fresh heart and vigorous hand, in the exercise of that pastime which is teeming with philosophy.

CHAPTER VI.

ON FISHING WITH THE WORM FOR TROUT.

To a perfect novice in the art of angling, nothing appears simpler than to capture trout with the worm, provided the water be sufficiently muddled to conceal the person and disguise the tackle of the craftsman. A mere urchin, with a pea-stick for a wand, a string for his line, and a pin for his hook, has often, under such favourable circumstances, effected the landing of a good-sized fish. But to class performances of this description among feats of skill were quite ridiculous, and they are just, to as small an extent, samples of successful worm-fishing. It may perhaps startle some, and these no novices in the art, when I declare and offer moreover to prove, that worm-fishing for trout requires essentially more address and experience, as well as a better knowledge of the habits and instincts of the fish, than fly-fishing. I do not, be it observed, refer to the practice of this branch of the art as it is followed on hill burns and petty rivulets, neither do I allude to it, as pursued after heavy rains in flooded and discoloured waters; my affirmation bears solely upon its practice as carried on during the summer months in the southern districts of Scotland, when the rivers are clear and low, the skies bright and warm. Then it is, and then only, that it ought to be dignified with the name of sport; and sport it assuredly is, fully as exciting, perhaps more so,

than angling with the fly or minnow. In the hands of a skilful practitioner indeed, there is no mode of capturing well-conditioned fish with the rod more remunerative, I say well-conditioned, for in the spawning months, lean, lank, and unhealthy trout may be massacred in any number by means of salmon-roe or pastes formed from that substance.

In the present chapter, I shall attempt to make plain the principal points to be attended to by the worm-fisher desirous of success. These I class, under the following heads:—

1. The rod and tackle to be employed.
2. The kind of worm and how prepared.
3. When and where to fish.
4. How to bait and manage the line.

First, then, with regard to the rod and tackle. The former I have already alluded to in a preceding chapter, and shall only repeat, that it ought to be a two-handed one, and in length approaching to seventeen feet—the butt light, formed of well-seasoned Memel fir—the top-pieces somewhat stiff and fashioned of lance or hickory-wood—a rod, in fact, such as would please the minnow troller, or give general satisfaction on a Highland stream among sea-trout and small grilises.

And now, with respect to the tackle. This merits very strict attention. Of the reel line I need say nothing. A common trouting one will serve the purpose better than any other. That for casting, however, should be fine, long, and well tapered—the lower portion of it composed of at least seven lengths of single gut, tinged rather than dyed with the ordinary decoction of logwood and alum. These lengths, I need scarcely say, should be knotted together with care and accuracy

but not whipped over at the joinings with silk-thread, an operation to be confined solely to the upper strands of the line. They ought, moreover, to be of picked material, round, clear, and fine, without flaw or fretting.

As to the hook itself, I recommend above all others the common round bend, sizes 10, 11, and 12, according to the dimensions of the stream, its condition, and kind of trout inhabiting it. Before attaching, nip or file off a part of the shank, which is generally too long, and apt, in striking, to interfere with the mouth of the fish. This I strongly recommend to be done. An application of the file is necessary also, in order to round off a new head and render the remainder of the shank capable of retaining the wrappings. In attaching worm hooks to the gut or foot-strand, use fine silk thread of a crimson colour, and see that it be well waxed, carefully lapped round and secured, according to the approved mode of fastening I have elsewhere referred to, commonly called the whip knot. A touch of spirit varnish adds greatly to the compactness and durability of the dressing.

In preparing worm-tackle, the adjustment of the leads or sinkers is a matter of considerable importance. The accommodation of these to the state or nature of the current requires on the part of the angler both tact and nicety. He must always proceed to work, provided with a sufficiency of split shot, Nos. 2 or 3 in his waistcoat pocket, a dozen at the fewest. Through means of these it is, that he has to regulate the pace of his worm through the water, as well as to keep it sufficiently near the bottom, close to which, on the outlook, feeding trout lie. As to the pace or rate of travelling in question, it should, I am of opinion, neither be quick nor yet very slow, approaching to that of the current

itself, which, from the motion given to the line by the angler, (who, as I shall shortly demonstrate, ought to pitch his hook up against the stream), it is apt to exceed. One, two, three, or even four leads of the sizes recommended may be required to effect this. These may be placed either together, at a fixed distance from the hook of not less than fifteen inches, or separately, at considerable intervals along the casting line. I prefer greatly, however, the former mode of leading, although several able anglers of my acquaintance adopt the latter, under the idea that it assists or improves the travelling of the worm. Leads formed of shot are frequently drilled through, instead of being slit. The process is more tedious, and renders them, when required to be shifted or displaced, less handy, although there is no question but that they give greater satisfaction to the eye, and if intended to be permanent are perhaps preferable. I may here repeat, that, in the making up of tackle for worm-fishing, loops are strongly to be condemned, and at no time should they be permitted to head the strand or gut on which the hook is dressed. The very nearest ought to be kept at double arm's length from the bait.

I am now brought to treat of the kind of worm best adapted for trout fishing, and the preparing of it for use. It is not my province, however, while on this subject, to discuss the natural history of the worm under the five classes into which it has been divided by Linnaeus. I shall confine my observations solely to the different kinds of earth-worms (*intestina*), frequenting our soils and employed by the angler. Of these there are at the fewest six or seven species with their varieties.

1st. THE LARGE SAND-LOB *or* LUGG-WORM, employed by the fishermen on our coasts in the capture of

flounders, haddocks, and other salt-water fish. It is easily discovered, at ebb of tide, on almost all sand-stretches, by the small hill or coil of refuse bearing its own resemblance, and backed, at the distance of ten or twelve inches, by a corresponding hole or sink, of diameter sufficient in some instances to admit the entrance of one's little finger. Betwixt these *indices*, at a foot's depth from the surface, the worm lies and is readily dislodged by means of a common sand-fork. I have heard it asserted that sea-trout at the entrance of rivers will take this bait greedily, and that salmon also have been known to seize it. It is not, however, a worm to be held in much esteem by the angler, being thick, flabby, ill-coloured, and not readily purged or toughened.

2nd. THE EARTH-LOB, *or* DEW-WORM; sometimes, but improperly, divided into two separate species. This is found in almost all cultivated soils, where the earth, naturally light, has been enriched by the application of manures. It frequents especially gardens and grounds wrought with the spade, concealing itself in the day-time at a considerable depth, and when the weather is mild rising about sunset to the surface, where, after a shower, it may be discovered at listless length stretched in proximity with others of its kind, and lapping, as it were, the new-fallen moisture. On such occasions, large quantities of this innocuous reptile may be captured with little address, requiring only the use of a ready eye and hand. As a trout-bait, it is not greatly valued by the angler, on account of its size and the difficulty experienced in toughening it. It forms however when properly strung, a favourite morsel with eels, chubs, and other ravenous fish, and on night lines may be used to some purpose as an enticement even to trout themselves, and these the largest and most wary. The virtues of

the lob-worm as a bait for salmon are well-known to all frequenters of Tweedside.

3rd. The third species of earth-worm I bring under the angler's notice, is the BLACK-HEAD, *or* BUTTON-WORM. This latter is no doubt a local term, confined chiefly to the south of Scotland, but descriptive, in some measure, of the habits and appearance of the animal, whose nature it is, during the summer months, to coil and knot itself up in the form of a ball or old-fashioned button. Under this shape it is found nearly dormant, in light gravelly soils, frequently among rich dry garden mould, but most abundantly among the roots and massed fibres of old meadow grass. Of all the earth-worms, it is the kind best suited for the angler, possessing the very qualifications he most desires, in a trouting worm. Its general length and thickness, the one seldom exceeding six or seven inches, the other that of a small goose quill—its colour and natural toughness, and the capability of being improved which these qualities possess, all combine to render it an object of considerable value to the sportsman. One variety of it there is, termed the maiden worm, which possesses the peculiar advantage of being free from what is called the knot—a development well-known to naturalists, as embracing the generative organs of the reptile, and not much relished by anglers on account of its unseemliness and the broken, distorted appearance it gives to the bait. The button-worm is dark-headed, but of a lively red lower down; although frequently, during summer, found in the coiled state, it more generally comes under our notice, as most worms do, possessing its share of life and activity, and may be brought to the surface by any agitating process, such as the rapid stirring of a spade or dibble inserted into the mould it inhabits. This, by

the instinct of the animal, is evidently mistaken for the subterraneous movements of the mole, its principal enemy. This is a much better method of obtaining worms, in some localities, than digging, inasmuch as it brings them within hand-reach in a more purged condition, and inflicts, in the case of garden ground, little or no injury to plants or vegetables in the vicinity. A solution of lime or salt in water, moderately strong, and dashed from a pail over the surface, I have seen used with effect on old grass land, when the blade is parched and short, otherwise the worms raised are apt to escape the eye. Those taken in this manner, ought to be washed immediately in fresh water, a precaution rendered necessary by the prejudicial nature of the agents above-named.

4th. THE MARSH WORM.—This species of reptile is found commonly in damp, mossy ground, often under stones, in cow-dung, and among quicken heaps which are partially decayed. It resembles, in some respects, a small dew or lob-worm, but is much more delicate in the texture. Trout, I know, especially in hill burns, are fond of it, but it is many degrees too soft for angling with in sizeable streams where one requires to pitch the bait to a distance, nor is it readily rendered tough by keeping, like most worms. Still, if handled tenderly and dropt with caution, it is not a despicable lure when employed either in narrow rivulets or among feeding trout, in still, deep, closely shaded water. I remember some years ago having recourse to it on the Eden, a well-known trouting stream on the confines of Berwickshire, to which I had set out unprovided with bait, and capturing upwards of three dozen beautiful and well conditioned trout, the water, at the time, being extremely small, clear, and choked up with weedy

matter. The worms in question, I procured by digging at Smailholm mill, to which spot I had fished up unsuccessfully with the fly from a short way above Nenthorn, and on my return over the same extent of water, managed, as above detailed, to load my pannier.

5th. THE BRANDLING—A worm held in great esteem by anglers of the old school. It is, however, no favourite of mine, possessing, as it does, all the faults of the March-worm and none of the virtues. Equally soft and frangible, it wants entirely the fresh sweetness of the other, and is filled instead with a yellowish matter which, oozing on the slightest touch from various parts of the body, is, as regards odour and appearance, particularly offensive. The brandling is found only in certain localities, by the sides of ditches, and in rank ground artificially kept moist. Transferred, however, to old, rich dung or leaf compost, it will thrive admirably, and in warm weather breed with astonishing rapidity. The brandling to look at, before handling, is on the whole a beautiful worm, being ringed over with alternate circles of crimson and white. Its shape, however, is somewhat flat, and contributes along with the defects already mentioned, to lower it considerably in my opinion as an angling bait.

6th. THE RED-HEAD.—The finest variety of this worm is found associated with the one above mentioned, or in soils of the same nature and degree of richness. It inhabits also some farm-yards, and an inferior sort is found plentifully enough in many fields and gardens. When cleansed, it is of one hue throughout, namely, a lively pink or red colour, not possessing the dark head of the button-worm, next to which species, as an angling bait, it deserves without question to be ranked. The principal faults I find with it are, the clearness or

pellucid nature of its skin, and the more than ordinary power it has of elongating and contracting its body, thereby, in the one case, occasioning a disclosure of the hook underneath, and in the other, an aptness in the worm to work itself partially off the wire, and thus render inevitable the protrusion of the point or barb. A smaller description of hook, say No. 9, would, I think, suit better the size of the red-head than that used for the button-worm.

7th. THE GILT-TAIL.—A small, sluggish worm, having a green or yellowish appearance in the lower extremity. This is found in places rank with the decay of vegetable matter, where turnips have been fed off, among rubbish heaps, &c. It is capable of being purged so as to part with much of its natural colour, and assume a tendency to redness. The gilt-tail also is easily toughened, and during a scarcity of better, the angler will find it a tolerable bait for trout.

Having thus attempted to specify the different kinds of earth-worms bred in our soils, and to describe their qualities as angling baits, I proceed to say, in few words, how they ought to be prepared or made ready for use. In the preparation of worms three ends are desirable, and these are to be attained only by an equal number of processes, conducted either severally or conjunctly. The requisites in question embody, first, the purging or cleansing; next, the toughening; and lastly, the reddening of the worm.

On being dug or captured, all worms not intended for immediate use, with the exception of those found in the button state, should be placed for the space of three or four minutes in a vessel containing water; some recommend the addition of a little salt, in order to divest them as thoroughly as possible of any earthy

matter attached to their outward coating. The further effect of this immersion is to cleanse partially the entrails of the reptile, occasioning it to throw off what imparts to the skin a dingy and ill-favoured appearance. Thus washed, the worms should be allowed to crawl about for a short time on a clean, dry board, with the view of ridding them of all superfluous moisture. When this is sufficiently accomplished, transfer them into a large earthenware jar, filled, or nearly so, with hart's-horn moss.

The hart's-horn is a species of moss, well known to the northern angler. It is found chiefly on moorland, and in boggy places surrounded by heath. Externally, on the exposed parts, it possesses a reddish tinge, the stalks and lower foliage are of a pale colour, approaching to yellow. Like many other mosses, it is found in considerable clumps; the texture possesses great softness; and, when handled, is agreeable to the palm. Although, in highly cultivated districts, difficult to procure, the extreme lightness and abundant nature of the plant, in places favourable to its growth, render it easy of acquisition. When dry it keeps for years, and the worm-fisher ought, unquestionably, always to possess a stock of it. He will find the common fog generally used in England much its inferior, although at a pinch not to be rejected. Before using the hart's-horn moss, let it be well washed; the hard and whitish stalks ought to be twitched off, and the red soft portions retained.

The worms on their transference to the moss-jar still undergo the process of scouring, but along with it is conjoined that of toughening, and should it be thought necessary, the further one of reddening. This last, I confess, for my own part, I have always deemed

fanciful, but as it is my purpose in this present treatise as much to propound the practice of others as to put forward my own notions, I shall not omit describing it. The drier the moss is among which the worms are placed, the quicker they become fit for use; at the same time, be it remembered, their natural juices are the sooner exhausted, and if kept beyond a certain period without moisture, they soon lose all liveliness, pine away, and die. The dryness of the fog ought therefore to be regulated by circumstances, by the state of the weather, the temperature of the apartment or cellar where the jar is placed, and the time when its contents are required to be used. As to the reddening matter spoken of, which some anglers mix up with the fog when in a moist condition, it is a species of high-coloured earth, reduced to a fine powder and resembling brick-dust. This may be purchased at any druggist's under the name of Bole Armenian. It is supposed the worms consume a portion of it as their food, being deprived of other natural sustenance, in the shape of earth, and that they actually fatten upon it, imbibing, at the same time, its alluring colour. Nor is it always administered to them mixed up slenderly with fog, but sometimes employed in larger quantities, moistened with water and mingled with a little sweet cream. So much for the preparation of earth-worms, as angling baits. The essential matter is to have them red and lively, possessing at the same time some measure of toughness, so as not to break upon the hook, and thereby expose to view a portion of its shank or barb. While undergoing the processes above mentioned, it is requisite to keep them in a cool shady place, for although naturally retentive of life when maimed or broken, they are not proof against great

atmospheric changes, being easily sickened by heat and killed by extreme moisture.*

Having treated of the several sorts of earth-worms used in angling, and the mode of preparing them, I am brought now, as was proposed in pursuing the subject of worm-fishing, to make some observations upon the season of the year suitable for this kind of sport, the time of day, and description of weather, and lastly, the places or portions of water best adapted for its practice. On Tweedside, worm-fishing seldom commences until the latter end of May or beginning of June, when the main stream and its tributaries are in ordinary seasons considerably reduced. The trout, in a certain measure require to be sated with fly-food before having recourse to any coarser aliment, at any rate, some change seems to be effected in their tastes and habits, virtually inexplicable, but yet dependant upon the instinct implanted by nature, an instinct which as regards many animals has, in all ages, baffled, perplexed, and silenced the minutest inquiry. Before trout take the worm freely it is necessary also that the temperature of the water should be at a state of considerable elevation, at least fifty degrees of Fahrenheit, and, moreover, that it be acted upon at the time by a fair proportion of sunlight; indeed, a bright hot day is not at all objectionable, the air being calm, or but slightly agitated. Such a condition both of water and weather often occurs during the month of June, and its occurrence is, indeed, frequently protracted throughout July. These in fact, June and July, added to the latter half of May, constitute, as

* This method of preparing earth-worms was communicated to me some years ago, by David Robertson, Esq., Kelso, unquestionably the ablest angler on Tweedside, if not in Scotland.

regards the southern districts of Scotland, our best worm-fishing months. Be it noted however, by way of repetition, that I am not at present alluding to the simple and coarse practice of the art pursued among starved and unwary fish in mountain rivulets, nor do I refer to worm-fishing in flooded and discoloured streams, but I treat of it solely as respects clear waters, inhabited by cunning, cautious trout, and in consequence as a method of angling which requires of the craftsman great skill and no stinted amount of prudence. With regard to hill burn fishing, undoubtedly it is more in season during August and September, when rains are frequent, than in June and July; and in discoloured waters, trout may be captured with worm throughout the whole year, no one month excepted. ♣

Connected with the branch of the art properly under notice, and the time of the year suitable for its practice, I may here mention the fact that in the months above-named, trout are invariably in their best condition, strong, active, plump, and firm, a recommendation that weighs much with the honest angler, who is always epicure enough to know and admire the good points of a fish, and who dislikes, very pardonably, to burden his pannier with such as are ill-shaped, villainously complexioned, soft, rank, and useless, affording on the hook no play, to the eye no pleasure, and at the table no nourishment.

As to the time of day when trout take the worm most largely, that depends not a little upon the state of the atmosphere. In warm, tranquil weather, they are sometimes met with in feeding humour shortly after sunrise, and continue to be so until one or two o'clock, p.m. Generally, however, they do not commence to bite freely before eight or nine, a.m., and leave off in the course

of five or six hours. During this period, short intervals of relaxation frequently occur, when the fish refuse to feed, and as often there are climaxes when they seize the worm with more than usual alacrity. These, however, happen chiefly on variable and unequal days, when warm glimpses mingle with dull and cloudy weather.

I proceed now to a description of those portions of water where success is generally met with by the worm-fisher; and, be it noted, that such are not the usual haunts of trout when in quest of insect and surface food. They are, on the contrary, the very places which an experienced fly-fisher would look over and avoid. Instead of the central current or foaming eddy, they consist of shallows, off-streams, and nooks of water; thin, fordable, gravelly stretches, and that smooth but not tardy flow, which in large rivers frequently heads a more troubled descent or rapid.

I say not that the main stream is altogether to be neglected, for, under long-continued droughts, it is frequently, from the nature of the channel or *alveus*, the only portion of water where fish can be taken; but, in the general experience of all able worm-fishers, the largest and finest trout are found feeding among the shoals and detached runlets, in places frequently, which, at first glance, one is led to imagine are not of sufficient depth to cover and conceal them. Here they lie in watch for their expected prey, under the shelter sometimes of a large stone or jut of rock, and in its absence, breasting immoveable the gliding current.

In swollen waters, I need scarcely inform the angler, that trout, during summer, take the worm eagerly at what is termed the tail of a stream, in places that are neither calm nor turbulent, small eddies, &c. Among hill burns, no one can mistake where to drop his bait;

indeed, in many of them, every inch of water ought to be fished, and so it should be, as respects the appropriate feeding-spots in large rivers. No likely haunt or ripple ought the angler to pass over, no indication of shelter for trout should he regard with indifference; his eye, hand, and line, must always be kept active, his heart and its hopes always up and alive.

A few instructions as to baiting the hook and managing the line shall, as proposed, conclude this chapter. I presume the angler to be provided with a quantity of prepared worms. If he intends devoting to the sport the best part of an entire day, let his supply of these be ample. On no such occasion, ought he to venture on a river where trout abound, without five or six scores. Nothing is so provoking as to run short of bait, at a time when fish are in the taking humour; and yet how frequently does this happen even with experienced fishers? The worms, I further presume, are confined in a flannel bag ten or twelve inches in depth, and of width sufficient to admit readily the hand of the sportsman. Along with them has been placed a quantity of hart's-horn fog, moistened or otherwise, according to their condition. The bag, for convenience, should be appended to a button or button-hole at the side of the angler. In addition to the bag, some use a tin box affixed to a belt or leather strap, which is buckled on round the waist. To this, the best and liveliest worms are transferred, free of moss, so that they can be taken out at once and without injury.

In baiting, let the operator hold the hook either in his right or left hand, betwixt the thumb and forefinger, and, having extracted with the other from its place of confinement a worm of suitable dimensions, let him, beginning not far from the head of the reptile, thrust

into it the point of the wire. He must then continue to run it along, over bend and shank, until the entire hook and nearly half-an-inch of the gut surmounting it be completely covered, taking great care not to break or further injure the body of the bait, and nowhere to expose the instrument of capture underneath. This latter advice is particularly to be attended to as respects the barb or point; the smallest protrusion of which is sufficient to alarm and warn off fish, and these always the primest and best-conditioned.

I have not hitherto said a great deal as to the size of the worm. It is difficult to procure any large number exactly of equal length and thickness, nor is any such correspondence as to their proportions at all necessary. The button-worm, which, as it is generally found, measures about six or seven inches, and is as thick nearly in the upper part as a small quill, may be taken as the standard in point of size. Smaller worms are often as deadly, perhaps in some waters more so; but on Tweed and Teviot, I for my own part prefer a large bait. It is less apt to be assailed by parr and insignificant trout, and without question, attracts more readily the eye of big watchful fish—of the roving swallow-smolt, and sometimes of the salmon itself.

Reverting to the matter in question, namely, the baiting of the tackle, it often happens, the worms being unequal, that the angler finds it difficult to accommodate some of them to the dimensions of the hook. Should the bait be a little over-sized and lively, and he deem it not worth his while substituting a larger description of hook for the one in use, I would recommend him, after running on the worm about half its length, to force through it the barb, and omitting a small portion of the body, re-enter the point of the wire

and continue the running on, bringing, as he does so, the wounded parts into contact immediately over the bend of the instrument, and thereby furthering its entire concealment. Nearly one-third of the worm should, on all occasions, be left to move about as it will, beyond the point of the hook. This serves as a lure to attract fish and does not, as some imagine, interfere with the seizure of the tackle; for no trout, however cautious and wary, ever engrosses its prey otherwise than head-foremost. Accordingly, on taking the worm, it always assails the thicker extremity, and at no time wastes its attack on the tail or lower end of the bait. Considering this, and the liability which, in consequence, the upper portion runs of returning to hand broken and disabled, should the striking prove unsuccessful, some anglers instead of inserting the hook below, actually do so through the mouth or orifice of the head itself. Another reason brought forward, in support of this mode of baiting, is, that, in the ordinary plan, the mere casting of the line serves, not unfrequently, to break or injure what they term the neck of the worm, namely, that part of it where the hook is first inserted. This, I allow, is an objection of some weight, but it acts as a meagre set-off to the bad effect of their practice, which is no less than to curtail at an early stage the life and action of the worm, thereby destroying its efficacy as a lure or provocative, and rendering it, in fact, a mere piece of dead matter.

While on this subject, let me caution the angler to pay close attention to the condition of his worm; indeed, every two or three unsuccessful casts he ought strictly to examine it, in case it has either become partially disengaged from the hook, or is in any degree maimed and ruptured, not to say water-logged and

motionless. A maimed bait few trout worth capturing will snatch at. It has attractions only for parr and small fry, and as for a dead worm, they would as soon think of attacking a mutton chop, which, by the way, I understand, is the favourite bait of the river cod in some of the Australian rivers.

I shall now, as undertaken by me, wind up this chapter on worm-fishing, with a few instructions as to the management of the line. Although recommending to the worm-fisher the use of a light double-handed rod, I do not insist upon it, as absolutely essential. It gives him, however, a power or facility over his line, especially if a long one, which no single-handed implement can ever possess. Both in waters that require to be waded and the smallest description of rivulets, it is of equal advantage. Employed on the one, the angler, without any strain, jerk, or extra impulse, which very frequently chafes and injures the worm, is enabled to heave out his bait to the required spot; he possesses moreover, full command in recovering his tackle for a new throw, and, as the occasion happens, can strike his fish with readiness and considerable certainty. Employed on the other, he can drop his worm unsuspected, softly as a snow-flake, behind stone or shelter fence, under banks and below boughs, keeping himself and his shadow concealed and at a distance. Such advantages, as far as concerns worm-fishing, the one-handed rod can have no pretensions to. The leads and weight of the worm are great drawbacks to its power. These, it can neither sufficiently heave out nor recover. In the striking of fish also it is of little avail, except when stiffish and used with a short line.

I introduce, it may be thought by some, the above observations respecting the kind of rod best adapted for

worm-fishing a little out of place, but when it is considered that the proper management of the tackle depends not a little upon the implement employed, they will be allowed to be quite preliminary to the subject under treatment. Let me presume that the angler is armed, as I have recommended, with a light double-handed rod, and that he has gained the scene of action, trimmed his tackle, and affixed his bait; his eye also is in command of a likely piece of water, which, as generally happens during summer, in large streams like Tweed or Teviot, can only be fished with much success, by the wader. In he steps courageously, but with due caution, below the place specified, lengthening line as he does so in the usual manner, that is, with the assistance of his hand, and by a slight jerking movement of the top-piece of his rod, along the surface. When he has unwound as much as he can conveniently heave out and recover without injury to the worm, let him venture his cast. This he may do, either over the left or right arm, as best suits his position, and the side of the river he angles from. He ought not however, as in fly-fishing, to perform the full sweep round his shoulders, but to substitute for it that mode of throwing the bait which consists of heaving or pitching it forward—a plan which very little practice will make him proficient in, and one that both saves the worm and causes it, on its fall, to break, without undue disturbance, the surface of the water.

As I have already had occasion to remark, all able worm-fishers invariably cast the line up the stream, taking their stance below where the trout are presumed to lie, and never allowing the bait, as it is carried down by the current, to pass beneath them. This practice of theirs embodies two separate advices, both of which re-

spectively demand attention. In heaving the bait up against the course of the stream, more than one advantage accrues to the angler. He is, first of all, kept better concealed from the wary eye of the trout, which, as is well known, always, when resting, fronts the current; and although possessed of visual organs sufficiently prominent to detect objects above or on either side of it, can descry but very partially what takes place in its rear. Again, from his position, he can strike with greater effect. In this particular he acquires a very decided advantage over the old-fangled mode of worm-fishing, that, namely, of casting down the stream; adopting which system the angler, when striking, is more apt to pull his hook fairly out of the mouth of the fish without even pricking it than, as when he throws against the current and strikes downward, to bring it, bend and barb, into direct contact with the open jaws of the biter. A third advantage obtained by the mode of casting I am recommending is, that the water is less disturbed; the unavoidable plunging of the wader affecting only those portions of it that lie below him, and which he has either thought proper to omit as useless, or has already ransacked.

The other advice conveyed by the practice of able worm-fishers is, never to allow the bait, which is carried down with the current, to pass below you. Lift it always before it comes into line with the opposite bank of the river. In permitting it to descend further, you not only angle without much hope of success, throwing away time and labour, but you frighten off more good trout than you are actually aware of. A fish, for instance, has just caught a glimpse of your bait, as it travels home towards you, he follows it, but by the time he can give any indication of his approach it is

carried down, either among your feet or to a short distance on one side of where you stand. Still he pursues it, but is all at once made aware of your presence, becomes alarmed and bids you, for that forenoon at least, farewell; whereas had you lifted your worm in sufficient time, you would have left him above you on the outlook, and readier than ever to seize it when again pitched in beyond him.

I shall append a single instruction as to the striking of fish. Upon this matter the question naturally suggests itself—when ought a trout to be struck? Whether directly on its first attack or after repeated assaults, at a crisis when it is presumed to have pounced or swallowed the worm? As in everything else, so in this matter, there exists a medium, and to hit that happy and just degree is all that is desirable. Now, for my own part, I am opposed, out and out, to the dilatory system of giving the fish its own time, neither am I an advocate for immediate striking. In the one case you afford opportunity for the trout to detect the nature of your lure, which, in three cases out of four, it assuredly will do; then, moreover, should you secure it after all, you are put to the disagreeable and time-wasting task of extricating the hook from its stomach, instead of simply disengaging it from the lip, jaw, or tongue. In the other case you act in ignorance of the habits of the fish, whose primary attack is upon the life of the worm—an attempt merely to deaden its movements and render it capable of being engrossed more at leisure and without detriment. Accordingly, as is well known, trout always assail the head or most vital part, and it is not until this has been rendered inert, which it generally is after one or two vigorous bites, that it attempts to engross the entire bait within its

jaws. This is the moment for striking, and it is distinguished more satisfactorily by the running away of your line from the spot where the attack commenced, towards the retreat of the fish. In performing the movement, do so steadily and with firmness, not by means of a jerk, which is apt either to snap the gut or tear away the barb of the hook from the part entered. Hold the rod well up, and always incline your pull downwards, or as little as possible at variance with the flow of the river. When a fish is hooked land it without delay; if a small one, it is not in many cases worth the wader's while dragging it to shore; if large, or even moderate sized, the safe rule is to do so, unless you happen to be provided with the inconvenient convenience of a landing-net. Always keep the line tight. Should you from distrust of your tackle be afraid of overstressing it, the blame lies originally with yourself, and you deserve to become the sufferer.

I have in this somewhat lengthy chapter embraced, methinks, most of the points connected with the subject it treats of, and endeavoured, to the best of my ability, to set them forth in a plain and practical light.

CHAPTER VII.

TROUT-FISHING WITH THE MINNOW AND
PARR-TAIL.

EVERY branch of the angler's art requires its separate measure of address, observation and practice. All the departments are not equally fine, and, of course, do not make the same demands upon the skill and experience of the craftsman. Trouting with the worm and salmon-roe, for instance, in discoloured water is a coarser and at the same time simpler and less ingenious manner of fishing than trouting by means of the artificial fly; and if we descend to bring into the comparison such branches of the art as are pursued with float and set-line, and those which have for their object the capture of the less cautious sorts of fish, such as pike, perch, eels, &c., the distinction becomes still more evident.

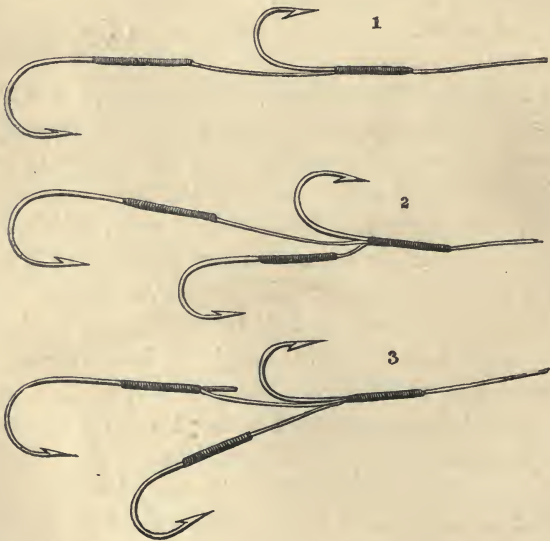
Allowing, then, the above assertion to be correct, what place, in the consequent arrangement, ought I to assign to that division of the art now under treatment? Shall I class it among the subtle, more refined, and difficult departments, or shall I allot it room with those which, comparatively speaking, are coarse and inelegant, requiring little exercise of judgment, small experience, and no great stretch of attention? Now, although not willing to allow it the very highest position, as a branch of our craft, I make no hesitation in saying, that, as far as regards the display of skill and science, it stands on

a level little inferior to any other. Placing foremost the able fly-fisher, I would rank, hand in hand, in my group of anglers, such as are adepts in the art with worm and minnow ; nor must the position, thus assigned to the last-mentioned, be ignorantly held a questionable one ; for if injustice, by this arrangement, has been done at all, the worm-fisher is, in truth, the party injured—a matter in evidence of which I refer to the preceding chapter. Independently, however, of its position in point of skill as a branch of angling, fishing with the minnow has its interests and excitements. It is truly a sport of winning and enlivening character. None is there, for my own part, that I love better to practise—none that acts with livelier influence on the hopes and fancies of the angler.

In handling this subject, I shall adopt a similar course of division to that already pursued in my chapter on worm-fishing. First of all, it is my design to treat of the rod and tackle best adapted for the minnow troller. On burns and waters of no great width, such as the Yarrow, Ettrick, and upper portions of Tweed, he will find, sufficient for his purpose, a single-handed rod, thirteen feet and a half in length, provided with stiffish tops, and indeed, throughout, less limber than the generality of fishing-wands. On a stream, however, that cannot be commanded without deep wading, on lochs frequented by large fish, and in all places where pike are likely to interfere with the bait, I would recommend a double-handed instrument, lighter in material, and in its dimensions a trifle shorter than that employed by salmon fishers. With this, the reel and its provision ought in all respects to correspond.

Regarding the correct fitting up of the minnow-tackle, and the proper size, number, and arrangement

of hooks to be employed in it, great difference of opinion exists. Some contend in favour of many, some of few, hooks; some prefer large ones, some small, while others advise the use of both conjoined. I shall not, however, perplex the reader with arguments for and against one and all of the sorts of minnow-tackles in vogue. My duty is to submit to him the most approved models, and this I do, in the confidence that, if an angler at all, he will be able to recognise their merits, and allow them the superiority they claim over a whole armoury of crude and fanciful contrivances, palmed off on the public, under the title in question.



The simplest and most killing form of minnow-tackle I am acquainted with, is that delineated in figure No. 1, and consists of two hooks, Nos. 12 & 10, tied on, as represented. This is the tackle in its medium size,

but it may either be enlarged or lessened, according to the proportions of the minnow employed, that is to say, should the minnow exceed the usual and favourite length of two inches and a half, a tackle of corresponding dimensions becomes requisite, and the same, when the bait is undersized.

Of the advantages of this description of tackle, I require to say little. They are apparent to all who are in the custom of using it, and arise, in no small degree, from its great simplicity. This, mainly, it is that renders the process of baiting or attaching the minnow, at once speedy and neat. It can, in fact, be performed in a few seconds, and is generally free from such imperfections as either offend the eye or affect the spinning. With respect, indeed, to its qualification of spinning well, there is, in the size and arrangement of the hooks, those very requisites that enable it to do so. This will be readily understood by the annexed illustration of the baited tackle, and a description of the mode of baiting generally adopted.



In attaching the minnow, enter the large or lowermost hook at its mouth, and run the fish, in the same manner you would a worm, along over the bend and shank, taking care not to rupture its skin or belly. When about a quarter of an inch from the tail, bring through the barb, allowing it to protrude freely, until, in fact, the turn of the hook is almost exposed, the minnow, which presents necessarily a curved form, covering the remainder. This done, and presuming

that the length of the tackle is justly proportioned to that of the bait, the smaller hook is in a position to admit of being readily thrust through its lips, both under and upper, an operation which, by effectually closing them, greatly assists the spinning. Should the portion of gut intervening betwixt the hooks prove slightly too long, the angler has it always in his power to shorten it, by simply giving it a turn over the upper wire, before closing up the mouth of the minnow. His great care should be properly to adjust the bait and regulate its curve. Without attention to this matter, the spinning, at its best, will only prove lame and unattractive.

Should he, for instance, exceed the mark and double up the body of the minnow, until forming nearly a circle, not only will it turn ill, but present, to boot, an unnatural and deformed appearance, acting as a scare-away rather than a lure or inducement. On the other hand also, when the minnow is made to retain its natural straightness, it loses on the tackle almost all approximation to a living and, consequently, wholesome fish, being rendered incompetent either to spin at all, or so wretchedly as to expose the art of the angler, and render abortive all his attempts to induce trout to seize it. And here, upon these points, I may assert that the tackle now recommended by me proves its superiority; for there is nothing more accommodating to the desired curve in the minnow than the bend of the larger or lower hook. It conforms indeed, with the greatest exactness, to that very portion of the bait where the curve or turn is required. This hook also, from its comparative weight and other evident causes, operates most beneficially, as a help or occasion to the minnow to spin freely. It is not, however, generally so killing as the upper wire, which, entering the lips of the bait

is more liable to come into contact with the jaws of the trout, seeing that, as I have already mentioned, all fish, if possible, seize their prey by the head or most vital part.

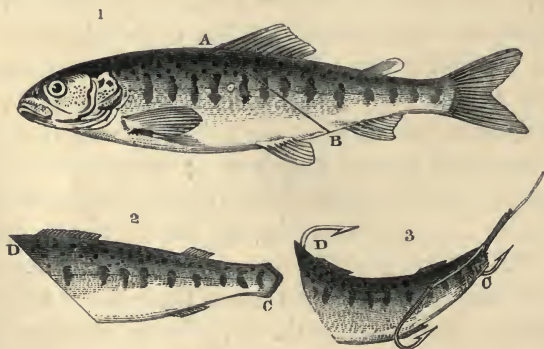
The tackle No. 2 is, in all respects, similar to the one above spoken of, only that it is provided, in addition, with a side hook, of the same dimensions as the upper one. It is baited also exactly in a similar manner; the supernumerary hook, not being entered into any part of the minnow, but allowed to hang loose, by its own joining, alongside of the bait. I have classed this among the above illustrations, as a variety of the minnow-tackle, simply, because it is employed as such by some able anglers. Its conformation however, renders it better adapted for parr-tail fishing, and it is, properly speaking, the parr-tail tackle of Tweedside. Another modification of it will be found exhibited in No. 3, the difference betwixt the two lying merely in the mode of appending the lower hook, which, in the one arrangement, is performed as usual, while in the other, a considerable portion of the shank-end is left exposed, for the purpose, in baiting, of its being inserted, below the skin of the tail.

And here, seeing I have classed minnow and parr-tail fishing under one head or chapter, although in truth, as branches of the art, they vary in several particulars, it will be proper to introduce some instructions as to the modelling or preparation of the bait in question, and the affixing of it to its appropriate tackle. The parrs or smolts fittest for use are those above four and under six inches in length. If of a smaller size, they may, as occasion offers, be employed entire, like the minnow, on suitable tackle; larger, I cannot well recommend them, unless as a trolling bait on lochs

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inhabited by pike and the *salmo ferox*. The cutting of the parr-tail for stream fishing is an operation which requires some nicety and attention. It is one also, very imperfectly understood away from Tweedside; indeed, even there, I have encountered anglers, (whose experience in the other branches of the art was beyond challenge) bungling it most effectually. The main error of all such lies in the notion, that because it is natural for fish to swim head-foremost, or with their tails in the rear, they only act with discretion, when they allot the same position to their bait, that is, when appending it to the tackle with the tail lowermost, whereas in the proper, economical, and killing method of fishing, it is attached quite the reverse way. Accordingly, in shaping and cutting out the bait, let the following instructions be strictly attended to.

Divide the parr or smolt with a sharp pen-knife, in the direction A. B. Cut off all the fins, closely and carefully, not excepting the caudal or tail ones. These, indeed, should be neatly rounded off,



and caution used not to break the contiguous skin. This process of shaping the parr-tail may be performed,

in the course of a few seconds, either at the water-side, or by the wader on the lid of his creel. No. 2 of the above illustrations exhibits the figure of the parr-tail, as ready for use. In No. 3, it is represented, as affixed to the tackle, C forming the head or foremost portion, and D the other extremity of the bait. Now, the advantages of this mode of attaching it are very evident. To satisfy himself with respect to them, let the angler, by way of experiment, adopt what is seemingly the more natural method of baiting, let him retain the finny portions of the tail, and place the end denoted by the letter D, foremost. The first cast taken by him may, not improbably, as regards the spinning of his lure, prove pretty satisfactory, and should the stream run strong, those immediately succeeding it, may still meet his expectations. In a short time, however, he begins to find all going wrong—the bait refusing, in spite of two or more box-swivels, to spin at all, or spinning only by fits and starts, awkwardly and inefficiently; its appearance, moreover, totally altered, the skin loosened, the fleshy parts flabby and worn away by the action of the water, which they come into violent contact with, and in fact, the possibility of a trout seizing it utterly at an end. Let him, however, by way of change, adopt the mode of baiting above recommended. The advantages derived from it will quickly discover themselves. Not only, indeed, will the parr-tail spin with more freedom and regularity, its heavier portion being lowermost, but it will last, to boot, for a much greater length of time, and frequently subserve to capture two or three fish. All this is owing to the narrow and protected part being attached foremost, consequently the opposing current is confined in its action upon the bait to the lower and expanding extremity—

a circumstance greatly favouring the spinning, while, at the same time, in conjunction with the natural toughness of the advanced end, it prevents that other portion of the parr-tail from becoming worn and fretted.

I have been thus particular in my description of this and the first-mentioned tackles, because experience has taught me to consider them as unsurpassed, in their separate adaptations, by any other combination of hooks. It is very true, however, as I have already hinted, that many able and accomplished anglers give the preference to more compound and perplexing devices, some using five, some seven, and others as many as eleven hooks, variously sized and arranged. Of these tackles, however, I shall say little. Without holding them in absolute disregard, I cannot help thinking they are constructed upon an unsound principle, as far, at least, as relates to the spinning of the minnow or parr-tail—(a point, the most essential, connected with this sort of fishing), and although seemingly, from their armed and horrescent appearance, better adapted to take good hold of a trout than the simple forms of tackle above recommended, yet in reality they are not a whit more so.

For my own part, I would limit their use entirely to loch-fishing, and then, as *pure trolling tackle*, larger in make and size of wire than suits either the minnow or parr-tail, and employed by the angler from a boat, under oars. In such a case, the spinning is sufficiently brought out by the action of the leads and swivels. A large bait, moreover, like that needed for the occasion in question, is better supported and held in shape by several hooks, entered at various parts of the body.

While on the subject of minnow and parr-tail tackle,

I find it requisite, having specified, to the best of my ability, the most approved and useful sorts, to say a few words as to the disposition of the leads and swivels. I presume that the hooks, whatever their number or arrangement, are invariably tied on good gut, round, clean, and well-proportioned in strength and thickness to the size and nature of the fish it has to deal with. Of this article, four or five lengths, forming a continued stretch of as many feet, are in general sufficient to use singly or in connection with the casting-line, which, on all occasions, should be formed of the same material, triple-spun or made up. Immediately above the lowermost length, or that to which the hooks are attached, I would fix the leads or split shot, sizes 2, 3, or 4, varying them in number, according to circumstances. In minnow-trolling, for my own part, I prefer the line heavily weighted; others, I know, do not; nay, I am acquainted with one gentleman, an excellent and successful angler, who uses, during the summer months, no leads at all, but fishes with the minnow as with the fly, almost on the surface of the stream—a manner of plying the lure which only great practice can render remunerative. The advantages, however, of leading heavily, consist of improved spinning, greater likelihood of attracting the eye of the fish, and a much better chance of hooking them. In this latter respect, the superiority over light or surface fishing is unquestionable. The trout or salmon, when pursuing the minnow, is generally out of sight, and you are first made aware of his presence at seizure, that is, a moment or two previous to the time when you ought to strike; whereas, in the other mode spoken of, you perceive the fish on his approach to the bait, and are liable, three times out of four, either to strike too soon

or put him on his guard, by altering the course of the spinning, checking the line, or jerking away the minnow. It is very true, notwithstanding, that with tackle barely weighted, you can always, on throwing, command a greater stretch of water, yet the advantage of doing so in minnow or parr-tail fishing is exceedingly doubtful, and if desired, for the purpose of escaping detection from the trout, perfectly unnecessary; for when rivers are in trim for these sorts of angling, that is, either large and discoloured or perfectly clear and small, in both cases, the fish, in their appropriate haunts, are eager and fearless, not readily deterred from their purpose, even within arm's length of the angler himself.

And as to heavy leading, it is, in salmon-fishing, with the minnow or parr-tail, quite indispensable, for the fish in question, when inclined to take the spinning line do not, like trout, change ground on the rove or feed, but lie close to the bottom, in their favourite places of resort, and are only roused to seize it, by the bait, in a particular temperature and state of water, passing near or before them.

For trouting, the ordinary number of leads of the sizes mentioned, which a minnow or parr-tail tackle requires, ranges from two to four. In heavy water, more, if necessary, can readily be added; but I would avoid deep leading, over a weedy or rocky bottom. Some anglers, instead of attaching the shot a short way above the tackle and all at one spot, distribute it, at different intervals, along the gut-lengths and casting-line itself, a practice I do not think commendable.

The box-swivel is a very necessary part of the minnow tackle. Its material use is not so much to assist the spinning of the lure, which it does to an ample

extent, as to prevent perplexity to the line, a mishap always consequent upon its omission. In trouting with the minnow, two, sometimes three swivels are employed by anglers. The lowermost of these should be fixed at the head of the gut-strand third from the hooks, or at a distance of nearly three feet from the bait. Another ought to have its position immediately below the higher casting-line, and in connection with the uppermost length of single gut. A third, if reckoned of use, may find place a yard beyond it, about the centre of the line alluded to. The size of the swivel ought, of course, to be regulated by its position and the description of tackle it is employed to assist. Very small ones, I find, are apt to become rusted and stiff in the axis. They are not so secure or perfect as those of the medium size, which, in addition to their other advantages, subserve, as leads or weights, in default of a sufficiency of these requisites.

Having exhausted all that at present is necessary to be said with regard to the tackle used in angling with the minnow and parr-tail, I proceed, before giving instructions as to the manner of employing these baits, to acquaint the reader with the kind and size of minnow reckoned enticing, its substitutes, and the simplest methods of procuring this favourite lure. Early in the season, that is to say, during the months of March and April, trout, in swollen or partly discoloured waters, provided these are not greatly impregnated with dissolved snow, are in nowise shy, should it pass across them, of darting even at the largest and least captivating description of minnow; but at the period alluded to, it is both against the habits of true sportsmen to angle for them, seeing that they cannot be expected to have acquired as yet anything like condition, and also, there

is but a thin sprinkling that have left their winter resorts, and begun to frequent the shoals and streams, best adapted for the spinning lure. In May, June, and July, the principal trouting months, they become, in most rivers, through feeding, more dainty and capricious. Large and ill-favoured minnows are viewed by them with suspicion, and it is needful for the angler to oppose craft to craft, and fastidiousness, in his choice of a proper bait, to their fastidiousness in the selection of food. Accordingly, it behoves him to pick out the best and fittest of the penk or minnow tribe; those, namely, which, being of a medium size, are well-shaped and silvery. All the spawning and unhealthy ones, unless in an hour of pressure, ought to be rejected; also all stickle-backs, and, I may add, loaches, although when no better are to be had, they prove a tolerable enough substitute for the lure in question. Sand-eels also, and small garvies, or herring fry, I have seen employed with effect in some rivers, both near and at a distance from the sea.

And as to the capturing of minnows for bait, this may be accomplished in a variety of ways. It may be done during a rising or fully-flooded water, by means of a small pout or bag net, used among petty eddies, submersed tufts of grass, and various nooks and shelter-places which the current may happen to form with the banks. In these it is, that this tiny fish finds natural refuge from the violence of the swollen stream, and the net in question, when worked low and with the current, I have generally found pretty effectual, as a means of obtaining it in considerable quantities. Indeed, during the spring months, when the minnow is in demand for salmon-fishing, the pout-net forms on Tweedside the readiest contrivance for procuring a supply.

The hoop-net also, when the waters are clear and small, may be employed with great advantage against the minnow tribe. It is used most successfully in bye-waters, where the fish in question are observed in large shoals, and consists simply of a ring or hoop, at least three or four feet in diameter, and formed of thick wire, to which a net has been suspended. This is attached by cords converging from the circumference, to a staff or pole two or three yards in length, by the assistance of which the net is laid cautiously down, in the shallow resort or piece of bye-water alluded to. The fish, by means of small fragments of worms or other bait, are then invited to feed over it, and when drawn in sufficient numbers towards the centre of the bag, the whole is suddenly lifted by the person employed to capture them. I have witnessed nearly a hatful of minnows taken, by this mode of netting, at one draught, but, unless with the view to furnish a store or summer supply of live bait, I am inclined to think the adoption of it, on the part of the angler, reprehensible, seeing it embraces an encouragement to wholesale destruction.

A third method of capturing minnows for bait is with the hook and line. Upon this expedient there is no need of enlarging. Those who have recourse to it should, however, always remember to employ tackle properly proportioned to the size of the fish. Let them use one or two hooks, as they think desirable, of sizes 2 or 3, round-bend. A small fragment of worm will suffice for the bait, the upper half of a trout rod or a branch cut from some neighbouring willow, for the wand; and I would recommend, moreover, the use of a small float, which not only prevents the hook from coming into contact with the bottom, but notifies to the angler the exact time when to strike.

Minnows, immediately on being captured, should be transferred to a jug or pitcher half-filled with water. This, should the angler happen to be detained for any length of time at the river side, ought to be every now and then emptied of its contents, and again replenished, otherwise the fish, if numerous, are apt to sicken and die. A few changes of water, however, invariably reconcile them to their new situation. When not for immediate use, let him, on reaching home, commit them to some cool and roomy recipient, such as a stone-trough, or large tub or pail. He will require to supply them with fresh water, at least once a week in the spring season, and oftener, during summer. I find it is not necessary to use exclusively what is drawn from a stream or lake, but well and even rain water answer the purpose quite as satisfactorily, provided they are administered, at the first, in limited proportions. To such as have the command of a pond or small rivulet, the keeping of minnows during the whole season presents no difficulty. They have only to enclose them in a deal box, perforated throughout with gimlet holes. This, by means of a few heavy stones or weights placed inside, is conveyed to the bottom of the piece of water in question or bye-pool formed from it, and there, kept sunk, until its finny contents are in demand. When minnows are to be used, I know of no better mode of conveying them to the place of action, than by means of a common soda-water bottle. This, when about two-thirds filled with water, will contain conveniently upwards of a score of these fish, and if at intervals, on affixing for instance a fresh bait, the element natural to them be changed by the angler, they may be kept alive during the whole day. The cork accommodated to this vessel ought to be provided with an air-hole, either driven through its

centre, or nicked out at the side. Minnows when carried in a dead state, if fresh, should be deposited among moss or grass slightly moistened; if salted, they may be placed for convenience in a tin box similar to what is used in worm-fishing, and suspended in the same manner by a belt round the waist of the angler. I may mention, by the way, that I have no great opinion of the salted minnow. It is a troublesome bait to deal with, readily torn and disfigured in fastening, dull in the eye and colour, and an uncertain spinner.

I have thus, at some length, discussed two or three of the most important matters connected with this branch of the art, and shall now offer some instructions as to the time when, the places where, and the manner how, it ought to be pursued. And first, as to the time and season adapted for minnow and parr-tail fishing. I have already stated that large, hungry trout may be taken as early as March or even February, but in these months, the generality of them have not yet begun to frequent the beats and shallows, although during mild weather, invited into them by the appearance of surface food. Floods also, then as at other times, compel trout to be active and abandon their places of refuge, and it is on the first subsiding of these that the minnow-troller generally meets with success.

I may mention here, however, that although, in my younger years, eager to capture individuals of the finny tribe whenever I could, be it in the middle of Christmas or on one of the dog-days, I am now content to limit my trouting expeditions, in a great measure, to the season in which these fish are fit for use; indeed, to slaughter them indiscriminately, during all the months of the year, as may be done by the use of the salmon-roe and pastes made from it, I consider

wrong, and inconsiderate. Holding such views, and recommending the same to every honest and high-minded angler, I exclude, in accordance with them; from my trouting calendar, that portion of the year preceding the 15th April, and also the months following August, during which interval the *fario* or common trout, with a few exceptions, is out of condition, and unfit to be used as human food. Angling with the minnow, then, being thus limited, along with the other branches of trout-fishing, in point of season, it is only proper for the craftsman to take every advantage which weather and the state of the rivers afford, to pursue his amusement. This may be done, either, as I have already remarked, when the water after a heavy flood has begun to subside, and is verging upon a dark porter colour, or when it is clear and small, under a bright sun. Also, during warm, summer nights, the minnow, as well as the fly and lob-worm, is a sure and deadly bait, enticing to large trout which have their haunts throughout the day, in deep, still water. On such occasions, too, the parr-tail will be found effective, but of this bait the true season is what on Tweedside is known as the smolt period, viz., those weeks of the year in which the parr, having assumed its silver coating, makes descent, in numerous shoals, towards the salt-water. Then it is, that all the large trout of our salmon rivers are out and on the watch, marking with cunning eye the bands as they pass them, if so be they can detect a wounded, worn-out, or incautious straggler; for on such it is, not on the healthy and alert pilgrims, they generally expend their vigour. The usual period for such emigrations is the latter week of April and first fortnight of May; but frequently they commence sooner and terminate, as in an occurrence of

droughts, much later. May and June, however, I esteem to be the best months for parr-tail fishing, although what is termed the swallow-smolt—a coarse, over-grown species of the *salmonidæ*, arriving sometimes in Tweed at the weight of seven pounds, and frequently caught with the bait in question above four, is more on the move, during the first-mentioned month.

The parr-tail, I may remark, is often used as a companion to the worm, and proves most killing in a similar state of water, and the same sort of day. described in a previous chapter, as suitable for the worm-fisher. Indeed, one pursuing that branch of the sport, in rivers frequented by large trout, ought always to have parr-tail tackle along with him, and employ it also, on procuring the requisite bait, in places adapted to its use. These, he will find, seldom interfere with his worm-ground, being rapid and broken water, often the central current, sometimes, indeed, seething eddies and detached strips of the river, whitened over with foam; nor are racing shallows, less than the breaks and necks of streams, to be despised, glassy and exposed though they be, for there large trout love, on suspended fin, to sun themselves, and undetecting avoid all detection. Such localities, too, as I have described, are, in the size and state of river referred to, well adapted for the spinning of the minnow. After a flood, however, in discoloured water, this bait must be fished with among casts of a different character. The trout, then, except in the smaller description of rivers, descend to less turbulent places of resort. They move off more into the silent shallows, sometimes to the very foot of streams, into diversions from the main current, not unfrequently, into what, in the usual state of the river, is smooth and seemingly motionless water. They are

found, indeed, should the flood happen to be a large one, scattered about in all places of comparative shelter, close below banks, among side-runs and small whirls, in fact, everywhere, except in central and violently-agitated currents.

I am now brought, having specified when and where this branch of the art ought to be pursued, to add some instructions as to the manner of pursuing it with success. The movements of the minnow on its appropriate tackle and under swivel traces, spinning, as it is made to do, with great rapidity, and often in the teeth of a strong current, are allowedly unnatural, nearly as much so as are the vagaries forced on the artificial salmon-fly. How, then, the inquiry arises, are trout, the wariest of all the finny tribes, deceived by them? This is a question of which it is vain to attempt giving the satisfactory solution. It is evident, however, that if trout regard the bait in question as a minnow at all, they do so under the notion that it is a sickened or injured one—an individual separated from its resort, and unable, through weakness or loss of instinctive consciousness, either to regain it or to take refuge elsewhere. As a proof of this, I may mention that, not unfrequently, when drawing the lure referred to through a host of live minnows, I have been surprised by the appearance of a good trout darting suddenly at my bait, from some shelter stone, in the very centre of the spot, preferring it, seemingly, because, (notwithstanding its mangled and spitted condition), an easier prey, to any individual of the shoal among which it dwelt. On the same principle it is, namely, the comparative facility with which they are captured, that vermin,—carrion crows, and beasts of prey—search out and assail wounded and stray

animals, while they watch, with apparent indifference, the movements of such as are healthy and banded together. I do not, of course, mean to assert that trout will forbear attacking the minnow in its active state, in the same manner as, when hard pressed, the creatures mentioned attack their game or quarry; on the contrary, they are well known to do so, and often, as the contents of their maws testify, very successfully; but every angler, I think, must coincide with me in opinion, that a spinning bait takes their fancy in a wonderful degree; to account for which, I am perfectly justified in making the assumption, with respect to it, above set forth.

The angler, then, must bear in mind that it is folly and over-refinement to attempt approximating the movements of his bait to those of a healthy minnow. Such an effect, by any known process, he cannot produce. His sole object should, therefore, be to hide and disguise the tackle, and it is solely by rapid spinning he can accomplish this. The quick and equal spinning of the lure is, in fact, the one thing most essential to be studied and understood in fishing with the minnow. This attained, what remains to be known and done is, in many respects, comparatively easy; for instance, the throwing of the line. All that the angler requires to pay attention to, over and above the instructions I have given upon that matter, in my chapter on fly-fishing, is, that he does not injure or tear the bait; a misfortune to be avoided, chiefly by care, and by not attempting to cast the minnow further than is requisite. Except in angling for salmon, indeed, I never experienced the necessity of throwing a long line, when using this lure; and often, instead of casting it like the fly, I adopt the expedient of heaving or pitching it forward, sometimes,

under certain circumstances, of merely dropping it from the end of the rod.

As to the proper mode of playing or working the minnow, I require to say little. It should be submitted, in fact, to every test and variety of movement; these, however, being made dependent upon the nature of the current it is cast into. Sometimes, like the salmon-fly, it ought to be urged along, by short measured jerks; sometimes drawn steadily against the stream, in one continued pull; sometimes made to descend for a little way, and then re-operated on by the angler; now on being cast across, it should be brought back in a curve to his feet; and again, allowed merely to dip near some stone or ledge of rock; in short, provided the spinning movement is kept up, and all collateral instructions already given attended to, there is no possible mode of playing this bait, which may not prove successful in attracting trout. I have, a short way back, professed myself in favour of deep fishing, and enumerated one or two of the advantages derived from it. These, I may again state, are connected chiefly with the spinning of the minnow and hooking of the fish; and it is in this latter respect, as an assistance to the striker, that I now once more recommend the adoption of heavy leads. The angler using them is not put to the necessity of constantly watching his lure, but detects the presence of an assailant, by the hand oftener than the eye. This, of course, he cannot do, until the fish has fairly made seizure of the minnow, whereas in surface spinning, the case is different. Accordingly, each method requires from the craftsman its peculiar manner of treatment, as regards the striking.

When the fish, as generally happens in deep spinning, is felt instead of being seen, the angler has only to

slacken the line for a second or two, and then, with a slight jerk of the rod upwards, recal it. He will find, in three cases out of four, (unless the trout, being overfed through a long continuance of flooded water, bite shyly) his fish hooked. Again, in the other case, should he descry the assailant on its approach towards the minnow, he ought, by no means, either to suspend, quicken, or alter the spinning, until its intentions are further completed by the seizure of the bait. And here, as in salmon fishing, lies the difficulty, at least to a beginner in the art, who is apt, immediately on perceiving the trout, either to strike, and in doing so jerk from it the lure, or else to check too rapidly its motion and thus undeceive and alarm his prey. Against both these errors, it behoves the angler to be on his guard, and at the same time, to use such preventives, (of which, in fishing with the minnow, I know of none better than heavy leading), as will act against their occurrence.

It very frequently happens that a fish, which has followed this bait for some distance below the surface, unawares to the angler, will make no attempt to seize it, until brought close to bank or the margin of the stream. Accordingly, great caution ought to be exercised by the craftsman in the lifting of the minnow. He should always exhaust or complete his cast. On no account ought he to break it off abruptly or in midway. The sudden and uncalled-for abstraction of the bait before edging, loses him many a good trout. This, at the time, is not always made evident, but it is not the less an undoubted fact. In the case of bolder fish, like the pike, it is better manifested; these, when trolled for with a spinning lure, withhold their attack, four times out of five, until it is within a foot of the margin;

may, I have been a witness to instances of their actually running aground in pursuit of the bait. Trout also, I have seen so earnest in the chase, as with difficulty to regain their way back from the shallows into deep water; but this is of rarer occurrence with them than with the fish above mentioned. On the contrary, they often exhibit no sign of their presence, and are passed over unawares by the careless and hasty angler, whose bait they had actually pursued and would in all probability have taken hold of, had he not abruptly withdrawn it from their vision. I know of an instance which occurred on Tweedside, of two individuals following each other on the same side of the river, at a distance not exceeding sixty or a hundred yards, and the one to whom precedence was given, although at the outset equipped from the same store of bait and minnow tackle as his friend, failing notwithstanding to capture above half the weight or quantity of fish. I may mention too, that on this occasion, the day was favourable, the water in trim, and trout taking freely. Both anglers besides, commenced and concluded operations at the same time. How then, it will be asked, was such a result to be accounted for? I allow that greater skill and science were on the part of the more successful sportsman; but the other, a native also of Tweedside, was by no means an indifferent fisher, and the advantage given to him, taking into consideration the nature of the bait, was such, that were he able to throw a line at all, he ought, without question, completely to have marred the sport of any one immediately following him. But then, mark the reason of his failure. He neglected to edge his minnow—omitted to exhaust his cast—abruptly withdrew his tackle, when in midway. On these points it was that the superior

skill and science of his competitor displayed themselves—here lay the true secret of his success.

While on fishing with the minnow, I may take notice (having exhausted most of the points connected with it, as a spinning lure for trout) of two or three other methods of using this bait, practised occasionally by the angler. One of these is live-minnow fishing. This branch of the art is little cultivated, and very imperfectly understood in Scotland. For my own part, I do not pretend to any acquaintance with it, and in consequence, refer the reader desirous of gaining information on the matter, to Blaine's Dictionary of Rural Sports, a very useful work in the main, but on the subject of fishing rather too comprehensive and exhausting. It embraces, in fact, upon that science, a medley of theories, adopting, as its own guide or creed, no individual one. It somewhat involves and perplexes the reader with the multiplicity of its divisions, the variety of its information, and complex nature of its arrangement. On the whole, however, it is a book eminently instructive, and one which ought to be in the hands of every lover of sport.

From this digression I pass on to describe the diving minnow-tackle, the way of baiting, &c. The tackle mentioned consists of a single hook, No. 10 or 11—Adlington, having a long bended shank, looped at the head. This, by the assistance of a needle or small wire having a groove at one end, is passed through its jaws along the body of the minnow, the barb of the hook being left, as in baiting with the single gorge-tackle for pike, to protrude from one side of the mouth. Thus trimmed out, the lure is intended to descend rapidly towards the bottom of deep, still portions of water, resorted to by large trout, and accessible from the

bank to the angler. What may be termed the bend of a pool, especially if shaded over with wood, is likely ground for this kind of sport. It is, in fact, only a variety of dipping, and may be pursued in places somewhat similar. A considerable depth of water is, however, essential. The diving minnow requires to be fished under swivel traces, for, although not intended to spin, but only to dart downwards, yet, on recovery, it is very apt to do so, and in consequence, to perplex the line of the angler. A fish, when seizing this bait, generally does so on its descent, and at the moment it reaches the bottom. It is detected of course by the hand, and requires to be struck without much parleying. This mode of fishing is generally most successful early in spring, before trout have quitted the pools and still places. It is on no occasion, however, even then, very remunerative.

Akin to it, is a mode of fishing with the dead minnow, in streams and during the summer season. Here, a simple worm hook, No. 10, is employed, not leaded on the shank like the former, but attached in the usual manner to a thread of fine gut. To bait this tackle, one may either employ, as before detailed, the grooved wire or needle, or in absence of it, let him insert his hook not far from the lower extremity of the minnow, and passing it along as through a worm, bring it out at the mouth. He should then, in order to sustain the bait in its proper position, hitch the gut over the tail, and draw all firm. Thus baited, I fish almost in the same manner as when using the worm, and in a condition of water somewhat similar, the streams being low and clear, the skies bright and warm.

Of artificial minnows and imitations of small fish, I require to say little. They are not, as far as I am

acquainted, held in much esteem by tried and able anglers. In the whole course of my experience and inquiry, I never heard of a single wonderful feat having been achieved by any of them, although the qualities and virtues of not a few have been expatiated upon, in my presence, over and over again. One imitation of the minnow, reckoned very deadly, has, as the seat of its attractive qualities, a coating formed from the belly-skin of the salmon; others are made of mother-of-pearl, horn, whalebone, &c., and an additional sort of lure introduced to Tweedside two or three years ago, under sanguine hopes of its proving successful, consists of a piece of crystal, shaped like a small fish, and set in metal. This last-mentioned artifice, when brought to the test, possesses, I understand, a certain degree of merit, that, namely, of attracting the notice of the fish, and bringing them towards the tackle. Invariably, however, they refuse to seize it, turning tail when within arm's-length of doing so, and only, instead of rewarding, provoking the patience of the angler. Imitations of small fish, I can readily believe, may prove tolerably successful during a stiffish breeze, when trolled with in some Highland loch, but on rivers, at least on those of the south of Scotland, and I am convinced our northern ones also, they assuredly do not answer. They want a very important essential, and that is, smell or flavour, the sense of which in trout is, as fishing with the salmon roe demonstrates, most exquisite.

In this article on minnow trouting, I have omitted, in its proper place, to allude to the English system of capping the head of the bait, a plan which, when adopted in connection with certain combinations of hooks, materially, I allow, assists the spinning, but one, the advantages of which are completely done away

with by the use of such tackle as I have recommended. There are also two evils resulting from the adoption of it, apparently unregarded; one is, that it interferes with the protrusion of a hook from the very part of the minnow, namely, the head, whereby trout generally seize it; and the other, that it disguises in some measure the conformation of that section of the lure, more especially the eyes, which I esteem to be of a very attractive nature. To pike, at any rate, they are so, a proof of which I very recently met with.

Happening, one afternoon, to troll from the bank for these fish, in a favourite resort of theirs, on Teviot, I employed for my bait the lower half of a parr or small trout, using gimp tackle and swivels. The cast itself is not above twenty or thirty yards in length, and to fish it carefully over did not occupy me ten minutes. This I did on the occasion alluded to, without, to my knowledge, stirring a single fin. Not content, however, with one trial, although a searching one, I continued to ply on in the same spot for nearly half an hour, with no better success. At length, as a farewell resource, I resolved to re-fish the cast with the upper half of the parr. Accordingly, appending it to my tackle, I recommenced throwing, and although in playing it below the surface of the water, it spun but indifferently, to my surprise, in a very short time, I captured with it no fewer than five pike, two of which weighed about six pounds each. These were scattered along with others, which managed, owing to the nature of the landing place to make their escape, over the whole cast in question, and in my opinion had preferred the bait latterly employed, solely on account of the eyes and head. This incident, however, I mention, not as any argument against the use of the parr-tail, whether for pike or

trout. It only proves the occasional caprice of the fish, and the influence which a very minute circumstance, namely the want of the organs of vision or some such deficiency in the bait, may have over their inclinations. I think, therefore, the system of capping the minnow not at all a judicious one, and indeed, if adopted in connection with the most approved form of tackle, scarcely practicable.

CHAPTER VIII.

FISHING WITH THE SALMON ROE.

ALTHOUGH fishing with the salmon roe is considered, and perhaps with reason, by many anglers, as allied to poaching, and in consequence is frequently tiraded against, without pause or forbearance, I do not think I should be doing justice to what is designed to be a full exposition of the art and science of angling were I to exclude all notice of it from these pages. The wonderful property possessed by the bait in question, of attracting trout is, of itself, a subject demanding the attention and investigation of the naturalist. To what sense or instinct inherent in the fish it is attributable remains still, in some measure, a matter of dispute; whether, in fact, it is dependent upon the exquisiteness of their taste, or that subtle power of discernment which not unfrequently is connected with the organ of smell. For my own part, I am inclined to believe it depends upon the exercise of both senses, although chiefly upon the latter. That the use of the salmon roe in its prepared state as employed by anglers, possesses the virtue I speak of to a truly singular extent, a very few instances falling under personal experience may suffice to prove, and from these, I undertake to make a few deductions in favour of, occasionally and in certain localities, employing it as a bait for trout.

Its wholesale use, however, without respect to river and season, I utterly condemn, in common with all lovers of fair sport; and although, on the occasions to be made mention of, some may deem that I advance far towards transgressing upon the principle I profess to hold, they will find, if I mistake not, in my argument, a good and sufficient apology.

The first instance I shall bring forward with respect to the attractive power of this bait, I find jotted down in my angling note-book, as occurring on the 24th of November, 1837. The piece of water fished on was the lower extremity of a short side-stream on the Teviot, about a mile from Kelso, a spot which, in the summer season, was wont to be clear and shallow, and, in consequence, not plentifully stocked with trout. Immediately below, lies a succession of rapid streams, extending onwards above two hundred yards, and then terminating in a large pool or dam.

Having taken up my stand at the margin of the small snatch of water above described, I commenced operations about two hours before noon, concluding them a short while after three o'clock, during which moderate interval I captured no fewer than eleven dozen of trout, many of them about a pound in weight, and along with these, a clear bull-trout weighing about five pounds. Nor, on leaving off, had I nearly exhausted the apparent contents of the spot; I say apparent, for it was evident to me, both from their scarcity at the commencement, and the gradual increase of the trout in number as I continued to fish on, that they approached the bait, as it were by a trail, from various quarters further down; some from the rapid streams immediately below, but the greater part undoubtedly from the pool in which these terminated,

and which, at that advanced season of the year, formed, unless induced to leave it by some exciting bait like the one then employed by me, their natural haunt.

Another instance, of later date, which I shall mention, occurred at Teviot-foot, not very far distant from the scene of action already spoken of, on the 16th of October, 1844. The water, on this occasion, was only slightly swollen, and far from that state which is generally held in estimation by roe-anglers; nor, indeed, was the paste used by me of the best quality, being fabricated, not from the roe of the salmon, but that of the bull-trout, and in consequence very inferior, both as respected colour and flavour. I commenced angling precisely at eight o'clock, A.M., and left off, my bait being wholly exhausted, at ten minutes before one, the whole period of time occupied by me extending to nearly five hours. The number of trout captured was in all two hundred and twelve, several of them weighing a pound and a-half. I hooked and played also two bull-trout, or large whitlings, but owing to the under-size of my hooks, or some other cause, they made their escape. As on the former occasion, the fish, when I was compelled for want of bait to abandon the sport, were still in feeding humour, more eager indeed, and ravenous than during any other portion of the forenoon. The spot I occupied, on the above-mentioned day, lies at a distance of three hundred yards from the junction of the Teviot with Tweed, and as the varieties of the common or parr-trout inhabiting the two rivers are quite distinct, the one from the other, in external appearance, I was at no loss to specify and assort them. I came accordingly to the conclusion that, at the fewest, two-thirds of the fish captured by me belonged to Tweed, and that these, owing to the

attractive qualities of the salmon-roe, had traced their way up to the bait, some of them, I have no doubt, out of Maxwheel pool, situated at the distance of half a-mile from the spot in question.

It were easy, did I choose it, to inflict upon the reader a detail of similar occurrences, all tending to prove the wonderful virtues possessed by the salmon-roe in gathering and concentrating trout, but the two instances above related are quite enough for my present purpose. They demonstrate the instinct of the fish to pry out its favourite food; they disclose to us that, for this end, it is gifted by nature with the most delicate perceptions; and more, they make us aware of the great extent of damage done during the spawning season, to the deposits of the salmon, by the depredations of the common trout. It is solely upon this last-mentioned ground, that I take my stand, when palliating the use of the salmon-roe as an angling bait, in certain rivers and seasons. I am of opinion, that in large waters frequented by salmon for the purpose of spawning, and also on their tributaries, the moderate employment of it in a salted state, acts powerfully in diverting the attention of more than one species of prowler from the natural ova or deposit, a very large proportion of which is every year consumed, as well upon the redd of the fish itself as when carried down below it; moreover, I can conceive it to be of great benefit to the breeding and increase of the *salar* or salmon proper, were it made allowable, by an amendment introduced into the various acts of parliament regarding our Scottish salmon fishings, to capture, by means of this bait during the close season, that species of fish which is well known under the designation of bull-trout. There is not, I am con-

vinced, among the finny tribe, an enemy to the ova and incipient spawn of salmon more rapacious and destructive than this very fish; nor is it one, as is well known, remunerative as a marketable article to the tacksman or proprietor of fishings. It is seldom taken from our rivers in good and edible condition, ascending them in large quantities only during close-time; and at the commencement of the open season, continuing to haunt them, in the shape of a hungry and good-for-nothing kelt; thus, not only tampering with and preying upon the undeveloped deposit, but committing unmeasured havoc among the infant fry.

But while thus palliating the use of the roe as an angling bait, on rivers frequented by salmon, I would strictly set face against its employment on purely trouting waters. Upon these, if of small width, the injury it is possible to inflict with it might, for a season at least, prove very serious. Let me suppose, for instance, that it is brought into play, under favourable circumstances, on the Eden or Blackater, two highly reputed streams in Berwickshire. I believe it practicable for one well versed in the use of it to strip, in the course of a few hours, to the extent of half-a-mile, either water mentioned, of three-fourths of the primest fish inhabiting it; and were he to pursue this system of devastation throughout, he would, in the course of a short time, nearly depopulate the whole range of pools, leaving only the pricked fish and a few dozen of stragglers to replenish them. Such extreme butchery would, of course, not only be condemned as unsportsman-like, but as an outrage upon common sense and feeling, whereas the destruction of a few hundreds of mischievous fish, in a broad and plentifully stocked river, not only effects little injury to the trouting,

but as regards the protection of salmon spawn, confers an acknowledged benefit. I confess quite freely that the trout, immediately before and during close-time are, with very few exceptions, rank and uneatable, but that is a matter with which the sport of capturing them has nothing at all to do. A kelted salmon frequently affords better sport than a clean fish, and I have seldom met with the angler, who, on account of its being out of condition, despised running one.

I shall now, having thus at some length prefaced the subject of this chapter, proceed to more relevant matter, and in doing so, I propose bringing first of all under consideration the mode or modes of preparing salmon-roe as a bait for angling with. There are two or three ways of doing this peculiar to Tweedside. It is either cured entire, that is, as it is taken from the fish in the form of what is provincially termed the *waim*, or it is reduced into a paste, or else it is converted to single particles, termed beads.

The first object of the curer is to obtain what is reckoned an available supply of roe. Much of the ingredient met with under that name is next thing to useless, the seed or ova being too small in the particle, or else, through an injury done to the fish from which it is taken, largely transfused with blood. In either case, and under other circumstances readily recognisable, it ought to be rejected. The roe best adapted for curing is found in what is called the *baggit* fish or ripe spawner, that is a salmon on the eve of depositing its ova. It is most readily obtained on Tweedside at the commencement of the open season, although often to be procured, in a state of sufficient maturity, in the month of October. The beads or pellets should, unless

intended to be cured in the way first mentioned, have attained their full size, equalling that of a small pea or swan-shot. They ought, moreover, to be distinct and easily separated, as well as of a high pink or brick-colour.

In every preparation of this bait, the first step of the process is to cleanse the *waim*, that is, to remove from it the clotted blood and other impurities which it may happen to have contracted. In some cases, when the roe is designed to be cured in the leaf, this may be done simply by the application of a cloth or towel. The natural juices are thus kept intact in their primitive condition. But it seldom happens that the leaf is so pure and undamaged as to allow of such a superficial mode of cleansing. Accordingly, in most cases, it is found essential to wash and pick it. To do this properly, use water slightly warmed and mixed with a small quantity of milk. Perform the operation in a large hand-basin, and transfer, when cleansed, each leaf, layer, or fragment to a sieve or cullender, by means of which the superfluous fluid will most readily be drained off. Thus cleansed and strained, the roe is made fit for one or other of the processes of curing already alluded to.

The preparation of this bait in the *waim* or leaf is very simple. The operator has merely to place the entire layers of ova in a small jar, sprinkling over them a handful or two of salt. He must then cover the vessel, so as entirely to exclude the air, with a piece of skin or leather. After remaining in this state for a day or two, if intended for early use, the roe, or any quantity of it, should be wrapt carefully up in a piece of flannel, (the foot of an old worsted stocking is often employed for this purpose,) and exposed to a slight

pressure and some measure of heat, not exceeding in general 80 or 90 degrees. By this means, in the course of a few hours, it is rendered sufficiently tough for use, and when required to be prepared in a shorter period, the operator has only to expose it to a higher pressure and a greater degree of heat. In curing roe in the leaf, saltpetre is sometimes employed, with the view of heightening its colour. I would recommend, however, that this ingredient be used very sparingly, as its flavour is by no means palatable to the fish, nor, indeed, are its effects in improving the natural colour of the bait otherwise than doubtful.

There are two modes of preparing pastes from the salmon-roe. The one I generally adopt is the least tedious, and although the ingredient produced from it is not so equal or thoroughly mixed up and broken as that of the other, it possesses all, and to spare, of its attractive virtues, being a compound of the bead and paste, and on this account insinuating itself into the good graces of bull-trout and whitling, which species of fish, I have generally experienced to be the case, give a preference to unbroken, over finely reduced roe. The following is the method I observe in preparing it:— After cleansing, I proceed to break down the leaf, separating, as I do so, the beads and pellets from the films to which they are attached. I then throw over them a quantity of fine salt, in the proportion of three or four ounces or upwards to every pound of roe, and stirring the mixture with the hand, incorporate all thoroughly. I also squeeze together and occasion to burst several handfuls of the beads, in order that, thus expressed, their adhesive contents may operate in binding and giving consistency to those left intact. This process concluded, I transfer the whole mass to a tin cullender,

there to remain under cover for some hours, during which time a considerable quantity of oily matter becomes separated and drained off, the juices of the pellets being acted upon by the salt to this effect. When the draining has ceased the paste is ready for use. If intended to be kept for some time, remove it into small pots, pressing it well down with the hand in filling, and running over it a little melted lard.

The other preparation of roe paste alluded to, undergoes up to a certain stage the same process as the one above described. After the beads, however, have been separated, place them in a jug or deep jar, and by means of a small wooden shaft or pestle, bruise, mix, and stir them up vigorously, until every individual pellet has become broken and dissolved, and the whole forms a thick, creamy-looking substance. During this operation, which is somewhat of a tedious one, and will occupy the person engaged in it at least an hour, a handful of salt ought from time to time to be added, as the dissolution of the particles proceeds. When all has been thoroughly incorporated and mixed up together, pour boiling water upon the mass, and it will instantly harden and become formed into a solid lump of paste, capable of being removed by the hand. The water, be it again remarked, must be quite hot, and poured into the jug or basin containing the roe, not applied to it externally. This is the true secret of preparing salmon roe paste.

Of the curing of this ingredient in the bead state, I require to say little: it consists simply in the drying and packing up of the separated pellets, and requires no process, beyond that of submitting them to the action of air and heat until sufficiently toughened, and then committing them to earthen-ware pots or small

jars. In curing salmon-roe for bait, the preservation of its natural colour should always be kept in view. The sweetness of taste also, is a matter upon which some English anglers lay great stress. If by that is meant freedom in the flavour of the roe from salt, I take the liberty of differing with them, for there is no doubt that independent of the properties of the roe itself, that substance possesses qualities of its own, highly attractive in their nature. These, in regard to wild animals of various kinds, are well known. They are exemplified in the instance of what is termed by the American hunter a salt lick, or moist spot of ground highly impregnated with the mineral in question. To this deer and game of all descriptions repair from great distances, lured by the inviting nature of the salt. I am of opinion, therefore, that the flavour of this substance is very agreeable to trout, in common with other animals, and that a measure of the success met with by the angler in fishing with salmon-roe is owing to its liberal use; nay more, I am inclined to believe that fish might readily be congregated to one spot, by the judicious placing of a fragment of rock-salt at the head of some stream or pool.

I shall now very briefly direct the attention of the reader to the tackle best adapted for roe-fishing, interspersing a few instructions as to the proper mode of angling with this bait. The hook, commonly used on Tweedside, is a single one, No. 9 or 10, round bend, tied on a good strong gut, as if for worm-fishing, in the coarse, ordinary style. A pair of these are frequently employed at one and the same time, fastened to the foot-line, at the distance of a yard from each other, the angler occasionally appending a worm, instead of roe, to the upper one. The salted leaf is what is generally

made use of along with this description of tackle, and a small quantity of wool reckoned essential, in order to fix and secure the bait.

Such I observe to be the usual practice and contrivance of Tweedside fishers, in respect of the hook and manner of baiting. Mine is different, and, coupled with the plan I adopt when using this line, much superior. I always, for instance, employ a double hook, that is, two hooks, No. 6, 7, or 8, tied back to back, and pressed forwards, by means of the finger and thumb, so as to lie at right angles with each other. These serve sufficiently to retain or secure the bait, without resorting to wool or cotton fibres. Leaf-roe I seldom fish with, preferring the mixed paste already described. I also employ strong, round gut, and weight or lead my line largely, in order to keep the bait from progressing too rapidly. In fishing with the salmon-roe, the general practice is to do so, in bands or small companies, including three or four persons. A piece of water, held in repute from year to year as a *rowan* cast, is pitched upon and baited with leaf refuse, or loose particles of the ingredient. This range or beat generally extends from ten to thirty yards, the depth being from two to five feet, the bottom gravelly and free from impediments, and the current gradual. Each fisher, in his turn, commences at the head of the cast, follows his bait as it is carried onward by the stream, withdraws it at the agreed point of termination, and then repairs, as quickly as possible, back to the starting post. This mode of fishing has certainly the attraction of being very sociable, but I have seldom observed it to prove productive. The trout are held by it over too large an extent of water, or, in other words, they are not sufficiently concentrated so as to insure ready or

rapid sport. There are, besides, too much hurry and excitement created through the number of parties engaged; in fact, there exist, at least half-a-dozen circumstances connected with this manner of fishing, all of which operate to its prejudice. I confess, however, that the habits of the bull-trout render it tolerably effective in the capture of that fish, the high impregnation of a considerable space of water with roe, acting powerfully upon the senses of the species of trout in question, while on its way up the river.

As embodying a more approved method of fishing with the salmon roe, I recommend the following instructions. Let the angler, provided with a stiffish single-handed rod and the tackle already described, sally forth, either alone or consorted at most with one companion in arms. He may either betake himself to one of the accustomed beats, if not previously occupied by another party, or pitch upon some untried piece of water, which, although of limited range, possesses the same qualities of depth, speed, and bottom. Near the head of this, he ought to select his stance or post, on a dry and unexposed portion of the bank. There is no necessity, on commencing operations, that he should bait the spot. This, in the course of a few throws, will be done quite sufficiently, without occasioning, as the other practice does, the gorging and repletion of a portion of the fish further down. In throwing, the angler should generally employ a short line, not much exceeding his rod in length, and occasionally, a good deal shorter. He can always, in that highly discoloured state of water in which the salmon-roe is most effective as a bait, entice his spoil to within a yard's distance from the margin. Accordingly, he loses no advantage, by employing the description of line I have recom-

mended, and in the matter of striking, acquires a very important one. Sometimes, however, in certain localities, and when bull-trout or whitleys are observed moving in his vicinity, it may be expedient to increase the length of his cast or throw; also, in brown or fine waters, it is essential to do so.

In baiting with the mixed or other paste, let the angler extract a small portion, equal in size to a horse-bean, from the pot or jar. This may be done readily, by means of an old pocket-knife or other sharp-pointed instrument. He requires then to insert the bait in question, betwixt the projecting barbs of his hooks, in the angle formed by their junction. A slight pressure of the forefinger will assist greatly in attaching it, but it is not necessary to conceal, as in worm-fishing, every point of the wire. When casting, the angler ought to be extremely cautious lest, by excess of force, he should occasion his bait to drop off. He will find it preferable to pitch it out gently from him, instead of throwing the line over his shoulder. This, in general, he requires to do partially up and against the stream, not forward and at right angles with the bank, as is practised under the ordinary style of roe-fishing. He must then allow the bait to sink rapidly and travel at a measured rate along the bottom or channel. When checked without any apparent reason, he ought to consider it as seized by a fish, and on such occasions, to act as if it were so, striking home, in the direction of the current. Commonly, however, the bite or nibble of the trout is unmistakable, although seldom, except in the case of parr and small fry, very vigorous. The attack by a good fish upon this kind of bait is quite distinct from what it is upon the worm. He appears, in general, rather to suck at it than seize it—to roll it about in

his mouth, as one would a comfit, not to bite or rend it. His instinct, in fact, occasions him to regard the salmon-roe, as inert, unresisting matter, while all other substances he is wont to prey upon possess life, motion, and the power of escape.

In the mode of fishing recommended, the angler, as already hinted, ought to restrict his operations to a single spot in the range or beat occupied by him. Doing so, he will most effectually concentrate the feeding trout and render available a great proportion of his casts. He should on all occasions keep his line *taut*, sounding, as it were, the bottom with the leads attached to it, and holding on the alert in case of any sudden strain or stoppage arising from the interference of a fish with his bait. On favourable days, this will happen in the course of every cast or throw taken by him, and he has only to strike at the proper moment in order to secure the trout. It is scarcely necessary for me to add further instructions upon this subject. A practical lesson or two will avail, beyond all written advice. I shall, accordingly, do little more than append a single remark as to the condition of water and state of the atmosphere best adapted to the kind of fishing under notice.

October and November being unquestionably the most suitable months,—a flooded river during one or other of them is the sure index of sport. The proper moment for commencing operations is when the water, on its decrease, has begun to assume a yellow or light-brown appearance—the particles of sand and soil being still, to some extent, in an unsettled state. From this period, until it merges into the deeper-brown or black consequent upon most autumnal floods, the salmon roe may be successfully fished with. Bull-trout and whitlings are aptest to take it during their ascent from the

sea, and at an early stage in the decrease of the river ; in fact, when its waters are too thick and large for the common fresh-water trout. Calm, frosty weather immediately succeeding a flood is favourable for roe fishing. If fresh and warm, the sport is generally indifferent, the fish seldom, on such occasions, displaying much avidity. They appear also to congregate with greater tardiness, their appetites and perceptions being apparently duller.

After ransacking a beat or cast with this bait, it is advisable, on some occasions, to have recourse to the worm, in order to pick up, if possible, one or two of the shy or gorged fish that are likely to remain on or near the spot. By adopting this plan I have more than once hit upon a bull-trout, the only one of the day ; which fish, on such an occasion, I always found replete with the roe-bait. This it managed to pick up on the trail of my hook, or possibly detach from the wire by its own exertions. A combination of the roe and worm is, as I have already stated, frequently resorted to in the ordinary mode of practice on Tweedside. It is sometimes also put in force during the summer season, in small clear waters, the roe being used in the bead form, not actually as a bait, but as an incitement. In fact, at such times, it is employed as a mere appendage to the worm, being supposed to attract the trout to the spot and give them an opportunity of seizing the latter or live bait. Before concluding this chapter, I think it proper once more to disclaim all partiality in behoof of the salmon-roes as an angling bait, beyond the favouring of its occasional use in rivers and streams frequented by the salmon tribe. To these solely it ought to be restricted. I would, on the other hand, most strenuously discountenance its employment on purely trout-ing waters, urging it as the duty of every true lover of our stream-side recreations to do so likewise.

CHAPTER IX.

THE SALMON.

ITS STAGES.—Parr ; Smolt or Black Fin ; Grilse ; Salmon.

FIN-RAYS.—Dorsal, 13 ; Pectoral, 12 ; Ventral, 9 ; Anal, 9 ; Caudal, 19.—
Vertebræ, 60.

GENERIC CHARACTERS.—Head smooth ; body covered with scales ; two dorsal fins, the first supported by rays, the second fleshy, without rays ; teeth on the vomer, both palatine bones, and all the maxillary bones ; branchiostegous rays varying in number, generally from ten to twelve, but sometimes unequal on the two sides of the head of the same fish.—*Yarrell*, vol. ii. p. 1.

AMONG objects closely associated with the sublime and beautiful, I cannot help classing the noble fish of which it is my purpose to treat in the following pages. The elegance of its form, the justness of its proportions, its glittering and gorgeous apparel, all entitle it to rank loftily in the scale of beauty, while its size and noble bearing, its strength and velocity, the rocks, torrents, and whirlpools among which it glides familiar, unite, in some degree, to elevate its pretensions and give it place withal amid creations of sublimity. That it stands unrivalled among the variety of fishes, extending to many hundreds in number, which inhabit the flood, there can be little question. The dolphin, famed in poetry, whose glowing surface may be termed the pallet of nature, the mullet, the opah or king-fish, the carp, dorie, and sturgeon, all yield before it the submissive palm. Nor is it undistinguished, independent of its shape and beauty,

by certain instincts and properties, which elevate it still higher above the rest of the finny tribes.

One of these, the foremost in rank, is the freedom it possesses of transporting itself from the saline abysses of ocean into rivers and lakes—the capability, in fact, of existing and enjoying its existence within two distinct *media*, differing from each other in taste, in gravity, in motion, and in produce. Certain fish, it is true, such as sturgeon and mullet, eels and flounders, forsake, like the salmon, their sea-haunts and betake themselves into fresh water; yet never do we hear of these or any others penetrating far inland and overcoming the strong currents and rapids with which many rivers abound in the upper districts. To the salmon alone this capacity belongs, and is exercised by its several species, in degrees apportioned to their strength and inclinations. For instance, the *eriox* or bull-trout, one of these species which, although seldom attaining the size of the full-grown *salar*, is on the whole a more powerful and venturesome fish, becomes led by its instincts to the very heads and sources of the rivers it frequents, and is sometimes found shedding its spawn in feeders where it is scarcely able to turn itself.

Among those peculiarities which distinguish the salmon tribe (*salmonidæ*) from other fishes, I shall also take notice of the pink or reddish colour of its flesh—a distinction which, to the best of my knowledge, it holds in common with none of the finny creation. Several naturalists ascribe this colour or complexion to the description of food upon which it subsists in the salt water. Dr. Knox holds, that it is derived from the ova of various kinds of *echinodermata* and some of the *crustacea*, endowed, for so his theory leads one to presume, with the virtues of cochineal. Others

again affirm that it is induced by a species of sea-weed, although they prudently forbear condescending any further upon the matter. Without altogether rejecting such opinions as incorrect, I cannot help asking how it happens that, in absence of all marine sustenance whatsoever, trout and charr (themselves, it is true, belonging to the same family, but inhabiting fresh-water lakes and streams) acquire, in many instances, the hue referred to? That it proceeds in their case, as well as that of the marine salmon, from some virtue or peculiarity in the food supplied by them, is very possible. To all who have studied the habits and nature of the *fario* or common fresh-water trout, it is well known that its internal colour is largely affected by the quality of its subsistence, and that this fish, when taken from a river or streamlet, (where, if suffered to remain season after season, it would assume no tinge of redness whatsoever,) and transferred to a lake or pond containing marl or other rich food, speedily acquires the high complexion in question, independent of other changes, elsewhere dilated on.—(See chap. i.)

This is true, but is there nothing connected with the transformation spoken of to be traced to the fish itself — no inherent tendency, analogous to that which flowers possess, to disclose, under certain circumstances, a particular hue or tinge of colour? They, too (flowers), depend, to some extent, for their tints and richness of bloom to the sustenance they are supplied with, or, what is the same thing, to the soils and climates, the manures and moistures which nourish and refresh them. Still this sustenance is in no case the direct occasion of any particular hue disclosed by the blossom, otherwise in plants that live on the same chemical substances and are reared together on the same soil, the tints and

colours unfolded would always be the same, without the possibility of their varying; whereas, it is well known this is not the case, every plant possessing a virtue of its own, which is the secret or origin of its colour, although acted upon in many instances, as florists inform us, by change of circumstances. What I have stated in respect to flowers holds good also as regards trout and salmon. The kind and quality of their food contribute, no doubt, to bring out or exclude the colour spoken of, but this colour is one that really appertains to the fish, and is by no means derived from the sustenance taken by it. Were this the case, perch and other fresh-water fishes, subsisting on the same kinds of food that trout do, would frequently, like them, acquire the pink or red colour spoken of.

Of whatever force these observations are as respects the question at issue, one thing is clear, that the salmon proper, whether they derive their high colour from marine sustenance or not, are possessed of it in common with fresh-water trout and charr, fishes that have no access to the aliment mentioned by Dr. Knox and other naturalists. I may also state a fact well known on Tweedside, and bearing upon the matter in hand, namely, that although salmon, after their entrance into fresh water, do undoubtedly, after a time, lose a portion of their high colour, in the same manner as trout and charr do, on becoming what is technically called foul; yet, as is well known, this property is, to some extent, recovered by them after parting with their spawn or milt, before returning to the sea as kelts.

In reality, however, this question is one of no great esteem or consequence; nor do I believe it to be so regarded, even by those whose assertions have given rise to it; their sole motive being, by such random and

hap-hazard affirmations, to throw light upon the still unsettled question with respect to the food of salmon.

Having thus briefly treated of the leading peculiarities which distinguish this fish, namely, its adaptation equally to fresh and salt water, and the high colour that characterises its fleshy particles, I may now venture to unfold my own views on so speculative a subject as the food of salmon. That it has, like many other fishes, including even the vast and unwieldy whale, the power of sustaining existence upon very minute particles of food, I have no intention of questioning; nay, that it is very possible for it to acquire its bulk and delicate richness from aliment, to our ideas so scant and precarious as marine animalculæ, cannot be denied; still, before positively deciding the matter, and leaping to a conclusion, the sole basis of which is vague and fictitious, there can be no harm in demanding one moment's investigation of those parts in the structure of the fish, which are adapted by Providence for the seizure and engulfment of its prey.

The salmon, as is well known, is furnished with strong jaws or mandibles—a mouth somewhat capacious, and armed, as well as the tongue, with sharp teeth. It possesses moreover a broad gullet, capable of passing at one gulp no inconsiderable quantity of food. Provided with these powers and functions, it is at least reasonable to suppose that the inclination to use them is not withheld from their possessor. Were it otherwise, there is evidently a flaw in the works of Nature—a breaking up of the harmony hitherto found so consistent and universal throughout her multifarious arrangements. To affirm that the powerful jaws, the firm-set teeth, and the expansive throat of the salmon, are, one and all, allotted it without the will to exercise

them, or what is the same thing, without a purpose, is not less than to assert that Providence allows the existence of anomalies among His works; that, in fact, there is a defect, as palpable as our senses can make it, in the system of Creation. Such is the ultimate conclusion, we lead their own arguments to bring them to, who give out that the chief sustenance of the salmon consists of marine insects and ova, too minute for the naked eye to discover. That it jars equally against truth, reason, and experience will be acknowledged by all; nor need I, in order further to expose its absurdity, do more than call attention to the fact, that Nature, in no other instance that I can bring to mind, hath been accused of the like inconsistency or mal-organisation in her structure, but rather, in all ages and among all nations, though most powerfully among the most civilised, hath excited wonder, too deep for utterance, by the singular adaptation of portion to portion, which is manifest throughout her works, as well as by their endless variety, their striking utility, and the harmonious spirit which reigns among them;—so harmonious and yet so needful, that were an atom of this globe to become defective or extinct, nay, drawn out merely by an angel's hand, from the attractive sphere of what remains, who dares question, but that the fine balance of earth would be thereby destroyed—its pillars misplaced—its cornice broken—its whole fabric shattered and dissolved?

I shall now proceed to relate what has fallen, from time to time, under my personal observation, in regard to the marine food of the salmon; following up what I have to state with a few quotations from various ichthyologists, corroborative, in some measure, of my own opinion on this subject. One instance, impressed on

my recollection, is of date 10th June, 1836, and occurred not far from the mouth of Nairn water which discharges itself at the town of Nairn into the Moray frith. The northern coasts of Scotland, both on the west and east sides, are, at the period of the year I refer to, frequented by immense shoals of young herring, smaller even than those known by the denomination of garvies; many of them not measuring above an inch and a half in length. It is worthy too of remark, that at this season, the friths and bays abound, seemingly more than usual, with different varieties of the salmon tribe, such especially as are recognised under the somewhat general title of sea-trout. Whether or no, these fish are in reality more plentiful in such localities, during the summer months, crowding shorewards from the deep and distant haunts, to which some suppose they betake themselves on descending from their parent streams in spring, I shall not stop at present to enquire. One thing, however, is certain, that be their transit like that of the woodcock or cuckoo, from some clime remote, or be it only the passage of a minute from the channel to the surface—from such retreats as rocks and tangles afford them, to the upper layer, if I may so express it, of waters; in whatever way this point of controversy remains to be settled, there is no doubt that we have the most frequent opportunities, during the warm months, of acquainting ourselves with several of their marine habits, and among others, though perhaps in a somewhat limited degree, their manner of feeding.

It is at the season alluded to, that our friths and estuaries, nay, our whole range of coast waters, display, plunging and disporting themselves on the surface, immense numbers of the smaller species of *salmonidæ*, such as the sea-trout, whitling, &c., enlivening the

spectacle occasionally by the appearance of some large *salar*, whose noble form glancing for a single instant above the blue abyss, attracts and rivets the eye of the beholder. Most curious and engaging is a scene of this description, on a calm, cloudless eve, when the sea-tide is flowing and almost at its full, murmuring plaintively at one's feet, and presenting in front, a billowless extent of waters, tinged in some places, by the retiring sunlight, in others, and in the distance, grey and indistinct, scarcely to be recognised among the hanging mists of the horizon itself. Such an eve was that of the 10th day of June, 1836; such was the appearance presented on it, along the coasts of the Moray frith, as I sauntered down to the beach, rod in hand, under the expectation of alluring one or more of the numerous sea-trout which, as I had anticipated, were crowding in with the tide and animating the surface in every possible direction.

Having often before heard of the capture of these fish in salt water, by means of the artificial fly, under circumstances precisely similar to those described, I felt naturally anxious to accomplish the like feat with my own hands. On this occasion, however, I was not destined to be successful, and although managing now and then, to heave my lure with sufficient lightness and dexterity immediately over the belling snouts of several prime fish which, more adventurous than the main shoal, had edged themselves shoreward, to within twelve yards of the margin, I found myself, nevertheless, wholly unable to divert the attention of any one of them from the object that seemed to have pre-engaged it. My success, in fact, was limited to the seizure of a few smolts or orange-fins, which, as I drew in my flies, close to the beach, invariably favoured me with attempts to get hold of them.

While engaged with fruitless endeavours to accomplish my object, the peculiar surface-kissing mode in which the sea-trout continued rising within cast, inciting me to persevere, I was approached by the tacksman's overseer and his assistants, who with a small boat carrying their nets, had sallied out, for the purpose of taking a haul or two before the tide commenced ebbing, when, as might be expected, the fish would retire back to a greater distance from the water's edge and beyond reach of danger. Although I generally take considerable interest in seeing a net shot, when the haul is likely to prove successful; on the present occasion, this interest was not a little heightened by a certain degree of curiosity, with respect to the cause of those belling and busy motions I had observed on the surface, and which, from their dissimilarity to the natural risings of sea-trout, when in salt water, I mentally attributed to the circumstance of their being on the feed; although, as to the kind and character of the food itself, I abstained, at the moment, from forming any conjectures.

Upon this point, however, the first draught of the net afforded me ample satisfaction. It consisted of about thirty sea-trout of the white and grey kinds, averaging from a pound and a half to three pounds each. These, or a great number of them, immediately on being hauled to shore, disgorged from their maws individuals of the herring tribe, measuring about an inch and a half in length. In one or two cases, the trout seemed literally crammed with this sort of food. I took five or six specimens out of the mouth of a single fish. So far, for the first haul of the net or seine. The next, which was more judiciously effected, discovered no less than seventy or eighty sea-trout, among which lay enthralled a prime and beautiful

salmon, sixteen pounds in weight. An examination of the mouth of this monster, for so it seemed, in comparison with those beside it, convinced me that it too had partaken of the feast. It was in the act of swallowing, or what was as likely, that of disgorging three entire fry or *soil*, the latter being a name commonly given to the young of the herring, in many parts of Scotland. Here there was no deception—no possibility of mistake: the fish in question had evidently mingled with the others of smaller species, for the purpose of feeding upon these infant coasters, and in order, moreover, to gratify this predatory instinct, had approached within a stone's throw of the beach, where, as I have just related, it was taken, to use a worn-out phrase, red-handed, or in the fact.

With regard to what has subsequently fallen under my observation, confirming the notion here contended for, that salmon, during their marine state of existence, subsist largely upon small fishes and such sorts of food as are more adapted to the structure of their mouths and their powers of aggression than minute insects or ova, I think it unnecessary to enter into close detail, and shall only state, that, while residing at Nairn, I had several opportunities of witnessing proofs of the habits of these fish, while in salt water, similar to the one above enlarged upon. Most of these, however, I am forward to confess, related to the lesser species of the genus *salmo*, such as sea-trout and finnocks. The latter, for instance, I remember on more occasions than one, to have caught while angling near the entrance of the river with their mouths and stomachs filled with small herrings, sprats, or sand-eels. They had come up on the tide, as was evident from the numbers and tenacity of the sea-lice that adhered to them,

and in all likelihood, would have returned on it, to the salt water, had I not thus intercepted them, for as is well known with respect to the finnock of our northern rivers, it is not a fish which at any time roams far inland, neither is it one which ascends solely for the purpose of spawning, seeing that it frequently exhibits on its appearance in fresh water a remarkable backwardness, if not deficiency, in its generative dispositions. But of this I shall take notice at more length, when I come to treat of it separately, as one of the salmon species.

Meanwhile, in reference to the marine food of salmon, I may further, in confirmation of what I have myself observed, quote the opinions of well-known ichthyologists on the subject. Mr. Yarrell, in his "History of British Fishes," vol. ii., p. 17, observes— "That the salmon is a voracious feeder may be safely inferred from the degree of perfection in the arrangement of the teeth, and from its own habits, of which proof will be adduced, as well as from the well-known habits of the species more closely allied to it; yet of the many observers who have examined the stomach of the salmon, to ascertain the exact nature of that food which must constitute its principal support, few have been able to satisfy themselves."

He then goes on to quote the opinion of Dr. Knox, and observes in allusion to it—"That they occasionally take other food, is well known." Faber, in his "Natural History of the Fishes of Ireland," remarks, "The common salmon feeds on small fishes and various small marine animals." Dr. Fleming says, "Their favourite food is the sand-eel," and I have myself taken the remains of sand-launce from the stomach. Sir William Jardine says, "In the north of Sutherland, a mode of fishing

for salmon is sometimes successfully practised, in the firths, where sand-eels are used as bait; a line is attached to a buoy or bladder and allowed to float with the tide up the narrow estuaries. The salmon are also said to be occasionally taken at the lines set for haddocks, baited with sand-eels."

I recollect seeing a fish 10 pounds in weight, of the *salar* species, which was taken in this way off the coast of Cromarty, during the winter of 1836, the bait used being part of a garvie or small herring. At the mouths of rivers, they rise freely at the artificial fly within fifty yards of the sea, and the common earth worm is a deadly bait for the clear salmon. All other marine salmon are known to be very voracious, and there is nothing in the structure of the mouth or strong teeth of the common salmon to warrant us to suppose that there is any material difference in their food." In reference also to the sea trout, Sir W. Jardine, as quoted by Mr. Yarrell, adduces the following remarkable circumstance:—"When angled for in the estuaries with the ordinary flies which are used in the rivers of the south for grilse, these fish rose and took so eagerly that thirty-four were the produce of one rod engaged for about an hour and a half." Although personally I have never had the good hap to kill above one or two sea-trout with fly in salt water; of course, I do not include salmon fry or small finnocks, yet from the appearance which these fish present at certain seasons, on our coasts, I can readily give credence to the feat above related, whether performed by Sir W. himself, or under his superintendence as an eye-witness. With regard to the common earth-worm as a bait for sea-trout, I have ample authority for stating that it is employed as such, with success, by the inhabitants of

some of the Shetland islands, who in using it resort at full tide to the cliffs and rocks, remote, in many instances, from a discharge or breeding stream, and angle with line and float as one would do for perch and other fresh-water fish.

I have been told also by an excellent angler who has fished a good deal in Norway, that, on one of its numerous fiords, when the tide was ebbing at a prodigious rate, he on several occasions caught, with a salmon fly having its wings tied down over the bend of the hook, both sea-trout and grilises, the depth of water where they rose being upwards of a hundred fathoms. These fish were evidently near the surface, on the out-look for fry of some description.

CHAPTER X.

ON THE BREEDING OF SALMON.

IN my "Scottish Angler," published in 1831, before the experiments of Mr. Shaw, of Drumlanrig, were made known, or even under course of trial, I advocated strenuously the theory, since established, of the parr being the young of the salmon. To go over the grounds of argument then employed were now a work of supererogation. I have no reason to alter the conclusion come to, and I concur cordially with most naturalists in the opinion that Mr. Shaw's experiments, although conducted in one respect upon what I shall prove to have been an improper basis, have established, beyond all dispute, the point at issue. There is, however, another matter brought by him before the public, and one too made the subject of several experiments apparently conclusive, upon which I beg to express considerable difference of opinion. I quote without abbreviation, Mr. Shaw's own words* :—

"The circumstance of the male parrs with the milt matured, and flowing in profusion from their bodies, being at all times found in company with the adult

* Experimental Observations on the Development and Growth of Salmon-fry, from the Exclusion of the Ova to the Age of Two Years. By John Shaw, Drumlanrig, from the Transactions of the Royal Society of Edinburgh, vol. xiv. Edinburgh : published by Robert Grant and Son, 82, Princes-street ; and J. Cadell, London.

female salmon while depositing her spawn in the river, and the female parrs being, in every instance, absent," (how Mr. Shaw has ascertained this to be the case he does not think it advisable to inform us,) "suggested the idea that the males were probably present with the female salmon, at such seasons, for a sexual purpose; and to demonstrate the fact, I, in January, 1837, took a female salmon weighing fourteen pounds from the spawning-bed, from whence also I took a male parr weighing one and a half ounce, with the milt of which I impregnated a quantity of her ova, and placed it in the stream E. pond No. 2, where, to my great astonishment, the process succeeded in every respect as it had done with that which had been impregnated by the adult male salmon, and exhibited from the first visible appearance of the embryo fish, up to their assuming their migratory dress, the utmost health and vigour. The very extraordinary results of these experiments, although made with the utmost possible care, induced me to defer giving them publicity, until I had repeatedly verified the fact. I therefore, removed the brood to another pond, apart from all other fish, where they had an abundant supply of insect food and wholesome water, and again, early in the following January, I repeated the experiment, by taking another female salmon weighing fourteen pounds and two male parrs from the same spawning-bed, and impregnated two lots of her ova with the milt from the two parrs, and afterwards placed them in the different streams inclosed in boxes open at the top, temperature forty-five degrees. The extreme severity of the weather which succeeded had, however, nearly proved fatal to the whole. On the evening of the 8th of January, the day on which I took the parents from the river, the frost

set in, and continued with such intensity for a succession of many weeks, that the wild-fowl generally, and the wild-ducks in particular, suffered severe privations, and in the course of their wanderings in search of food, they unfortunately stumbled on my boxes of ova, one lot of which they wholly devoured, to the amount of five hundred. My feelings of mortification and disappointment, on the discovery of this unforeseen disaster, may readily be conceived. However, on examining my other box, I found there were still a few remaining, which I carefully collected and put into a place of greater safety. The progressive growth of these, from the impregnation of the ova up to the age of eighteen months, has also been uniformly the same as of those produced by male and female adult parents, and reared under similar circumstances.

“As a further illustration of the singular economy of the salmon in their native streams, I have yet to detail another experiment or two, not less interesting than conclusive. In December last (1838), I took a female salmon from the river weighing eleven pounds, and four male parrs from the same spawning-bed. After impregnating four different lots of the ova, one lot to each individual parr, I placed the four parrs in a pond where they remained until the following May, at which period they assumed the migratory dress. The ova were placed in streams to which no other fish had access, and where they became mature in a similarly progressive manner to those already detailed, thus clearly demonstrating that the young salmon of eighteen months old, while yet in the parr or early state, actually perform the duties of a male parent before quitting the river.

“While the males of the three several broods which

occupy ponds No. 1, 2, 3, continued in a breeding state which lasted throughout the whole of the winter of 1838-39, I impregnated the ova of three adult female salmon from the river with the milt of a male taken from each of the three ponds, the whole of which ova matured. This at once removes any doubt which may have been entertained regarding the constitutional strength of individuals, reared under such circumstances."

I have thus quoted, at large, the account of several experiments made by Mr. Shaw. With regard to their results, they are, as he himself states, most extraordinary; nor, in fact, is it admitted, would he have ventured to lay them before the public, had he not been reassured with respect to them, over and over again, on eight successive occasions repeating the detailed process. I shall now insert what is appended, merely in the form of a note to the above relation.

"As I believe it has been objected to my views or rather practice regarding this mode of impregnation, that the generative influence may have been in some other way effected, than through the medium of the parr, I therefore took every means to prove the truthful results of my experiments, by varying in some measure, their conditions. Thus, in two instances, I took a portion of the ova from the female and placed them, *without impregnation*, in a stream of pure water. The result was, *as I anticipated*: up to the termination of the general hatching season, they exhibited no appearance of vitality. The female from which one lot of ova was taken and placed in water without impregnation, was the female with which the four parrs were spawned. They were placed in the same stream, but in a separate vessel, from the four lots impregnated.

The other lot was taken from the female with which the male from pond No. 3, was spawned. The unimpregnated lot was placed in the same stream with the former. The impregnated lot was placed in the stream of pond No. 3. To avoid contact, the unimpregnated lots were, in each case, taken first and removed to a distance."

Now, I beg attention to this note. It is most important as regards the question I am about to raise, and to insert it, although introduced into Mr. Shaw's pamphlet as supplementary to the text, is only an act of common justice to that gentleman. The whole of the detailed experiments, I contend, are based upon this false but popular notion that the ova of the salmon, previous to its being emitted is in an unimpregnated state—that, until brought into actual contact with the milt, it is, in fact, perfectly barren and unproductive; in other words, the understanding, (for despite of the above note it is nothing less), upon which Mr. Shaw conducts his experiments is this, that the object of the he-fish, in frequenting the redd or spawning-bed, is not to copulate with its mate, but to hang over and impregnate the spawn itself,—to perform an amalgamating process with the ova or ejected pellets, instead of holding actual and direct intercourse with the she-fish.

The averment in the note in question I hold fairly open to challenge upon the ground that it is, in fact, a slurring over of one of the most important points connected with the breeding of salmon, and also, because it embodies an admission, on the part of Mr. Shaw, which is very apt to impress one with the idea that the experiment under detail was imperfectly, if not carelessly, conducted. I allude to the insertion of the words, "as I anticipated," which phrase plainly indi-

cates that Mr. S. had made up his mind to meet with but one fixed result to the experiment, although upon what grounds he had done so, apart from mere prejudice, he has not thought fit to enlighten the reader.

It is far, however, from my intention to abstract one iota from the praise justly due to Mr. S. for that unwearied assiduity and patient observation which characterise his various experiments. He has succeeded, beyond all dispute, in throwing the wished-for light upon a much-agitated question; and although not the actual originator of the theory respecting parr being the young of the salmon, he is entitled to the higher merit of giving it, by means of practically testing its value, a place in science. I cannot, however, reconcile myself to the belief that he has proceeded either upon just or reasonable premises, in conducting the latter course of his experiments—that which aims to prove the generative influence of the milt of the male parr, when brought into contact with the ova or roe of a full-grown spawner or baggit salmon. In the first place, I hold it to be, as regards the laws of nature, a palpable anomaly, that no direct act of coition should be considered to take place betwixt the milter and spawner and *that*, long previous to the effusion of the ova. It is scarcely an argument to assert that fish are deficient in the organs which alone can render them capable of performing this act. Why, worms and serpents are, to all appearance more scantily provided with such organs than they are, and yet, as is well known, these, and in fact every insect and reptile, as well as every beast and bird on our terrestrial globe, have necessary recourse, in order to promote the extension of their species, to acts of coition. It is no matter whether viviparous or oviparous, the communication of

a generative power among all these animals is dependant, in every instance, upon the completion of a certain process, implicating direct intercourse between the sexes. But are fishes really unprovided with the copulative organs necessary for such intercourse? Are salmon, in particular, both male and female, defective as to these developments? I deny it. Examine a kipper or he-fish in his rank or ripe state, and you will find him distinctly set off with the adjuncts in question. The female also is as plainly provided with her receptive sheath, and this is particularly noticeable in her after spawning, at the period when copulation takes place.

Before, however, I add further argument in opposition to Mr Shaw's theory respecting the impregnation of the ova, I think it expedient, as clearly as possible, to state my own views on the subject. It is a fact very well known to Tweedside fishermen, and indeed to those of every Scottish river, that at least three-fourths of the salmon and grilse which ascend during the open season are female fish. In all these the roe is invariably found; sometimes, as in clean or spring salmon, and also in the June and July grilse, in an incipient or early stage, not longer than one's finger, sometimes the pellets are large and the leaf heavy, but, in whatever stage the ova themselves are, I have never heard of an instance where a female fish on its ascent into the fresh water was without this natural provision or growth. Nay more, after having spawned, and while still in the kelt state, before their return to the sea, many, I say not all, have the new roe distinctly developed. I have taken, over and over again, this formation from the body of a salmon, grilse, and sea-trout kelt; the layers and ovicles being perfectly discernible to the naked eye, while, at the very same moment, close to and in contact with them, remained

remnants of the previous formation in the shape of intact ova, evidently what the fish, in the act of deposition, had been unable, from its detached state, to slough off or get rid of. Yet strange to say, on mentioning this circumstance very lately to an experienced and zealous salmon-fisher on Tweedside, who, in his day, has slaughtered, no doubt, many a kelt as well as more desirable fish, he remarked, "You must be quite in an error." Not a week afterwards, however, he happened himself to capture a recently spawned salmon at Teviot-foot, and from the circumstance of this fish containing both the new roe and particles or pellets of its former store, he is now quite convinced of the fact, as I have stated it.

It is not a question for me here to determine how long the new roe takes to arrive at its full maturity, or in what state it is when the fish, after having made its way down into the salt water and become renovated, again inclines to ascend. A great deal of investigation and guess-work have taken place among fishermen upon these points, as well as upon the yet unresolved question what the clean spring salmon actually is, whether a barren, unproductive grilse of the former year, or one that has deposited its spawn in salt water, or a separate and unclassed variety of the *salar*.

As I have above stated, the female or spawning fish form fully three-fourths of those salmon which ascend our fresh waters during the open season. I am under-rating, not exaggerating, the proportion, and in respect to the close-time (I confine myself to that of Tweed which extends to little more, as far as regards the rod-fisher, than three months), the kippers or he-fish then entering the river cannot be said to exceed, but rather fall short of, in point of number, those of the other sex.

Upon the whole, I may safely say, that the proportion of spawners throughout the year stands in the relation of nearly three to one, when reckoned with the proportion of milters, a fact which excludes the idea that salmon regularly pair off for the purpose of deposition. Nor has Shaw, I notice, very tenaciously insisted upon this coupling or pairing off.

He mentions (see Transactions of R.S.E., p. 563, vol. xiv.), "a female adult salmon, weighing 12 lbs., was taken at the same time (5th January, 1839), from the river, in the act of spawning, in absence of the male."

This, in two respects, is, although in the form of a fact, a curious and important admission, for it completely disturbs the common notion, that the milter and spawner require to act in concert, in order to express and properly amalgamate their sexual deposits—a process I have fifty times seen detailed by naturalists, and which, although not for the purposes they assign, actually takes place at a different stage or period, as I shall immediately show ground for believing. Again, Mr Shaw, who, I presume, knows well that this occurrence, namely, the circumstance of a female performing its spawning functions in absence of the male, is not at all an infrequent one, plainly, by the introduction of the case above quoted, holds the power of instinct at a discount; for it is not likely, allowing the salmon to be endowed even with the smallest share of that natural faculty whatsoever, that any individual of either sex would commence and carry on an unassisted and imperfect process of generation, ejecting, without provocative, but solely at its own will and pleasure, barren inoperative spawn, ova, it may be or milt, but whether milt or ova, alike fruitless, and unless borne into accidental contact with some waif particles of counteracting matter, prodigally squandered and

made useless. This certainly is not what the strong instinct of the fish, in other respects, would lead one to expect. It is not in accordance with the economy of nature, which allows of no such capricious conduct or glaring extravagance.

What then, I ask, is to be presumed from the fact that a female salmon can perform the generative functions, as Mr. Shaw terms them, unassisted? Simply this—that she is in the same position that any hen-bird is. She is laying her ova. These ova may, it is very possible, prove, under certain circumstances, unfruitful. Take the case of the common barn fowl. Every one knows that the actual production of the egg in the female does not depend upon the male bird. It is his office to endow and fructify that formation. A hen kept quite separate from intercourse with its mate will continue for a long period to produce eggs, but these it can never hatch; they are barren. Now, this is frequently the case with regard to the ova of salmon. In failure of any intercourse having taken place with the milter, the spawner is not therefore itself necessarily unproductive. It produces barren ova. But I ask, following out the analogy I have adduced, would any one in his senses think it a natural or befitting process were the barn-door cock, instead of holding direct intercourse with the female bird, to transfer it to the newly-dropt egg? Yet, this is exactly what Mr. Shaw and others would have us believe is the method by which the ova of salmon are impregnated. They deny everything approaching to a direct and completed intercourse betwixt the milter and spawner, substituting in its stead the imperfect, unnatural, I might justly add impossible process of amalgamation subsequent to expulsion. Can anything be so utterly absurd? Take the case as it is supposed to

occur. Give it even the advantage of Mr. Halliday's testimony before the House of Commons while describing the operation in question: "Salmon," says he, "when spawning, work up the gravel and make their furrows; then parting, throw themselves on their sides, and coming together, *so shed their spawn.*" This mode of procedure Mr. Shaw is evidently slow in admitting. He passes it over in silence; yet admitted, it plainly favours, if it does not entirely coincide with his manner of experimenting (*Transactions of R. S., Edin., vol. xiv., p. 554.*) He says, "In conducting the experiment of artificial impregnation, it appeared to me very desirable that the male should be taken with the female of *its own selection*, at the very moment when they were mutually engaged in the continuance of their species. To take a female from one part of the stream and a male from another might not have given the same chance of a successful issue to the experiment. Having drawn the fish ashore, I placed the female, while still alive, in the trench, and pressed from her body a quantity of the ova. I then placed the male in the same situation, pressing from his body a quantity of milt which passing down the stream thoroughly impregnated the ova," &c.

Mr. S. evidently, in the instance detailed, acknowledges as essential the existence of a mutual understanding betwixt the sexes. It is otherwise in his experiments with the milt of the parr, which, he contends, is as effective in impregnating the ova of a full-grown *salar* as is the milt of its appropriate mate.

But to return to the matter under consideration, and it is of no consequence whether Mr. Halliday's description of the manner in which the roe and milt are simultaneously expressed is correct or not, what, I ask, is

alleged actually to take place? Simply this; that two bodies disagreeing severally in their nature and gravity, one being a fluid or semi-fluid, having no concentrated form, and not possessed of any redundant weight sufficient to overcome that of the element it is presumed to be shed in, the other a solid, consistent as to shape, and remarkable in respect to its heaviness,—that these bodies, so different as regards their specific gravity, and notwithstanding the intervention of a resisting and decomposing medium, like water, approach and come into contact with each other: again, that this contact of the milt with the ova, of a light, creamy mote or particle with a thick husk or shell is impregnation—that it operates as having conveyed the vivifying power to the roe-pellets, and that, without such inoculation, these pellets will remain inert and lifeless. Can anything, I repeat, be so utterly absurd as this detail of the process? yet, if held good of the salmon, it necessarily applies in a question of generation to all known oviparous fishes.

Now, I put to Mr. Shaw one single interrogatory. Did it never occur to him, in the course of his observations and experiments, to inquire how it happens that the male parr of seven or eight months old, (for I certainly differ from him in the notion that the young of the salmon remain, during the course of two seasons, in the parr state, most unquestionably such is not the case in Tweed or in any other salmon river I am acquainted with, although in the ponds at Drumlanrig, indications of this disposition,—the result of confinement may very possibly have presented themselves), is, with regard to its generative secretions, in a greater state of forwardness than the female fish—why, when the one has its roe just developed and the pellets thereof are barely distinguishable to the naked eye, the other possesses its

milt in a state of absolute maturity, ready, at the slightest pressure, to become discharged?

This fact he admits, but the reason he refrains from grappling with, and yet it is very simple and readily propounded; in fact, what else does so seeming an incongruity consist of, but in the circumstance that nature has made a certain equitable and harmonious provision for the propagation of the salmon species, by thoroughly maturing or rendering effective for purposes of impregnation the milt of the he-parr, in order that, by an act or acts of coition previous to entering the salt water, he may prepare and vivify the ovaria of his cotemporaneous mate, thus anticipating her return from the sea as a grilse, to deposit, not a bed of inert slough, but active and endowed spawn? Can there be a solution of the subject more natural or consistent? Does it not at once account for the startling and extraordinary results which apparently attended Mr. Shaw's experiments with the milt of the he-parr?

But I shall be asked, what is the generative process with regard to this fish in its adult state, as a grilse or salmon? I shall be asked, why it generally happens that, when the spawner is engaged forming her redd or depositing her ova, she is attended by the milter; and also what is the meaning of those natural partings and collisions, described by Mr Halliday and others? I have already stated that the number of spawners computed to ascend Tweed, I may add, salmon streams in general, greatly exceeds during the year that of the he-fish, standing in the proportion of three to one; and although it is true that salmon frequently leave the salt water in pairs, it does not necessarily follow that each pair consists of a male and female fish. They are as often both of them spawners, and in the early grilse

period, when they enter the river in shoals of some magnitude, it is not uncommon to find five-sixths of the lot fish of this description.

I hold then as inaccurate the assertion, that salmon regularly pair off, in the manner of partridges or grouse. They certainly pair, but it is not as they are described or understood by naturalists to do, one milter serving merely its appropriate spawner. On the contrary, a single male fish is adapted to perform the requisite office to several females; in fact is polygamous. I once witnessed, in a shallow pool in the Blackwater, near Contin, Ross-shire, a collection of above fifty fish, among which were only three males, and these, notwithstanding the immense disproportion in point of numbers, so jealously inclined towards each other, as to prefer fighting furiously among themselves, to engaging in acts of duty and affection towards the other sex. It appeared, in fact, as if one of the trio wished to obtain possession of the whole harem. With regard to the females, on this occasion, they were generally inert, showing no disposition to leave the exact spot they severally hung over, and evidently, I judged, engaged, many of them, in the act of spawning, and that without the slightest measure of assistance from any of the milters.

On general occasions, however, when the fish are what is termed paired, the female, while on the redd, is commonly watched at a short distance off by the milter; nor is any attempt made by him to disturb her during the continuance of the operation, which lasts sometimes two or three days. All this period, he hovers faithfully in her rear, and should another male fish, or even common trout, approach the redd, assails it with jealous fury. I once witnessed an instance of this from the

bridge at Kelso. Two fish were occupied in the manner described,—the spawner evidently sloughing off her ova, and the milter, without assisting her, watching the process. A male of equal size approached the redd, and was immediately given chase to by the other, which continued its attack, until it had driven the intruder some hundred yards up the shallows, towards the mouth of Teviot. It then returned to its post, in rear of the female fish. This, I understand, is frequently observed to occur at the place mentioned, and one has always, in the spawning season, when the water is small and clear, an opportunity of watching fish on the redd, above and below the main arches of the bridge in question. I am told also, on credible authority, that the discoloration of the water, effected by the string of ova proceeding from the vent of the unassisted female, may on those occasions be detected without difficulty by a careful observer. The position of the kipper is generally, as I have described it to be: no coitive process taking place, until the female has left off spawning.

With regard to the jealous habits and quarrelsome propensities of the milter, I have only to mention what is well-known on Tweedside, that while, during the Winter and early Spring seasons, it very rarely occurs that dead spawners are cast up to view along the banks of the river, it is quite common to fall in with male fish in a lifeless or exhausted condition, exhibiting, on various parts of the body, wounds and gashes, inflicted evidently by the teeth of their own species, during some fierce and sanguinary combat.

I have come to the conclusion, therefore, first of all, that although the milter and spawner are very frequently discovered to be on the redd together as a pair, this pairing takes place only for the occasion; and that

the same milt will serve several females in succession, according as they are in a state of preparation to receive him. Again, that this state of preparation happens after the completion of the spawning process, when the females are in the condition of what are called kelts. Thirdly, that the sexual intercourse betwixt salmon consists of repeated acts of coition, wherein the generative organs of the parties engaged require to be put into reciprocal activity. It is not an impregnation of the shedded or flowing ova that takes place, but an impregnation of the ovaria after spawning; and this, for the purpose of endowing or fructifying the next year's deposit. I may also add, that the fact of the male parr of eight or nine months' growth being, as respects its milt, fully matured, while the female fish of the same age exhibits no corresponding forwardness in regard to the spawn, most unquestionably confirms the reasonableness of such views; and if it has not the weight and value of actual experiment, in regard to them, yet, if looked upon as an anomalous and inexplicable circumstance, when taken into account by the experimentalist himself, as is the case in this instance, it certainly tempts to the inquiry—Have such experiments been conducted upon their legitimate bases? or, in other words, is there no error or oversight, no questionable postulate, on the faith of which they have been put into operation?

That such there is, I cannot help thinking; and I therefore raise the inquiry, not, be it credited, as a matter of strife, but for the sole purpose of eliciting truth, by drawing attention to certain inconsistencies in Mr. Shaw's theory. At the same time, I most willingly allow full credit to that gentleman for his discoveries in relation to the parr—a matter quite apart from, and unaffected by, the inquiry I have at present started;

only observing, in reference to it, that I cannot well conceive how any angler, resident upon a salmon stream during the Spring months, could possibly entertain doubts with regard to the parr being the young of the salmon. He has only, by means of the fly or worm, to capture a specimen or two of this fish in the middle of March, when it is purely and unquestionably in its parr state, and to continue capturing two or three individuals every succeeding week, until the end of April, when he will find the transformation fully completed. He will also, at the same time, have an opportunity of observing the gradual growth of the young scales, or what, with respect to adult salmon, may be termed the moulting process; and he has to remember, should any change from greater to less in the size of the fish, when in this state, surprise him, that the body of parrs or smolts from which he made a former capture is not the same as that out of which he extracted his present specimens; but that, in the month of April especially, a constant descent of the young salmon towards the sea is going on; one shoal following another, so that when those native to the main stream have passed downward there remain in their rear the tributary supplies of its feeders and branches.

It was not my design to have pursued this subject any further, but in accidentally turning over the pages of Mr. Scrope's well-known work, entitled "Days of Salmon Fishing," I stumbled upon what, on a former perusal, had escaped my attention, in the shape of two letters from Mr. Shaw. Mr. Scrope, it appears, had suggested to that gentleman the impregnation of the ova of the salmon with the milt of the common river-trout; and having acted upon this suggestion, Mr. Shaw communicates the results of his experiments,

as far as they have proceeded, in the letters referred to. The first of these, dated 26th April, 1841, is as follows:—

“I am happy to inform you that my experiments with the ova of the common trout and salmon have been quite successful, and their hybrids are now hatched, and in good health.”

Again, 14th of October, 1841.

“The hybrids I produced by artificial impregnation, last summer, are all in a very healthy state, the cross not having in the slightest degree affected their constitution. Those produced between the salmon and salmon trout appear to partake more of the external markings, silvery coating, and elegance of form, of the parr, than any of the others. Those produced between the salmon and common trout, and between the common trout and salmon trout, have, in every respect, more the appearance of the common trout than the former.”

Is Mr. Shaw really serious? Were these hybrids actually in existence? What has become of them? Were there no after-revelations promulgated, as to the size they arrive at, the habits they maintain, whether marine or fresh-water, the generative functions they want or are possessed of? Why not favour the world of science with some description of such marvellous productions? Why not account for their total exclusion from our rivers, or prove that they are there, swarming, as they must necessarily do, if his system of impregnation be correct, in overpowering numbers? Upwards of five years have elapsed, and we are not yet enlightened with an account of the completed result of these experiments. Some mishap has plainly taken place; the wild ducks have been at work, the ponds robbed of their previous contents—or, so I fear, a new and impor-

tant discovery is on the eve of coming to light ; the error *ab initio* has been detected, and it will require, not time or assiduity merely, but caution, craft, and resolution to unravel the threads of former speculation, and re-blend them together, so as to attract and harmonise.

Seriously speaking, however, these experiments and their results assist greatly to embarrass Mr. Shaw's own views regarding the impregnation of the ova. I do not mean to assert that there may not be occasions when a fresh-water trout and whitling hold a breeding connection, perhaps a bull-trout and salmon will, under peculiar circumstances, form the same, still I think there exist very powerful obstacles in the way of their doing so; yet, granting they occasionally come together, and that there are hybrids so termed to be found in our salmon rivers, these, it must be allowed, are of very unfrequent occurrence; whereas, were Mr. Shaw's views on the popular theory of impregnation of the exuded ova correct, they would, in such a river as Tweed, for instance, where the fish mentioned crowd together promiscuously in every pool and stream during the spawning season, exceed to such a degree the pure and legitimate breeds, as to throw these completely into the background. The escaped milt of the salmon could not possibly avoid being brought into immediate contact with the uninoculated ova of the trout and whitling, whose spawning operations are in progress a short way further down; nor could the milt of the trout fail of interfering with the unburied ova of the spawner, as they roll onward along the channel of the stream.

The views I have set forth in this chapter, touching the breeding of the salmon, are, I am glad to discover, held as probable, by many who have constant opportu-

nities of observing the habits and instincts of this fish; nor are they entirely of recent date and origin. The "Angler in Ireland," a work published some years ago, embodies the same opinion. A letter alluded to by Mr. Scrope in support of Mr. Shaw's experiments, and which was written thirty years ago, by the late Sir Anthony Carlisle, although unintentionally, also favours the idea of an impregnation of the ovaria before spawning. The writer says, "He imbedded the ova of the salmon in the gravel without the milt of the male, leaving the river trout to impregnate them; *they did* so, and the river (Wandle) was afterwards full of the fry so produced."

This experiment as detailed, will, at the least, corroborate what I have said as to the number of hybrids which, without question, would infest our salmon rivers, were Mr. Shaw's theory a correct one—a number anything but diminished when his own admission, as to the fact of the female fish being able to carry on her spawning operations without assistance from the male, is taken into account.

Since penning the above, my attention has been directed to an article in the Edinburgh Journal of Agriculture, written by Mr. John Younger, of St. Boswells, and entitled, "Some fresh hints on the nature of the salmon," &c. This intelligent observer, the author of a clever little treatise on Tweed Angling, I feel pleasure in stating, sets forth the same views as are held by myself, on the subject of the breeding of salmon. Alluding to Mr. Shaw's experiments with the parr and that fish, he says:—

"However correct in his main opinion, derived from a class of excellent experiments, that the parr is the young of the salmon or other red sea fish of the first

season, still, the impregnation of the roe of a fifteen pound *baggit* salmon, by a two ounce parr of her last year's spawn, is too great a stretch for a vulgar fisherman's comprehension or credulity, however many 'learned Thebans' may believe it. May we not, with more probability, imagine, that the roe of the baggit salmon which Mr. Shaw spawned by compression, and at the same time brought in contact with the milt of the small male parr, and thereby supposed to have impregnated the female's spawn as emitted—is it not as probable that, at least, a quantity of the spawn would have produced the young as well without as with contact with the puny parr? I am of opinion that it would, believing that the female salmon had already been impregnated by previous connection with a mature male; though the period and manner of such connection have not been perceived, and are therefore unknown to us."

Again, as regards the organs of generation in the male fish, Mr. Younger justly observes:—

"If we have no proper idea of the purpose of the large pike or kip, like a finger, growing in projection from the under snout of the male salmon just previous to the spawning season, and fitting into a hole of proper dimensions on the upper chap of the snout, and this pike falling so suddenly and entirely off, and its case also filling up immediately after spawning,—need we wonder that the still more complex construction of the organs of generation and of the manner of their use, should, to this day, be unascertained?"

In the discussion of this question, I might, had I thought proper, have availed myself of an anecdote introduced into a small volume published by Pickering, and entitled "Piscatorial Reminiscences," &c., which relates the circumstance of the ova having been taken

out of the belly of a female fish and thrown upon a dunghill, where, after lying exposed nearly two months, and acquiring large dimensions, they became hatched, displaying actually the head and back-bone of infant fry; but as the story smacks strongly of the cock and bull, I would rather, until it be properly attested, disclaim using it, in favour of my views on this subject.

CHAPTER XI.

ON THE GROWTH OF THE SALMON.

IN the preceding chapter, I have disclosed certain notions on the breeding of the salmon, which, it is possible, may not meet with general acceptance. I have done so, however, without any intention of acting discourteously towards Mr. Shaw or any of his supporters, whose position in the eye of the public is too strongly fortified by actual experiments to admit of its being assailed with impunity, by a mere casualist or theoretical observer, as some may choose to term me. The strange anomaly of the milt of the male parr having been found effectual in impregnating the discharged ova of the full-grown salmon has led me to look out for some weak point in Mr. S.'s experiments, and this I have discovered, not as distinguishing any particular case, but running, as it were, throughout the whole; an error, in fact, in the principle or preconception upon which one and all of these experiments were conducted. Under the impression, therefore, that I am correct in my discovery and have ascertained where the error commences, I have only thought it proper, disclaiming, as above stated, all notion of acting discourteously towards Mr. S., to communicate, as has been done, my own views on the subject.

I am now brought to consider a matter which, as connected with the natural history of the salmon, is

even more difficult of investigation than the one treated of in the preceding chapter, namely, its growth.

I have already stated, in the way of parenthesis, that the parr of Tweed and Teviot, unlike those of the Drumlanrig ponds, descend to the sea in the shape of smolts, in the year following their birth or production. There can be no doubt whatsoever as to this fact. All the parrs of these rivers, with, it may happen, the exception of one or two individuals, descend to the salt water during the smolt season, and in the character, more or less developed, of smolts. During the latter end of May and a considerable portion of June, the parrs are not to be found in either river, and when they begin to re-appear, which they do in considerable numbers about the commencement of July, they are of a size very insignificant, in many cases, not much larger than a full-grown minnow. They increase in this respect, however, with tolerable rapidity; as quickly at least as the fresh-water trout they cohabit with, and acquire before October a weight averaging from two to three ounces; after which, food being scarce, all further growth for the season becomes suspended. While in the infant state, immediately on their breaking the shell,* immense numbers of them are devoured by sea-gulls, river-trout, &c. I have witnessed, in the lower part of the Mertoun water, a flock of marine birds, not

* With regard to the hatching of the ova, Mr. Shaw has ascertained that it is completed, when the temperature is 36° , in 114 days; when 43° , in 101 days; and when 45° , in 90 days. On the young fish emerging from the external membrane, the remains of the yolk continue attached to them, and are not completely absorbed until the expiration of nearly four weeks, during which period they act in the place of nourishment. At the end of two months the fry attain the length of $1\frac{1}{4}$ inch; at the end of four months they measure $2\frac{1}{2}$ inches; and at the end of six months $3\frac{3}{4}$ inches.

fewer than five hundred, all busy in the shallow streams and spawning-beds, perpetrating havoc to an incalculable extent, among the defenceless fry. Multitudes, however, escape, finding refuge under stones, &c.

In reference, however, to what I have stated regarding the parr of Tweed, namely, that they descend to the sea in the shape of smolts, as yearlings, it will be asked: What then do I say to the experiments of Mr. S., which prove that the parr, after being hatched, continue nearly two years in the fresh water? This fact, as falling under observation at the ponds in Nithsdale, may be explained by the circumstance that the subjects under test were kept in a state of comparative confinement, their growth stunted, and their instincts overruled. I recollect in Teviot, some years ago, there being no spring or summer floods sufficient to carry the smolts over the cauld dykes, vast numbers of them were compelled to remain in the river until late in July, and at particular spots, congregated in great shoals. In the pool above Sunlaws Mill, one of the best angling portions of the water, they were so plentiful that it was impossible to cast for trout without their interference. Every hook in fact, the instant it touched the surface, became occupied by one of these fish, so that the usual inhabitants of the pool had no chance of rising at it. Although by far the greater portion of the smolts in question were what are termed orange-fins, or sea-trout fry, still, a considerable number were the true salmon or parr-smolts, having the pectoral fins tinged with black. These continued in the river, as I have said, until late in July, and exhibited, as regarded their scales, no great change, but became, with few exceptions, lean and feeble, a result naturally to be expected from the fact, independent of other causes, of

their being crowded together into a comparatively small space of water. A flood or swell at length occurred, of size quite sufficient to carry the whole of them seaward, and it was natural to suppose that they would all instinctively avail themselves of this opportunity to leave the river. But no; numbers remained, even after a succession of floods, throughout the season, and what was remarkable, regained, simply owing to an ampler supply of food and lower temperature of water, their strength and plumpness.

Smolts, then, it appears, may become reconciled through circumstances, or, as in this instance, disposed to remain in the river an extra twelvemonth. I do not see, therefore, why the parr in Mr. Shaw's ponds, where they are confined under great disadvantages, should not exhibit a like disposition; and I can understand also the deferring of the moulting process happening to them, in the same manner as happens to the red deer, in regard to the shedding of its antlers, for it is well known that this animal, while in its natural and free state, will, at regular seasons, retire to the swamps and mosses and there get rid of them, yet confined in a park, it will exhibit no such inclination. There occur, however, I repeat, a few exceptions to the general rule on Tweed and Teviot, and, although seldom, parr of the second year's growth have been captured in both rivers. These are readily distinguished by the size from the succeeding generation of fry.

To what may be termed the moulting of the scales in parr, and the assumption of the smolt appearance, I have already directed attention. The process is gradual. It commences in Tweed about the middle of March, sometimes a little earlier, and extends over a space of six weeks, until nearly the end of April. The

smolts are now in full scale and on their way to the sea; a passage they accomplish, should the water be in a clear state, slowly and circumspectly, and in small straggling divisions, but when slightly flooded, with great rapidity and formed into compact shoals and masses.

There are three distinct species of smolt that at this time descend Tweed. The black-fin or salmon-smolt, the orange-fin or whitling, and the grey-fin or bull-trout smolt. Of these, the last-mentioned far surpasses in size the two others. I have caught them weighing five ounces, and equal in strength and activity to river-trout of nearly twice that weight. The orange-fin, in this respect, ranks next, and the black-fin or true parr-smolt is the least of all. In Tweed itself, the real salmon smolt abounds more than the others, but in its tributaries, which are spawned in by vast numbers of bull-trout and whitlings, the fry of these fish greatly exceed those of the salmon.

I am now brought to the investigation of a matter not devoid of difficulty, and where, other modes of ascertaining the truth being withheld, it is allowable, in fact, to supply their absence by mere conjectural statements. This, however, I feel averse to do, further than is made actually necessary, and shall therefore, avoid, as much as possible, handling the subject in a purely theoretical manner, as if it were independent of facts. The matter to be investigated is the growth of the salmon smolt, after its entrance into the sea.

A great many experiments, in various rivers throughout Scotland, have been made in order to ascertain this point in the natural history of the fish. Numberless smolts have been marked and mangled, clipt in the fin and decorated with platina wire, and thus set free to find their way to the ocean, in the expectation of their being,

shortly after captured, in the shape of grilse or salmon. I have seen, from time to time, the results of these experiments detailed in different local papers and elsewhere; one account bearing, that a grilse having such a scar or appendage was caught at this or that fishery, that the fish in question was one of a number of smolts marked that spring, by so-and-so; another relating the same circumstance, with this difference, that the fry was marked on the preceding year, and yet strange to say (their weights over and above being recorded), the first-mentioned was the heavier of the two. Out of such conflicting statements, to form anything like a fixed conclusion on the subject is impossible; nor, until the experiments themselves are conducted on a wide scale and placed under systematic control and management, can we expect, in relation to them, much consistency of detail.

But let their results upon individual opinion be what they may, the general impression in regard to the growth of the smolt after its entrance into the sea is, that it increases in size with astonishing rapidity, so much so, that in the course of twelve or fourteen weeks, it becomes transformed out of a fish two or three ounces in weight into one of five or six pounds, notwithstanding that to attain the insignificant weight first-mentioned it consumes nearly a whole year. This belief to some may appear very extraordinary, but to those acquainted with salmon rivers and the general habits of the fish, it has become perfectly natural. There is one circumstance especially that favours it, and this is, that, on ordinary years, the early grilse, those which on Tweed enter the river about the end of June, are generally small, averaging from two to five pounds weight, that every succeeding week brings fish

of increased size into the fresh water, so that, in the month of September, the average may be said to vary from six to nine pounds. I have seen them in October, weighing upwards of twelve pounds. Now, what is, very naturally, to be deduced from this fact? Why, that considering the rate at which the grilse themselves, as such, increase in size, it is more than possible, nay, a matter of strong probability, that they were actually the smolts of the current year,—those very insignificant fish which descended late in April.

This is the general opinion among salmon fishers, and although a startling circumstance, which I shall here relate, staggered at one time my belief, in respect to it, I am now led, for reasons shortly to be explained, to yield it my hearty concurrence. The circumstance I allude to was as follows:—

While treating of the food of the salmon, and detailing what fell on one occasion under my observation with respect to it while angling from the beach for sea-trout on the Moray Frith, I mentioned the fact of my capturing, with the fly, a few smolts or orange-fins. This happened on the 10th day of June, 1836. Upwards of a month before, the entire bulk of fry, of all descriptions, had descended from the Nairn, Ness, Findhorn, and other neighbouring or intervening streams. They had, I was disposed to think, actually existed, all this space of time, in the sea, and yet, in regard at least to the individuals captured, I failed to discover any very marked increase of size, or even change of appearance, from what, as concerns these two features, distinguished them before leaving the fresh water. There might, indeed, have existed a trifle more of fulness in their proportion; and I think they displayed a thicker and firmer-set coating of scales, although upon these

points I pretend not to accuracy ; still there was nothing about their growth to favour the idea that they could possibly, during that season at least, acquire the dimensions of the whitling, or even full-grown finnock. A subsequent capture, made at noonday, of fourteen of these fish, on the same part of the coast, namely, about a mile to the west of the Nairn water, aided in confirming this idea. I may mention, however, that in July I caught fish, evidently of the same hatching, in the Nairn water, on their ascent in the shape of small finnocks, none of which exceeded half-a-pound in weight. Although the smolts captured by me were all orange-fins, they were pronounced by the tacksman's overseer to be salmon-fry. I am convinced, however, that he was in error, and led into it possibly by the fact, that by far the greater portion of the smolts descending Nairn in spring are of the first-mentioned description, the black-fins being comparatively rare, although both salmon and grilse frequent the river in considerable numbers.

I was certainly for a long time puzzled by this experience regarding the slow marine growth of the orange-fin in comparison with that of the black-finned smolt ; the more so, that in fresh water, before the general descent of the fry in April, the former is evidently of quicker growth than the latter ; and I concluded, very naturally, that the general opinion, in respect to the rapid transformation of the black-fin into the grilse was quite erroneous. A circumstance, however, connected with the conformation of the parr before assuming the smolt garb, has urged me to come to a very different conclusion. It is simply this, that in the male parr the generative capacity is found fully matured ; in the female parr, the roe-layers, although in an incipient state, are also distinguishable. The forwardness in the case of

the milter and immaturity of the spawner, I have explained in the preceding chapter; and all I wish at present to deduce, in connection with that explanation, from the facts stated, is, that the female parr, on its descent as a smolt, retaining as it does the unspawned ova, is in a condition to ascend shortly after, in order to effect its discharge; and this it does, without question, as a grilse, in summer or autumn.

It has been asserted, however, and very recently, that in order to spawn, salmon do not require to enter the fresh water at all, and that hundreds effect that object along the line of coast, in bays, creeks, and marine lochs. This argument may possibly be brought to bear upon the matter in hand; and some may affirm that the yearling fish, under these circumstances, invariably deposit their ova in the salt water. Such a supposition can hardly stand a hearing, but I shall not pass it over altogether in silence.

That salmon, or even sea-trout, ever deposit their ova in salt water is, in the first place, a mere conjecture, unconfirmed by a single fact or incident falling under the observation of those that form it. It is, moreover, a conjecture rendered greatly improbable, when the ascertained habits of that species of fish which is most closely allied to the salmon are held in view, I mean the common fresh-water trout. These, the fresh-water trout inhabiting all lakes or ponds fed by streams or even rills of insignificant depth, breed freely; but where there are no such feeders, nor any regular escape of water in their place, they are well known to be incapable of spawning. They require, in fact, to leave their still abodes and enter the sluices or currents in order to accomplish this process. It is thus, also, I maintain, with salmon and sea-trout. They are quite as incapable

of spawning in the sea as the others are in lakes or even deep pools: and this is shown very forcibly in the strenuous efforts they make, at certain seasons, to ascend our rivers. They will steer their way circumspectly through a labyrinth of stake-nets to the mouth; pushing onward, they will risk the manifold hazards of the seine or long-drag; these escaped, they will glide along, through pool and stream, under terror of new contrivances—the cairn-net, the spear or leister, and angling lures of all descriptions; now, they will stem the rapid, now cleave the whirlpool, and dashing onwards, work up, with exposed fin, along the shallows. No barrier but they strive to surmount; even the crashing, thundering, and impracticable waterfall, headed and hemmed in with rocks, is not left untried by these adventurous explorers. And why all this persevering ardour—this scorn of danger? Surely not for the purpose, as some affirm, of getting rid merely of a few parasitical insects (*monoculus piscinus*)? Why, but in obedience of their powerful instincts, to accomplish those duties which Nature hath made urgent, in order to maintain and propagate the species?

These instincts, it is evident, lead the fish in question to push far inland in order to deposit their spawn, and imply, on their part, a dread of salt water, as prejudicial to the hatching of the ova. How can it be otherwise? Is it on the space betwixt low and high-water mark that the ova are presumed to be deposited, alternately left bare and covered over by the retreating and flowing tides—subject, even if carefully buried, to be raked up by the billows, and thrown resistlessly upon the beach, deprived of the protection of the parent-fish, and exposed to hazards of a hundred descriptions? The idea is quite irrational. Is it, then, beyond tide-reach, in

water comparatively deep? Even in rivers, salmon, while spawning, resort to the shoals, instinctively by doing so courting for their deposit the action of solar heat, in order to vivify and hatch it; and it is plain, from the size and nature of the pellets, compared with those of other marine fishes, such as cod, &c., that they require this action.

That salmon do not, as alleged by some, breed in salt water, may also be inferred from the circumstance that they are seldom or never met with on those coasts where the breeding streams are not of sufficient size to admit of their ascent. Along the shores of Great Britain and the sister island, where there are so many contiguous streams and friths, it may be difficult to adduce a single instance in illustration of this fact. I have ascertained, however, that around the Shetland Islands, where there are numbers of small streams sufficient in run to favour the breeding of sea-trout, that these fish are proportionably abundant, but that the true *salar*, which the rivulets referred to are unable to accommodate, is not known in their vicinity.

Having thus stated my objections to the notion that salmon breed as well in salt as in fresh water, I am led back to the subject started from, namely, the transition of the parr or smolt into the grilse. I have already set forth my reasons for believing that this transition is very rapidly effected. They are simple, but strong. The only objection which it is possible to cast up against them is supplied by myself in the preceding relation, as to what fell under my notice, respecting the gradual growth of the orange-fin, or sea-trout fry, into the finnock. But this is an objection very easily disposed of.

The salmon or *salar* and sea-trout are distinct species of fish. The one, as we find it, attains a much larger

size than the other, but in order to do so, does not necessarily require a longer period of time. They are also, in respect to their feeding, of different habits. In fresh water, the sea-trout is a voracious feeder, especially during river-floods, and when the water is high-coloured, whereas the salmon, on such occasions, refuse every variety of sustenance. Even the parr or infant fish is then more capricious than usual. This is the reason unquestionably, why, before its descent to the sea as a smolt or black-fin, it is generally of smaller size and weight than the sea-trout smolt or orange-fin. The latter, while in fresh water, is as voracious in its habits of feeding as the common river trout, and consequently, at the time I speak of, grows with greater rapidity. On its entrance, however, to the sea, the change, as respects its food, being one of kind and quality, not so much one of quantity, its growth (irrespective of its being affected through specific inferiority) although proceeding at an improved rate, does not bear any proportion to that of the salmon.

The black-fin smolt, after its descent into the salt water, until the period when it ascends as a grilse, does not, I have reason to believe, wander to any great distance from the breeding river. The limit of its peregrinations coast-wise extends, in the average, to ten or twelve miles, but where there is a firth, such as that of the Forth or Moray, its range is much greater. The grilses of July and August, which ascend in shoals, proceed from localities very near the mouth of the breeding stream, where they are naturally more crowded. The late-running fish of this description are chiefly stragglers from a greater distance, or such as are kept back by the presence of stake-nets at the entrance of the river. These, during calm, clear weather, they readily detect,

and, until discovering a free passage, will continue in their vicinity, often for weeks together.

Salmon at no stage, except in regard to their fresh-water excursions, are migratory fish. They very rarely leave our coasts, but not unfrequently, in their wanderings, lose reckoning of their native stream, and ascend other rivers. Thus, a Forth salmon is sometimes found in Tweed; a Tay fish in Forth, and so on. It is quite ridiculous to talk of their Arctic voyages. I don't believe that even the herring travels far from where it is captured. It only retires from the surface, to which at certain seasons it rises in great shoals, and this is proved by the fact, that, in the west coast of Scotland, many of the lochs or estuaries possess severally their peculiar breed of this fish, which breed or variety is never captured at a distance from its native arm of the sea, either entering or returning. As illustrations, I mention the herrings of Loch Broom, Loch Torridon, Loch Carron, and Loch Fyne, each of which salt water estuaries contains its distinctly marked breed or variety.

While touching on this subject, I may state that not only every main salmon river throughout Scotland possesses a breed of its own, quite recognisable by the experienced eye, but even the tributaries of those rivers, such of course as are frequented by breeding fish, give birth to a peculiar variety. There ascend Conan, for instance, four varieties of the salmon: its own, and those of its three principal feeders, the Rasay or Blackwater, the Orrin, and the Meig. The breed peculiar to one river is also capable of being transferred to another, while in the condition of ova or unhatched spawn. A quantity of gravel, containing the deposit in question, was, some years ago, taken from the Tay, by Mr. B——t of Perth, shipped off as ballast on board of a vessel, and

placed afterwards in a river which empties itself into Loch Shin, in Sutherlandshire, not formerly frequented by salmon. This stream, I understand, is now resorted to by salmon of the Tay breed.

Although there can be no question that the grilse and salmon are the same fish at different stages of maturity, or that a great proportion of the salmon of this year were the grilses of the one preceding it, still, there is one circumstance bearing in some degree upon this fact, which requires explanation.*

It is well known that in the spring season, sometimes before Christmas itself, what are properly termed clean salmon commence their ascent into fresh-water. These, singular as the fact may appear, are, nine-tenths of them and upwards, female fish, and contain the roe-leaf in an unripe, initiatory state, seldom exceeding in size the dimensions of one's finger. On their first appearance in Tweed they weigh, on the average, lighter than the October grilses, ranging in this respect from four to eight pounds. Occasionally, even smaller ones

* I cannot resist, in proof of this fact, and in order to convey some idea of the growth of the fish, after its descent as a grilse smolt, extracting from Mr. Scrope's volume, entitled "Days of Salmon Fishing," the following record of experiments made on the Shin, and furnished to that gentleman.

When marked.	When re-taken.	Weight of Grilse Kelt.	Weight of Salmon.
February 18	June 23	4 lbs.	9 lbs.
" 18	" 25	4 "	11 "
" 18	" 25	4 "	9 "
" 18	" 25	4 "	10 "
" 18	" 27	4 "	13 "
" 18	" 28	4 "	10 "
March 4	July 1	4 "	12 "
" 4	" 1	4 "	14 "
" 4	" 10	12 "	18 "
" 4	" 27	4 "	12 "

are captured, but as the spring advances, larger salmon make their appearance. I am talking of the Tweed fish only, being aware that in Tay, Forth, Ness, and Shin, the average weight is somewhat more than that above-mentioned. These salmon, in their edible qualities, greatly excel those taken during the grilse season, and in consequence of this as well as their comparative scarcity at a period of great demand, fetch a much higher price in the market. Now the question started by many with respect to them is:—What relation do these salmon bear to the grilses of the bygone season, the majority of which are still, during a large portion of spring, in the river, as kelts or even baggits and milters? The average size they exhibit at first entering the river, is a proof they are not salmon advanced in age, but cotemporaneous evidently with the grilses I speak of. I think it may correctly be conjectured that they were part and parcel of the same year's breed, which, concluding their spawning operations in October, have either been early impregnated by the few milters then in the river, or, without being impregnated at all, have, immediately on depositing their spawn, descended to the salt water, and having there undergone purification, re-ascended as salmon. This hypothesis, it will be allowed, satisfactorily accounts for the size of the fish, the peculiarity of their being almost all females, and for the readiness with which they again resort to the fresh water, in order to court impregnation from remaining milters; the existence of the ova in its immature state, as I have already shown, not indicating in itself any prior act of subjection to the cöitive process on the part of the female exhibiting it.

In this and the two preceding chapters I have run

over most points of interest in connection with the natural history of the salmon. My views and conjectures are possibly erroneous, but they are not, it will be granted, altogether without foundation. In regard to impregnation or the breeding of the fish, they are certainly more plausible than the commonly received notions on this subject—those whereupon a series of experiments have been conducted, the results of which, were there no defect in this principle to counteract them, involve monster or unnatural productions, and reflect, without attempt at palliation, upon the congruity of Nature's ongoings.

I shall now, in connection with the leading matter of this chapter, viz., the growth of the salmon, adduce one or two facts relative to the size it occasionally arrives at in our British rivers. During its condition as a grilse it has been known to attain the weight of sixteen pounds. I have frequently seen grilses captured in Tweed weighing eleven or twelve pounds. These were late-run fish that left the sea in the month of October; but what I consider to be a singular, if not an unexampled circumstance in the history of Tweed fish, is that in 1846, a year remarkable for the scarcity of grilses throughout Scotland, among the first fish of this description that were sold at Kelso, in the month of July, were two weighing seven pounds each; nor, throughout the season referred to, was there visible, in keeping with the month, that gradual increase in the growth of the fish, so manifest during ordinary seasons. Salmon, however, were more than usually plentiful throughout the summer, and these exceeding the average size. The largest captured with the fly weighed about thirty pounds, but two were taken in the neighbourhood of Berwick upwards of forty pounds. It is not very

often that such large fish as those last-mentioned frequent Tweed.

I have heard of salmon sixty or even seventy pounds in weight. One of the latter size or nearly so was brought to Billingsgate in 1795, and sold subsequently by a fishmonger at one shilling per pound. On the Wye, a few years ago, a fish of sixty pounds was taken by J. Evans, Esq., and presented to the Duke of Beaufort. Pennant states that he has heard of one seventy-four pounds, and I recollect mention being made in some newspaper, not very long ago, of the capture of two salmon on the north-west coast of Scotland weighing eighty pounds each. According to Mr. Yarrell, in 1821, Mr. Groves, of Bond Street, had one in his possession of the extraordinary weight of eighty-three pounds, and Mr. Lascelles, in his "Letters on Sporting," says "The largest salmon I ever knew taken with a fly was in Scotland; it weighed fifty-four and a half pounds."

What is designated by fishermen the "grey schule" is the largest and most compactly built order of the *salar* or salmon proper. The fish so called ascend, for the purpose of spawning, late in the year, seldom before the last week of October, and continue leaving the sea as stragglers, until February. They are evidently, from their make, fish of greater age than the general run of salmon, varying from these, in the same proportion, in respect to external appearance, as they do from the grilses.

The power of the salmon, in surmounting cascades and waterfalls, has frequently been discussed. Mr. Yarrell states that its highest leaps are from eight to ten feet. At the falls of Rogie, on the Black-water in Ross-shire, I have frequently had an opportunity

of observing this fish attempting to overcome a high natural barrier, and my impression is, that Mr. Y. slightly underrates its maximum power. These falls, at the part where the salmon generally endeavour to ascend, are divided by an intermediate pool or cauldron into two portions, the lower of which appears easily scrambled up when the river is at all swollen, but the upper one is perpendicular and requires to be sprung over at once. Their leap before surmounting this latter obstruction, I am inclined to think, requires to exceed twelve feet.

In ascending cauld dykes and falls not exceeding four feet in height, salmon, unless under peculiar circumstances, seldom emerge from the water, but steer their course upward, as if the headlong nature of the current presented little or no resistance. When the overshoot, however, is shallow or broken, and discharges itself into a pool or gully of considerable depth, affording facilities for the fish to take its spring, it generally does so.

The upper falls at Kilmorack, on the Beauley, are said to be twelve feet in height; and those of Tummel, eighteen feet. The former, as is well known, are frequently surmounted by salmon, and above the latter this fish has been captured oftener than once; to meet with its fry, in the Spring season, above Loch Tummel, is a matter of common occurrence.

CHAPTER XII.

SEA-TROUT.

UNDER the general term sea-trout, are included the *salmo eriox*, or bull-trout; the *salmo trutta*, or salmon trout; and the *salmo albus*, a designation given by Dr. Fleming to the Finnock or Herling. The *salmo eriox*, or bull-trout, is a fish well known to Tweed anglers. It attains occasionally a large size. I once saw an individual, taken out of the river Carron, in Ross-shire, which weighed upwards of twenty-four pounds. They have been caught in Tweed a stone weight, and I have frequently, when rod-fishing, killed them weighing eight pounds. They ascend in scanty numbers during the Spring and Summer seasons, but are then in excellent condition. On the whole, however, they are a coarse fish, when compared with the *salar*, or salmon proper. They want the same richness of taste; and the internal colour of the flesh is much fainter and less inviting. Still there is no fish that I know of which affords, on being hooked, such sport to the angler. In proportion to their size, they are much stronger and more wayward in their movements than the salmon, and test to a greater extent the sufficiency of the tackle. Although, as I have mentioned, comparatively scanty during the Spring and Summer seasons, they ascend the river, on the occurrence of a flood, in enormous quantities, at a later period of the year. Betwixt the middle of October,

when the net fishings close, and end of November, I have no doubt that, in ordinary seasons, fully a million of these fish enter Tweed, and push upward to the very sources of its tributaries and their feeders. I have seen them, weighing five or six pounds, taken by means of the leister, out of insignificant burns close to Moss-paul; I have known them to be captured, by the score, in the upper portions of the main river, of Lyne, Manor, Gala, Yarrow, Ettrick, and Leader, sometimes in mere threads of water connected with these streams. They frequent the Ale, Kale, and Oxnam running into Teviot. They ascend the Till and Whitadder, wending their way around the bases of Cheviot and into the heart of the Lammermuirs.

During these journeys, which are undertaken for the purpose of spawning, the bull-trout, unlike the salmon, is not content to fast, as it proceeds. It is evidently a fish of great voracity, but endowed with strong instincts and perceptions. In the very heat of its progress, it may be enticed readily to the hook, by means of salmon roe employed as a bait, especially on a cold day and when the water is large and discoloured. Its sense of smell, in common with that of the river trout and whiting, is so delicate as to occasion the detection of the above-mentioned bait, at the distance of many yards, and in a favourable state of water, it will seldom refuse it. I have known of as many as twenty fish of this description, weighing on the average three pounds a-piece, having been taken, by means of a single rod, and in the course of a few hours, from Tweed, all of which were on the run upwards, as, on occasions of this sort, is indicated by their coming to the surface every now and then. At the period referred to, although frequently they exhibit an attractive appearance externally,

the bull-trout, with few exceptions, are very inferior as food, and contain large quantities of roe. The kipper fish, however, being in a more backward state of maturity, are sometimes presentable enough.

The bull-trout is distinguished from the salmon by the number of maculæ on its gill cover; the salmon or grilse seldom exhibiting above one or two spots on that part of the head. It is also more plentifully strewn with spots on the back, shoulders, and upper portion of the flank; the teeth are long and strongly formed, the tail square and expansive, and the scales, which are much smaller in proportion than those of the salar, adhere tenaciously to the skin.

Mr. Yarrell says, that during its second year, it is termed a whitling in the Tweed. By many fishermen it certainly is so, but quite erroneously. What I have always regarded as a whitling, and what others in common with myself hold as such, differs in many respects from the bull-trout. It agrees, in fact, more with Mr. Yarrell's description of the *salmo trutta*. Its tail is forked, its mouth tender and armed with small teeth; the spots on the gill cover are silvered over, or but faintly marked in comparison with those of the *eriox*; the ones on the back, shoulders, and upper portion of the flank are few, and occupy a lighter ground, while the scales, in proportion, are much larger, and less tenacious. Besides, a great number of these fish, which weigh, generally speaking, from a pound to three pounds, ascend Tweed in June and July,—the run of bull-trouts during the above months being comparatively scant. Quantities also make their appearance after the removal of the nets, and I have frequently captured, by means of the salmon roe, whittings and bull-trout, on the same occasion, the former equalling the latter in point

of size. There is another distinguishing peculiarity in the whitling, namely, that its flesh is much redder and better flavoured than that of the *eriox*. It occasionally also, like the latter fish, attains large dimensions, without losing any of its characteristic features, except, as in the case of the grilse on becoming a salmon, the tail acquires more squareness, its central rays lengthening as the fish advances in age.

The finnock or herling is included by Dr. Fleming among the different species of sea-trout, under the designation of the *salmo albus*. I have been fortunate enough to have had an opportunity of capturing this fish, or one answering in some degree to its description in various rivers in different parts of Scotland. I have taken it in Ross-shire, in the Conan and the Carron; the one discharging its waters into the Cromarty frith, near Dingwall, on the east coast; the other into Loch Carron above Jean-town, on the west coast. I have caught it over and over again, in the Nairn, the Ness, as well as in the Findhorn. I have also angled for it successfully in the Lochie, and other streams in the Western Highlands, and I have taken it under another denomination, from Tweed, and the Esk above Langholm; in which two last-mentioned rivers, it is severally designated the silver-white, and the herling, whiten, or bill, a bill being the term applied to it when in breeding condition.

That the finnock of the north of Scotland is the same fish, at an earlier stage of existence, as the whitling or *salmo trutta*, there can be little question. Every feature in its external appearance assists to prove this, and I am quite satisfied, from what I observed some years ago while residing on the Moray Frith, that such is the case. The habits of the finnock on the Nairn water,

near which I lived, disclosed to me, however, one peculiarity which distinguishes it in some measure from the herling or bill of the Dumfries-shire rivers, not certainly from the silver-white of Tweed, which, in the point I allude to, greatly resembles it. It was this, that a large proportion of these fish entered the river and remained there for weeks without spawning, or even discovering any tendency or fitness to do so. In 1837, I caught several of them in good edible condition, as early as the first of February, at a period when the river swarmed with kelts of all descriptions, and continued to take them throughout that month, as well as March and April. They had entered the fresh water, many of them, I have reason to conclude, the previous autumn, and seeing they had done so not as breeding fish, had retained, in a large measure, their condition and edible properties. I may mention, however, that I seldom caught them in this state above three miles from the river's mouth, so that it is possible enough, during the months I refer to, they had ascended direct from the salt water, or kept moving to and fro, betwixt it and the river, as tides and floods assisted them. This however, is mere conjecture, for I am rather inclined to think they had located themselves in the Nairn, during the previous season, preferring it as a harbour of shelter in winter, to the furious billows of the German ocean.

The silver-white of Tweed also, which is closely assimilated in external appearance to the finnock, I have captured in good condition during the Spring season and when the river abounded in kelts. The silver-white is by no means an abundant fish in Tweed, in comparison at least to the finnock in our northern waters. They are more numerous, however, some seasons than others. In 1846 this was particularly the case. They exceeded

in numbers that year what I ever recollect them to have been, and I frequently, in the month of October, captured four or five in a forenoon. These were all in good condition, lively on the hook, red-fleshed and well-flavoured at table.

Early in November, in the same year, I had occasion to pay a visit to a friend in Dumfries-shire, who resided on the Esk, some miles above Langholm, and within a stone's cast of the river. Wishing to test the attractive power of the salmon roe in that stream, I sallied out one forenoon, rod in hand, to a spot called the Maiden Pool, and had the gratification, in the course of two or three hours, to capture several skellies or chub, one of great size, above two dozen fresh-water trout, and seven or eight bills or foul herlings. Next day, with the salmon-fly, I caught three more of these last-mentioned fish. Of all the bills taken by me not one weighed half-a-pound, and without a single exception, they were kelted females. Externally, a few of them were black and of loathsome appearance, but the generality, although lank, large-headed, and loose in the scale, retained their silvery coating. The question naturally occurring to me, on the capture of those fish was, are the bills or herlings of common species with the finnock or silver-white? Here they were, at the same period of the year, in very different condition from the latter. (What the finnock is, in this respect, at the season referred to, I never had a fair opportunity of ascertaining, the close-time of our northern rivers commencing on the 14th of September, but judging from what I have related, as occurring early in Spring, on the Nairn water, I draw the inference that many of this tribe retain their condition during Winter). On examining them minutely, I descried two distinct

varieties, one plentifully spotted on the back, shoulders, and flanks, like the bull-trout; the other, the true herling, having the maculæ thinly distributed, the scales silvery and easily separated from the skin, the head small and delicately formed.

The Esk, above Langholm, by no means excels as an angling stream. It contains few yellow trout, there termed *eldrins*, and these of small size, seldom weighing half-a-pound,—some scattered troops of skellies or chub, and is visited moreover by a scant and straggling supply of salmon, few of which, after wending their way upwards, are allowed time to effect a deposit of their spawn, but become slaughtered, without mercy, by the ruthless leisterer. In summer, before they commence their ascent, a few sea-trout answering the description of whitlings, and weighing from one to three pounds, push their way up and generally meet with the same fate as the autumnal fish. After them, in July and August, succeed the herlings, and lastly, the bills or bulls. These latter, as well as the herlings, were wont to be destroyed in great numbers below Langholm, by means of the pout-nets. This destruction, however, through the medium of the Earl of Minto's act, was last year, 1846, put a stop to, and in consequence, the bills were more abundant than usual in the upper part of the river.

Although the bills, on a small scale, may be held to resemble them, the Esk contains no fish answering the description of the Tweed bull-trout, and I make no question, judging from this circumstance, that the far-famed bull-trout of Tarras, a tributary of the Esk, were merely bills, and when "ta'en in season," herlings or whitens, the latter being another local name for the same description of fish. This is certain, that Tarras,

in the present day, is not resorted to by sea-trout of any magnitude, while its fresh-water breed lays claim to no manner of superiority. The *eriox* or bull-trout proper is not, however, a stranger in the Solway Firth. It ascends Annan, where it is called a round-tail by the fishermen. Mr. Yarrell mentions that it is to this species, "that the names of Norway trout and Norway salmon are believed to refer, as used occasionally in Tweed and some of the northern parts of Scotland." I recollect recognising the bull-trout, a few years ago, in Edinburgh, as forming the bulky part of an importation of what were termed kippered Norwegian salmon.

As some have conjectured the bull-trout to be a hybrid or breed betwixt the salmon and common river-trout, (a supposition which the fact of its possessing the generative power in all its completeness sufficiently disposes of) I may mention that it is, comparatively speaking, a recent invader of our Border river. The old fishermen affirm that, thirty years ago it was looked upon as a rare fish; this being the case, at a period when both salmon and river-trout were fully as abundant as at present, it requires no further proof, in order to set aside the conjecture, as far-fetched and irrational.

CHAPTER XIII.

SALMON FLIES.

I RECOLLECT, several years ago, meeting with a well-known landed proprietor in the north of Scotland, and the possessor on both sides of a noted salmon-river, who, being an angler in his own time and way, took it into his head to use no flies in salmon-fishing but such as were made up with materials of a white colour. This he did upon the advice, or in approval of the theory of a celebrated optician, who affirms that the position of the fish underneath, with regard to a fly traversing the surface, prevents it altogether from distinguishing the colour of the insect, its visual organs in this respect being acted upon by the superincumbent light of day, and so contracted in power as to be able merely to recognise the shape of its prey. That this theory is correct, I am very much inclined to doubt, and so I think would most anglers be, whether on Tweedside or elsewhere. Still, the individual alluded to, notwithstanding his whimsical assortment of flies, one and all, though varying in respect of magnitude, being composed of snow-white dubbing and hackles, silver twist, and portions of the pencilled wing feather taken from the silver pheasant, was no unsuccessful angler; and although occasionally competed with by one of the ablest craftsmen in the district, whose notions regarding the visual perceptions of fish were perfectly different, and who actually took pleasure in using flies of the opposite colour, managed generally to bear off the palm.

Now, independent altogether of the views taken by the gentleman in question, and of the reasons assigned by him for his capricious usage, I hold this fact to be worthy of some attention; the more especially, as certain deductions from it, which I shall immediately set forth, are fortified by other occurrences in the history of fly-fishing as singular, and in some respects more inexplicable. These additional facts may be all clumped together in one statement; and as, individually, they are well known, I shall be at no pains to separate or particularise them. They consist of the proofs daily recurring in the experience of salmon-fishers, with respect to a fanciful taste as regards flies, naturally possessed by the fish or inherent in it. A general instance of this develops itself in the well-known circumstance that salmon, in the lower parts of Tweed, are not now to be allured with any degree of readiness by means of the same colours and descriptions of flies as those successfully employed against them twenty or thirty years ago. At that not very distant period, they were wont to be taken only by a limited variety of hooks; on few occasions did the angler venture to experimentalise with any others; he repudiated, above all, those gaudy lures which are now found to be so killing, and looked with strange distrust upon any Irish innovation—concoctions of foreign feathers and highly-stained hackles. Nor, as some of this passing school continue to assert, were the fish themselves a whit less capricious, but shared to a tittle the prejudices and suspicions of the angler, refusing the rich yellow of the golden pheasant, the orange of the toucan, the cærulean of the blue lowrie, the green of the trogon, the crimson of the parroquet, and even those magical fibres which gleam on the much-prized tail-feather of the blue and buff macaw.

Salmon were then, like our sage and grey-haired fore-

fathers, of sober tastes and simple habits—content with fare of the homeliest description, and scornful of new-fangled delicacies, gilded tit-bits, and savoury provocatives. They esteemed the speckled feather or white tip of some strutting turkey, the dun plume of the glodd or buzzard, select filchings from the maldrake, teal, or widgeon, along with twitches of home-dyed wool, rough barn-fowl hackles, and the threads of an old service-worn epaulette, better than the combined luxuries of Mexico, the Indies, and New Holland.

Thou silver-headed angler! canst tell of these better and less degenerate days? Thy feats are all registered within thee, and that lack-lustre eye regains its olden fire when, with hand outstretched, thou recountest the capture of some goodly fish, the sojourner once of yonder pool whose runs and careerings are to-day as deeply traced on thy memory as if the sward that bears thee were still red and moistened with its blood. Answer me,—where in thy day was the doctor? where the parson? where the butcher? where the Childers? where, in short, all those prismatic rarities that stock so amply the tin and vellum of a modern salmon-fisher? You possessed them not. It was neither your wish nor your interest to employ them. They were harmful to the salmon in so far only as they alarmed and annoyed it; and if now and then, in the hands of a stranger, they should chance to draw blood, a dolt of a kelt was at best the only victim.

I am only, reader, stating a well-known fact, when I affirm that in the time I allude to, the salmon-fishers on Tweedside not only held what is called the Irish fly in absolute ridicule, but actually forbade the use of it on those portions of the river they individually rented; and this they did, not because they deemed it too deadly for every-day use, but solely because they conceived it acted

as a kind of bug-bear to the fish, scaring them from their accustomed haunts and resting spots. And indeed, it is only gradually that in the lower part of the district I allude to, a complete change has been effected in the matter of flies. Not absolutely discarding the old standard and local lures, modern anglers have introduced into their stock at least a thousand and one other varieties, all dignified with the name of killers, yet no single fly-hook resembling any known insect, bird or other animal. For every season and month, for all hours of the day, for all changes of weather, for waters low, flooded, or in mid state, sunned or clouded, deep or shallow, streamy, wind-ruffled or still, icy-cold or at blood-heat, black or clear, leaf-strewn or otherwise, they have a peculiar and favourite lure; nay, were it possible, by some adaptation of phosphorus, to cause hooks to reveal their trimmings in the dark, no doubt a nocturnal assortment would become added, possessed as became it, of all the powers of diablerie and witchcraft.

I go back to ask, what are the deductions to be drawn from all I have instanced? Was the by-gone school of salmon-fishers a humbug? Is the modern one less so? Can the disciples of either unfold anything which was not as well known in the days of Agricola, as it is now? Seriously speaking, are the tastes and habits of the salmon, as some assert, of a revolving nature? Is the fish too so capricious, that a single fibre wanting in the lure, a misplaced wing, a wrongly assorted hue, will discompose and annoy it? Such questions I leave to be answered by wiser anglers than myself. They search too deeply into the philosophy of the art to obtain their reply from one so imperfectly versed in it, nor does it render the task less arduous were I to comprehend them all under the single query—can the principle upon which salmon in certain waters, accommodate

themselves to certain colours in the fly be regulated or explained ?

From this dark, insoluble and thoroughly speculative subject, it is high time to retire. My apology for introducing it at all, rests on the desire I have to discover to those who make of it a matter of argument, the absurdities they are liable to run into. There is, I cannot help thinking, a great deal of prejudice, self-conceit, and humbug exhibited by salmon-fishers generally, with respect to their flies—a monstrous mass of nonsense hoarded up by the best of them, and opinions held, quite at variance with reason and common sense. I will not go so far as to assert, in relation to salmon-flies, that it would be expedient greatly to reduce their number or establish, as I have recommend to be done in regard to trouting-hooks, any limit to their variety. An innovation of this sort, if proposed, would, I well know, be treated with ridicule. Still, I have reason to believe that the salmon is not quite so finical a fish, as many anglers represent it to be—that the fastidiousness is more on their part, and that, through carrying it on occasions to an extreme length, they frequently accomplish the very thing they are desirous of avoiding, that is, they alarm instead of alluring the fish. This is exemplified very often on the raising of a grilse or salmon with a particular fly. A great many anglers with whom I am acquainted make it a practice never immediately to cast over the same fish, with the same hook, but having started and missed their game, at once to substitute another size and description of fly. Now this I hold is all well enough, when a second offer of the lure, due time being granted, has been made and refused ; but to present to the eye of the fish, after a few moments occupied in making the change, a hook of different, perhaps opposite colours, must now and then inevitably

excite suspicion. As far as my own experience has led me to judge, I generally find that a grilse or salmon, if inclined to rise a second time, is as ready to do so at the fly first offered it, as at any other; nay, I have even, on more occasions than one, raised the same fish, before hooking, four or five times in rapid succession with the same identical lure. Of course, my doing so was more a matter of chance than good guidance, and I should not, on general occasions, were I fishing carefully, have encountered the risk my perseverance was likely to incur of disheartening, if not disgusting the salmon.

I am of this opinion, however, talking more generally on the subject, that if one only knows how to adapt the size of his hook to the state of the water and season, and is acquainted with two, or at most three approved of local flies, he will find it not only quite unnecessary but positively disadvantageous to experiment upon the tastes and fancies of the fish with others of a doubtful and untried nature. The only occasions on which he has an excuse for doing this, are when the pools have been well thrashed over before him by resident anglers; nay, even then, he will find it expedient in selecting a hook, not to deviate very largely from the discovered likings or prejudices of the salmon frequenting this or that locality. He never, acting otherwise, can fish with any proper measure of confidence, and that very fact only renders his experiment the more precarious.

I shall now proceed, without further remark, to draw out lists of the most approved Scottish salmon flies, adapting them severally to their appropriate rivers. I shall also introduce into the proposed classification, a limited number of Irish fly-hooks, such as gradually, of late years, have been adopted by our fishermen, and become of common use throughout Scotland.

TWEED FLIES.—SPRING SIZES.

Wings.	Bodies.	Shoulders.	Tail-tufts.	Sizes of Hooks.	General Remarks.
1. White-wing: pure white feather taken from swan or white turkey, six or seven slips are sufficient for each wing.	Dark-blue or black pigs wool in the upper part, succeeded by claret-coloured ditto; hackle dark, edged with brown, in the upper part, crimson hackle further down, silver tinsel. Same as No. 1.	Light-blue hackle intermixed with mohair of the same colour.	Light yellow.	Addington.—From No. 13 to 20. Phillips.—From 4 to 6.	In the Spring sizes of salmon hooks, lace and tinsel are preferable to gold and silver twist or thread.
2. Snipe-wing: small ribbed feather taken from under the wing of the snipe. Another variety from the pen-cilled feather of the silver cock pheasant.	Dark-mohair, claret-coloured, and blue or red near the tail-tuft, black hackle, silver tinsel.	The same, or scarlet hackle and wool.	Ditto, or crimson.		The name given to this fly and the following one will discover the required feather used for the wing.
3. White-top: formed from the rump or tail feather of turkey.	Black-mohair in the upper part, relieved below by light blue and yellow ditto; black and fine yellow hackles in succession, silver and gold tinsel.	Light-blue or crimson to correspond with the lower extremity of the body. Fine orange hackle.	Yellow or orange.	A favourite wing in cold weather.	
4. Double-white-top: a variety of the same from the rump of the turkey.	Dark-mohair, relieved below by red or deep orange ditto. Black hackle with orange one succeeding it, silver or gold tinsel.	Light-blue hackle or crimson ditto.	Crimson and yellow tuft in juxtaposition, not mixed.	The dun white-top esteemed preferable as a wing to the thorough dun. This can be obtained in perfection from the turkey only.	
5. Dun-wing: taken from the salmon-tailed gield or buzzard; also from turkey, Egyptian goose, and mountain pheasant, &c.	Mottled turkey or silver pheasant hen tail. I prefer the white mottle to that having a brownish tinge.	Orange mohair or hackle.	Deep yellow, or orange, or crimson to correspond with shoulder.	A favourite fly when the river is clear.	
6. Drake-wing: white mottled feather taken from the breast of the mallard or of the tame drake.	Black or dark-blue mohair in the upper part, wound over with dark fibred hackle, yellow below with orange hackle, silver tinsel. Black wool or mohair body, orange dubbing above tuft, or hackle of the same colour. Black hackle, silver tinsel.	Black hackle, or orange ditto.	Deep yellow.		
7. Brown-mallard: brown-mottled ditto taken from the back of the bird. This is more finely marked in the tame drake.	Orange-coloured mohair or pigs wool, fine brown hackle, gold tinsel.	Dark-blue hackle.	Orange or yellow. Yellow.		



TWEED FLIES.



Reeve. lith.

TWEED FLIES.—SMALLER SIZES.

	Wings.	Bodies.	Shoulders.	Tail-Tufts.	Observations.
1.	Drake-wing: mottled feather from breast of mallard or teal.	Dark-coloured mohair, blue, purple, or black, in the upper part, twitch of orange ditto, below; black hackle, silver tinsel or twist.	Twitch of orange or crimson, occasionally introduced under the wing.	Yellow or orange, formed of small feather from breast of parrotquet, also, floss silk or worsted form a desirable tail-tuft.	In the smaller sizes, the large fibres of the hackle sufficiently in most cases shoulder the fly. A head formed of ostrich herl gives the hook a finished appearance. Two or three wrappings are sufficient.
2.	White-top: from wing feather of mallard, or rump of turkey.	Black mohair touched off near the extremity with a twitch of blue ditto. Black hackle, silver twist or tinsel.	Blue or crimson do.	Fine crimson or orange feather of the above description.	
3.	Double white-top: from rump feather of turkey.	Same as above; both may be varied by substituting yellow or orange for the light blue near the extremity.	Ditto.	Ditto.	
4.	Dun-wing: from dun turkey feather. Dun white-top preferred.	Dark-coloured mohair, touched off with blue and orange ditto, or olive-coloured throughout; fine brown hackle, with dark interior, gold tinsel.	Ditto.	A few fibres of golden pheasant tippet feather, or small crest feather from ditto.	
5.	Mallard-wing: taken from the brown mottled feather on the back of the mallard.	Dark-blue, green, or orange mohair; black or brown hackle, gold tinsel or silver.	Light-blue hackle sometimes wound in.	Yellow.	The mottled wing used on Tweed and its tributaries is most effective when the river is small and clear, whereas in the North of Scotland, where it is at all times a favourite, a dark-coloured state of water is no hindrance to its success.
6.	Mottled-wing: from the tail of the silver pheasant, hen bird, also from mottled turkey feather.	Dark-blue mohair, touched off with orange, fine dark-brown hackle.		Same as No. 4. The crest feather used as a tail-tuft is unquestionably enticing.	
7.	Guinea-fowl wing: taken from finely marked feather of guinea-fowl.	Light-blue mohair, touched off with orange ditto below; silver tinsel, dark hackle.		Yellow.	I may observe that the Summer-sizes are most of them adaptations of the Spring-sizes of salmon-hooks, employed on Tweed. They differ chiefly in point of finish and require more choice material.
8.	Pencilled feather of silver pheasant.	Black or dark blue; black hackle, silver tinsel.		Yellow or golden pheasant crest feather.	

SALMON FLIES FOR THE AWE AND URCHAY RIVERS.—MR. LASCELLES' FLIES.

	Wings.	Bodies.	Shouldering.	Tip.	Observations.
Flies for River Awe.	1. Mottled black and white tail feather from turkey. 2. Speckled brown feather from mallard. 3. Taken from feather of raven.	Olive-coloured mohair, ribbed with gold twist, black hackle. Blue-mohair, ribbed with silver twist. Blue hackle. Black-mohair, black hackle.	Black hackle wrapt close under wing. Blue hackle.	Orange wool and small projection of turkey feather. Golden pheasant crest feather. Ditto.	In clear, bright waters this fly is reckoned very deadly. It was first used by Colonel Robertson, a successful salmon-fisher on the Awe and west-coast rivers.
The Black Dragon.					
Flies for the Urchay.	1. Mottled black and white tail feather from turkey.	Dark-blue mohair, touched off with twitch of orange ditto, two turns of light-blue floss and ostrich herl. Black hackle, gold tinsel.	Claret-coloured hackle above twitch of mohair of the same colour.	Golden pheasant crest feather, ostrich herl.	
The Tartan.	1. Dark-speckled brown of turkey tail mixed with 12 herl's of peacock tail.	A mixture of every imaginable colour, forked with dark fibres of mallard feather, blood-red hackle, gold twist.	Copper-coloured mohair.	Forks of dark fibre of mallard feather.	The body of this fly is made with each colour separate, beginning with bright yellow and ending with black.
The Black Dog.	2. Wings of blue heron feather mixed with red turkey. 3. Reddish-brown speckled feather from turkey tail. 4. Mottled grey of turkey's tail.	Lead-coloured mohair, ribbed with gold lace, large black hackle. Bright-brown hair or fur of bear, mixed with gold-coloured mohair, black hackle, gold ribs. Copper-coloured peacock herl, green plover's topping, ribbed with silver, dark grizzled hackle. Dress with dark red silk.	Dark-green mohair. Deep-red hackle over red mohair.	Two long fibres of pheasant's tail feather.	Divide the wings with gold twist and make it appear about the head.

SALMON FLIES FOR VARIOUS RIVERS.

	Body.	Wing.	Shoulders.	Tail Tuft.	Observations.
Spey Flies.	1. Black and brown mohair, or pig's wool mixed; hackle taken from pendant breast feathers of male heron, broad gold or silver lace, lapped on widely.	Brown mottled feather taken from the back of the mallard.		Yellow or orange.	A soft, long fibred hackle or side feather from barn-fowl cock or hen is sometimes employed instead of heron hackle. A thread of blue silk also, is frequently introduced, wound on next the lace. I may mention that until recently, this, or one similar to it, was held as the only true Spey hook. But the fishers in that quarter have, of late years, greatly augmented their stock, discovering that others of a very different fabric are quite as killing. Indeed, many of those I have introduced into these lists, as favourite lures on Tweed, will be found equally so on most of our Northern rivers.
Ditto.	2. Black mohair; black hackle, silver tinsel.	A pair of crest feathers taken from golden pheasant.	Dark brown or black wool.	Yellow.	
Nith fly.	Light brown wool; peacock herl; red hackle with dark root and edge; tarnished gold twist.	Red turkey with yellow or white tip; under wings of grey turkey, teal, or pea-hen.		Yellow.	
Tay fly.	Dark mohair, heron hackle, silver tinsel.	Mottled turkey feather, either brown or white.	A twitch of yellow or orange mohair.	Ditto.	
Dee fly.	The same as the above.	Ditto.	Ditto.	Ditto.	Wingless hooks, like Palmer's on a large scale, are I understand, sometimes used on the Dee and Don, by salmon fishers.
Fail-me-never.	Black mohair, black hackle, silver twist.	Mottled feather from tail of Argus pheasant.	A twitch of orange mohair.	Yellow.	
Forth and Teith fly.	Ditto, ditto.	Yellow feather tipped with white.		Yellow.	
Ness and Beaulay.	Dark, with silver tinsel.	Turkey, peacock, gilded, or mallard feather.			Wings made of peacock herls, considered taking in Beaulay in snow water.

SALMON FLIES. IRISH STYLE AND PATTERN.

	Wing.	Body.	Shoulders.	Tail.	Observations.
The Parson.	A bright yellow hook, wings formed of golden pheasant crests, with slips from the blue and buff macaw.	Yellow floss silk, gold twist.		Golden pheasant crest feather below ostrich herl.	Most of these flies are favourites on the rivers Ness, Beauty, and Shlu.
The Doctor.	Mixed wing. Mixtures are generally composed of gold pheasant tippet, ditto tail feather, bustard, brown mallard, capercaillie, &c. &c. along with macaw slips, which latter are reckoned indispensable	Blue floss silk, silver twist.	Blue feather from wing of jay used as a hackle: the cerulean of the blue lowrie is still more esteemed.	Ditto.	
The Childers.	Mixtures. A pair of golden pheasant crests are also introduced into the wing and the macaw slips as usual.	Yellow body, resolving into orange in the upper part. made roughish, gold thread.	Ptarmigan feather used as hackle under the wing.	Ditto.	So called after Colonel Childers, a celebrated sportsman and frequenter of Tweedside.
The Butcher.	Mixtures — golden pheasant the most prevalent; macaw slips.	Blue and red floss, silver twist.	Black hackle.	Ditto.	
Dundas fly.	Mixed wing, slips.	Greenish yellow body.	Golden plover feather, used as hackle.	Ditto.	Designated after John Dundas, Esq., of Edinburgh, a well-known and successful angler.
The General.	Composed of golden pheasant crests as in the parson.	Blue floss silk.		Ditto.	
Lascelle's Golden fly.	Mixtures. Golden pheasant, common ditto, parrot, peacock's herl, mot-tled turkey, along with two blue jay feathers placed on each side.	Green silk, ribbed with gold, red hackle or saddle feather.	Green mohair.		Silver fly for the same, only ribbed with silver and a dun hackle used for legs.

CHAPTER XIV.

ON SALMON-FISHING WITH THE FLY.

“EVERY man to his taste.” For my own part, I would sooner hook, play, and capture a clean run April fish of sixteen pounds weight than follow the best fox ever tally-hoed out of cover, under guidance of old Williamson—aye! or stalk the noblest pair of antlers reared in Glen Tilt or Tor Achilty. And yet, I can understand, and in some degree appreciate the enthusiasm of the fox-hunter; I can share the delight afforded by a good meet in mild, open weather—the assemblage of well-appointed red coats and stalwart yeomen in front of some old baronial residence—hounds and horses, the huntsman and the whippers-in, all mixed up with the landscape—life and joy depicted on every countenance—greetings and introductions passing—jests and sporting phrases on the wing: I can enjoy, in fancy, the ride to covert—the speedy finding of the fox—the view halloo—the gallant burst—the baying of the dogs—the run, spirited and brilliant, with its checks and hazards, its hundred incidents; and the death too of wicked old reynard, remote in some sheltered nook, I can enjoy even it. The height of mawkish affectation it would be to do otherwise. What although he has thrown out the whole pack of his pursuers, save a half dozen or so of staunch old dogs, and thinned the field to a trio of red coats, including the huntsman, he is but “varmint”

after all, a sly, sneaking thief, the despoiler of hen-houses, and devastator of pheasantries. Who pities him? who grudges these panting hounds their mouthful of spite, or would rob the gallant rider of his well-earned tooth and brush?

Deer-stalking too has its delights and inducements. A manly and noble sport it is—nobler far and more kindred to noble minds than fox-hunting. Well can I appreciate the enthusiasm of the keen-eyed hunter, when on a September morn before sun-burst, he sallies forth, rifle in hand, attended by a single gillie similarly armed, and holding in leash a powerful stag-hound. They have threaded the valley far up to its remotest extremity, and are now ascending the mountain side. Above them, in long wreaths, the mist is still hanging. It fills the ravines and torrent courses, creeping sluggishly through them, like a thing of life and feeling. For an interval, we lose sight of the deer-stalkers. They are deep in the heart of the cloud, but lo! like the curtain in a theatre, up it furls, and again are they descried on the highest shoulder of the mountain. The sun is now out, bright and cloudless. Onward they move—still onward. It is an expanse of heath that stretches before them, knolled here and there, and at length terminated by a tarn or mountain loch, from the far margin of which rises abruptly a scaur or precipitous ascent, formed partly of crags and partly of loose stones. But the moor is yet to be traversed—three weary miles at least. Twice, unsuccessfully, has the prospect-glass been applied to the eye of the attendant—but now the halt is long, the survey steady and minute. Something is discerned. The glass exchanges hands. Heads are shaken, fingers pointed, the eye brightens up. Far off, in the extreme of the landscape, is a speck

—little more than a speck. It bears to the naked vision the colour of the moss; seen through the artificial medium, it resembles an animal—a jackass. But no! the antlers (they are just discernible) proclaim it to be what it really is—a hart magnificent. And see, not far from it, lie couched a couple of hinds. High beat the hearts of the deer-stalkers and quickly is their council of war concluded. Off they move, not forward in direct line towards the object of their anxiety, but describing, as it were, part of a circle, so as to meet or face the wind, and at the same time keep under cover of one of the knolls or small hillocks already alluded to.

At length, after much strategy, by crouching and creeping on all-fours, they gain the desired point of concealment. A natural excavation or hollow it is in the moor ground, half filled with black mossy water, and lying about two hundred yards in front of the deer. But see, their quarry is browsing towards them. In a short time, it will approach the mark. Unconscious of danger, it moves along, invited by every successive tuft of herbage to its fate. Three-fourths nearly of the intervening distance have been passed over, and now, suddenly the animal halts, and lifting its stately head snuffs the perilous air. Too late! The murderous barrel is on the discharge. The bullet is winging its way onwards with lightning speed and unerring accuracy. It has reached the heart of the antlered monarch. A death-bound—a stagger, and all is over. The warm blood gushes from the fatal orifice. The blade of the hunter is at the throat of his victim.

I have not introduced into this cursory sketch the unleashing of the stag-hound, its angry impatience, its fleet unconquerable pace; nor have I thrown in the figure of its cruelly-wounded chase, unable longer to

hold ahead, yet in despair and fury showing front to its savage assailant. I have not described the crouching and spring of the dauntless hound, the defiant menacing posture of the deer at bay, with its fruitless attempts to ward off the fatal grasp; all this—the piteous wind-up of a more prolonged tragedy—can scarcely with truth be included among the delights of deer-stalking, or if ever esteemed so, it is only by the steeled and semi-barbarous mind—by one of matador breed, not by the sterling, generous-hearted sportsman.

Allowing to these recreations—fox-hunting and deer-stalking—all they lay claim to as interesting, manly, and exciting pastimes, I cannot help preferring to either of them—indeed, to any of our national amusements whatsoever—the noble sport of salmon-fishing. The others, it is true, have their moments and intervals of extreme—it may be thrilling, pleasure; even their blanks and disasters scarcely, on some occasions, deserve the name of disappointments or calamities. But there is wanting that indescribable something which gives its zest to the other, rendering its pursuit throughout more equably pleasurable, and yet offering no hindrance to higher and intenser occasions of enjoyment, created, for instance, by the play and capture of some vigorous and magnificent fish.

When I speak, however, of salmon-fishing, I renounce all allusion to it as practised under that name by the aristocratic frequenters of certain portions of Tweed. To those who live at a distance from this river, the feats recorded and vaunted of, from time to time, by these noble piscatores, may appear, as displays of skill and craft, highly creditable to the parties engaged. To the spectators of them, they are, in many instances, next thing to farcical—quite undeserving the name and cha-

racter of feats of sport, and, in reality, no more the achievements of those professing to execute them, than Punch and Judy is the veritable unassisted performance of a set of wooden puppets.

Let me describe the mode of rod-fishing for salmon in the parts of Tweed I allude to. A stretch of water, a mile or two in length, and comprehending in some instances both, but in more only one side of the river, is rented by a fisherman. For this he pays yearly a sum of money, varying from fifteen to seventy pounds. He has the liberty of using and constructing cairns, or artificial projections, formed generally of stones, stakes, and turf, to which, during small spates or floods, when salmon are on the run, nets of a particular size and shape can be attached. He may also, in some localities adapted for its use, employ the long or seine-net; but besides these advantages, he is empowered, generally speaking, to hire out boats for the purpose of rod-angling. It is from the hire of these, chiefly, that he derives his livelihood; and really, to those who have a good tack, and are of frugal habits, it is no unprofitable business. The angling mania of late years has arrived at such a height, that salmon-fishing may truly be considered a princely amusement, to be obtained only by gold and interest, and ranked on the same footing with deer-stalking itself. It is very true that the rate of charge for a day's amusement is not what some would consider absolutely exorbitant, being fixed by the fisherman at ten shillings, for which sum the boat is provided and managed—it being understood, however, that all fish caught are delivered up to the tacksman, or taken off his hands at market price; but then, in order to obtain, even on these terms, the boon in question, is a matter of some difficulty, requiring, in many

instances, the permission of the proprietor as well as that of the lessee of the salmon-fishing; and, at all times, made a subject of rivalry and disappointment. In fact, to prevent, or rather alleviate the latter feeling, it is necessary, owing to the press of applicants, often to engage the water many weeks before one designs fishing it; and, for this purpose, the fisherman keeps a book of entry, which is frequently, as respects certain months, filled up before the season itself has actually commenced. Of course, in this registry the name of the same individual, if a resident at hand, or a regular frequenter of Tweedside, may occur statedly, as contracting for a number of days throughout the season; for instance, it is a common thing, on application to the tacksman, to find that his Monday's boat on the upper water is engaged by General So-and-so; on the lower streams by the Duke of ——. On Tuesday, Colonel —— and Lord —— fish; on Wednesday, Major —— and the Honourable Mr. ——; the latter days of the week being generally less run upon and monopolised.

But I come to the description of the sport itself, so termed, although in my opinion but partially entitled to that designation, as far, at least, as regards the possession of skill and judgment on the part of the angler, and also, in respect to the kind of salmon forming the majority of those killed, and which, in the spring season, consist, with comparatively few exceptions, of kelts and baggits. These, although they sometimes run long and sullenly, are very far from having the activity of clean-run salmon; moreover, they are totally unfit, after being captured, for human use, retaining neither the internal curdiness nor rich taste of properly conditioned fish. As exercising, moreover, the ingenuity of the sportsman, they are quite at fault, possessing a voracity that, on

occasions of great success, induces disgust and satiety rather than satisfaction or triumph.

For my own part, I would rather capture in spring a single newly-run salmon than a whole boat-load of kelts. Yet these, and no others are the fish frequently boasted of, as affording, under the name of salmon, amusement to some brainless scion of nobility—some adept by purchase, not skill, in the art of angling. For, let me ask, what all the science displayed by this sort of salmon-slayer consists of? Is he versed in the mysteries of rod and tackle, taught by experience what fly to select, when, where, or how to fish? Is this amount of knowledge at all necessary? Nothing of the kind. The performer has no will or say in the matter. In every act, in the choice of his fly and casting line, in the position and management of the boat, he is under control of the tacksman. By *him* he is directed where to heave his hook, and, if a novice, how. Nothing is left to his own fancy or discretion. He has forfeited all freedom of action. Nay, more, he is fettered with the presence of his griping task-master. Enough it is that he pays, and that handsomely, for the sport, so termed, of hauling within reach of the gaff-hook a miserable kelt or two, which, when secured, he sees no more of, and is unable, unless by purchasing it, to exhibit to his friends as a trophy of his prowess—enough, methinks, this measure of endurance, without adding to it the annoyance in question.

Angling and butchering fish I consider as two totally different occupations. The true angler I would describe to be one who follows the art as a science, who cultivates it, not by usurping the experience of others, not by becoming the mere slave to precept, but by fond and zealous assiduity in the practice of its various depart-

ments, by carefully studying the habits of the fish he wishes to capture—their food and feeding hour—their customary and occasional haunts—the effects of different states of weather or sizes and colours of water upon their tastes—together with a hundred other matters essential to be known, before he can venture to claim for himself the reputation of an adept in the craft. I do not say he is to refuse the instructions of others; far from it. These he should receive and treasure up with due gratitude; but let him do so only after they have been weighed and examined,—when the occasion and benefit of them are ascertained and understood.

That salmon-fishing, as practised from the boat on Tweed, is upon the whole a very agreeable recreation, affording exercise and some measure of joyous excitement to the person engaged in it, I do not mean to deny; but it is not, to my mind, nearly so pleasurable or satisfactory a sport as when pursued on foot. Give me a stream which I can readily command, either from the bank or by means of wading—a dark, hill-fed water, like the Lochie or the Findhorn, full of breaks, runs, pools, and gorges—give me the waving birch-wood, the cliff and ivied scaur, tenanted by keen-eyed kestrel or wary falcon—more than this, give me solitude, or the companionship, not less relishable, of some ardent and kindred spirit, the sharer of my thoughts and felicity—give me, in such a place, and along with such an on-looker, the real sport of salmon-fishing—the rush of some veteran water-monarch, or the gambol and caracol of a plump new-run grilse, and talk no more of that monotonous and spiritless semblance of the pastime, which is followed by the affluent, among the dubs and dams of our Border river. The two modes of angling, with their attendant circumstances of place and com-

panionship, are not for a moment to be compared. They, in fact, no more resemble each other than does the stroll of the sportsmen through a preserved park, under guidance of the keeper or his assistant, to whom every brood, covey, and form is as well known as are the denizens of the dog-kennel themselves. They differ as widely as does the straight-jacketed method of cramming a game-bag differ from the free march along moorland and hill-side, through heather and fern, over a domain well plenished but not wedged with birds where you are at liberty to follow or keep in check your highly-trained setter, and, without taunt or ridicule, can miss with either or both barrels some prodigy of a black-cock, or a hare which in size and length of ear resembles some veritable donkey.

Having ventured these preliminary remarks, I shall now proceed to give shape and arrangement to such instructions and matters of knowledge, in relation to the subject of this chapter, as I think will prove of advantage to some of my readers. And first of all, as to the places or portions of a salmon-water frequented by the fish, and where, in the common phrase, they are most likely to take the hook. This is a question I have already, to some extent, treated of in my observations upon rivers, but it is one that lays claim, in the present chapter, to more ample notice.

In all rivers there are certain pools, and portions of pool or stream, to which salmon naturally resort, and, under ordinary circumstances, are inclined to favour the angler. Nor are these always to be discovered by the eye even of the most experienced and able fisher on a water to which he is a perfect stranger. It is only through actually testing or having them pointed out to him by some resident angler, that he can acquire an

intimate knowledge with respect to the different casts ; whereas, in the case of a purely trouting stream, his own practised eye is sufficient to direct him where to throw, and will detect at once, without fail, the likeliest feeding-grounds and places of resort.

As a general rule applicable to salmon-streams, the fish, on the subsiding of the flood or swell, which forces them either from the sea itself, or higher up the river, take refuge, in their healthy state, among rocks or large stones, both of which are to be found in marked abundance in all well-reputed salmon-rivers. It is not, however, every rock or large stone that the salmon will choose to frequent ; nor does the seeming convenience of this or that place of shelter always prove attractive to it. As in respect to its food, so in respect to its accommodation, the fish is royally fastidious, passing over, on occasions, what seems, in point of structure, to be adapted for its concealment and habits, and selecting instead what to our fancy is less in unison with them. Thus, for instance, in a long stretch of water, to all appearance the most inviting, being full of breaks and gorges, walled with rocks and teeming with places of retreat and security, have I failed, times without number, to stir a single fin ; while at its neck, where the river widens up, and at which the only appearance of shelter is a dimly-discernible slab of stone, half-imbedded among gravel, I scarcely ever heave a fly without doing execution. Nor do I state this circumstance as a solitary one, seeing I could point out on various rivers many such positions, taken up and held in retention by salmon, apparently out of sheer caprice, but no doubt from some reason which their natural instinct leads them to have respect to. What this reason is I shall not stay to inquire. It may stand connected with the

accommodation or shelter, the feeding, the facility of removal in case of a sudden flood, the sensation of the fish, its state of pregnancy, or all or several of these matters combined ; but be this as it may, to trace out the exact motives which direct salmon to particular spots in preference to others, apparently as advantageous, is a task not to be ventured upon with materials purely speculative. As I have said, I could point out many such spots, even in large, broad waters, like the Tweed, near Kelso ; as the Red Stane below Makerston ; the Prison Rock, at Sprouston Dub, &c. &c., each of which is, as it were, a magnet for the attraction of salmon ; so much so, that it has been proved in regard to them, that should one of the occupant fish happen to be abstracted by the angler, its place will, even when the river is at its average height, become, in the course of two or three hours, supplied by another.

I recollect some years ago being along with a party who were sun-leistering or spearing from a boat, in the month of August or September, during a season of great drought, and when the fish in Tweed had become scarce. We had ransacked nearly a mile of water to little purpose, having, in the course of our descent, slaughtered only a single grilse. Nor, although the clearness of the day and low state of the river afforded every facility for detecting the presence of other fish, were any such observed—none, most certainly, lurking within a hundred yards of the stone or rock, along-side of which the individual above mentioned was taken ; and yet, on our return thither with the boat, not an hour afterwards, a dun salmon, of ten or twelve pounds in weight, presented itself to view, in occupancy of the identical spot where the grilse had been discovered. This fish, also, it may be mentioned, we secured ; I shall not say legitimately,

for, in truth, leistering salmon is at the best a barbarous and questionable amusement, entitled, under rare circumstances, to the name of sport, and in most cases no more deserving that dignified appellation than if it were the slaughter of a flock of diseased sheep, pent up within fence or inclosure.*

* I find a number of anglers at one with me in opinion upon this subject; and all who have witnessed night-leistering on Tweed, during the autumnal or winter months, will acknowledge that even the romantic character which torch-light and scenery invest it with, fails as an apology for the ignoble, wasteful, and injurious nature of the occupation. In nine cases out of ten, it is pursued, either during the spawning season itself, or when the fish are heavy with roe—when they are red or foul, having lain a considerable time in the river, and moreover, when they have lost all power of escape or are cut off from exercising it, both by the lowness of water and by the circumstance of their being hemmed in, at the head and foot of the pool or place of action, by nets and other contrivances stretched from bank to bank.

It can scarcely be credited, but I relate a fact known to many on Tweed-side, that about four or five years ago, upwards of three hundred breeding fish, salmon and grilses, were slaughtered in the course of a single night, from one boat, out of a stretch of water not far from Melrose, two leisters only being employed; and of this number—I allude to the fish—scarcely one was actually fit to be used as food, while by far the greater part of them were female salmon, on the eve of depositing their ova. In the neighbourhood of Kelso upwards of ninety have frequently been butchered with this implement during a single night, from one boat, all of them fish in the same rank and unhealthy condition above described. In September, 1846, according to the most moderate calculation, no fewer than four thousand spawning fish, consisting chiefly of full-grown salmon, and comprehending the principal breeding stock of the season—those fish which, from their forward state, promised the earliest and most vigorous supply of fry, were slaughtered in Tweed, with the consent and under the auspices of the upper holders of fishings, in the manner I speak of. Need it be said, that the injury done to the salmon-fishings in general by this malpractice on the part of two or three lesser proprietors, is incalculable, and when linked with the doings of poachers during closetime, to which it unquestionably gives encouragement, and the system pursued on Tweed of capturing and destroying the kelts and baggits, it must operate most prejudicially against every plan devised to further the breeding of this highly-prized article of food.

Having thus briefly described the likeliest resorts of the fish in a salmon river, and alluded to their caprice in selecting this or the other point of shelter, in preference to one seemingly as accommodating, I am brought to treat of what is more pertinent to the matter in hand, namely, the question, how ought salmon to be angled for?

I shall, first of all, set forth a few instructions as to the best method of capturing this fish with the fly, and then proceed to explain how it may be taken, most readily, by means of the worm, minnow, or parr-tail. As I have already, in former chapters, described the tackle generally used by the salmon fisher, it is quite unnecessary for me to make any further mention of it at present. Let me urge, however, upon the angler a single advice in regard to it. On no occasion, while fitting it to his rod, should he neglect examining into its sufficiency. Every knot, strand, and length of the entire casting-line ought to be separately scrutinised, and, to a due extent, tested. The fly-hooks also, which are intended to be made use of, require close investigation. It may happen, for instance, that the barb is deranged or broken, the hackle loose, the eye or neck of gut fretted and weakened. There may, in fact, be half a score of matters connected with the fly-hook that need to be looked into, nor is the requisite investigation accompanied with much trouble or loss of time; at any rate, what trouble it costs or time it involves is made up for by the measure of risk avoided or got rid of.

THE CASTING OF THE LINE.—In fly-fishing for salmon, the casting of the line is generally managed, first of all, by raising the rod back over the left shoulder. This part of the operation requires to be done slowly

and deliberately, with a slight increase of speed or force on the part of the performer as he proceeds. He will thus, if managing properly, raise the dipping or employed portion of the line above and behind him, so that, by further elevating the rod and bringing it round over his head, both hands being employed in the exertion, he shall cause the tackle in question to describe, as it were, a sort of semicircle in the air. He must then, at the moment when the sweep in question is completed and the rod has attained its highest elevation, direct his fly forward, by a rapid impulse, towards the spot where he wishes it to alight; and this should be done without any accompanying jerk or violent movement, but solely by a firm continued exertion of strength, as in the "putting" or launching of a large stone or cannon ball.

This is the left-shoulder method of throwing the salmon-line, and is commendable, not so much on account of its being more easily managed than the other, but chiefly because of the advantage it gives the angler when under a bank or in advance of shrubby ground, where his hook, were it suffered to fly back instead of being kept aloof, over his head, would frequently find its anchorage behind, and thus endanger the safety of rod and tackle, as well as try the patience of the thrower. But there is no reason why, under favourable circumstances, right-shoulder casting should not be resorted to. I think, for my own part, that the fly hove from the right shoulder generally alights on the stream surface with greater lightness, and can be directed with more accuracy, towards the desired spot. The sweep or circle is, in this case, described over the arm or shoulder and not over the head, as in the other mode of throwing. The fly consequently, during its

performance, is held more aback and occupies a less elevated range. On this account it is extremely apt, should the angler prove too liberal of his line, to come into contact, as already mentioned, with the bank behind him.

I have frequently heard salmon-fishers argue upon the matter of distance to which a fly may be hove, one boasting that he can discharge so many yards of line, another that he can master a still greater surface of water, and a third, who ridicules the exploits of both, asseverating that he can lay his fly with dexterous precision across the broadest stream in Scotland. Now, in its adequate place among vaunters and freshmen, it is quite fitting to talk of such wonderful feats as fill philosophers with amaze and doubting, but these marvels fall on our sober ears without the desired effect; and we feel assured that every practised angler will only give his contempt in exchange for their relation. Does it never, I ask, occur to those who make the casting of some fifteen or twenty fathoms a matter of moonshine, to inquire what of actual power the lever they employ possesses, which enables them, as they fancy, to lift or recover such an extraordinary outlay of line? Giving even the advantage of a rod twenty feet in length, and allowing moreover that its wielder is fully six feet in height, with a proportionate extent of arm, and that he stands elevated above the surface of the stream not less than a foot, I maintain it to be impossible for him to lift in or recover, so as to effect a second discharge, more line than will measure three times the length of his salmon-rod; I do not of course include what is confined within the rings of that implement.

In fact, without adopting the heaving or pitching system practised on Thames and other English rivers—

a mode of throwing not adapted to fly-fishing, it is impossible for the angler to command a range of cast exceeding twenty-seven yards from the spot whence he plies his hook. It is, I admit, quite practicable for him, in the act of throwing, to let out a yard or even two of line more than he is able to lift or recover; but, by doing so, he only imposes upon himself the necessity of using the reel or winch before repeating his cast, in order to shorten or again accommodate the line to the power of his lever.

I might readily, were I so inclined, dilate upon this subject with more order and ceremony, but I have no wish to treat of it in a plenary or philosophical manner, by disquisition or diagram, as if it merited the special attention of the angler. All I desire to be observed is—and the fact bears its own explanation among the axioms of mechanical law—that the length of the lever or lifting power comprised in the rod and its wielder, regulates to all intents and purposes the distance to which the fly can be hove. The action of the arm and muscles, the weight of the line, the make and pliancy of the rod, and the propelling or repelling virtue of the air when in motion, its resistance, and many other causes, act, there is no doubt, to the advantage or prejudice of the cast taken; but the lever power, when used as a power of recovery, is affected by them to an extent easily calculated on, and, on the whole, they can only act as very subservient aids or drawbacks to the exercise of that power.

THE WORKING OF THE LINE AND FLY.—In what are properly called pools, that is, the terminations of streams or sluggish water that can only be fished over with effect when rippled by wind, it is generally expedient to direct the fly across, almost at right angles with

the bank, and allow it to sweep or sail round, so as to catch the current and bring the line to its full natural tension. To do this invitingly, the angler must ply his rod, gradually lowering it as the fly beats round, until the point has declined to within two or three feet of the water's surface. The plying motion consists of a measured and gentle working of the line, so as to impart a life-like appearance to the lure, causing it, as it were, to amble and sport leisurely in the stream, opening and shutting its wings, and giving opportunity to the fish to pursue and seize it. This motion also assists to keep the line in sufficient stretch, and to disguise all the unattractive, exposed and suspicious points of the fly and tackle.

In fishing streams, (I use the word as one differing in signification from pools, and referring to those portions of a river which are of rapid movement), the line, instead of being directed across at right angles with the bank, ought to be thrown more in accommodation with the run of the current, say at an angle of 45 degrees, so that the fly, in describing its sweep or curve, may not come round too rapidly and escape the notice of the fish. In rapid water, such as the necks of streams, straits, and eddies, the plying and working of the hook is not always requisite; at any rate, one should have resort to it as a secondary measure, allowing every chance to be given to the fish rising, at the juncture which takes place on the completion of the curve, or what is termed the moment of hing. This failing, the salmon-fisher advisedly may finish off his cast with the process in question, which, if it do not prove irresistibly attractive to a pursuing fish, may be the means of stirring up to the scratch one hitherto dormant.

Those parts of a stream or pool, which are known to

afford favourite shelter to salmon, cannot be angled over with too much care. A single cast or two will, in most instances, be sufficient to determine the presence or humour of a fish, in places where the shelter is limited, or, it may be, doubtful, such as a single stone or projection of crag; but with a range of water underwrought with rocks and retreats, the angler should deal prudently and circumspectly. A cover of this sort it will not answer to beat in quick, slovenly style, forwarding oneself within ken and survey of the game, as some do who, from their eagerness to be in *medias res*, plunge waist-deep into the primest portions of the stream, scaring right and left the liers in wait, whose plunges in the distance are mistaken for sober, matter of course movements, indicative not of alarm and excitement, but of readiness to favour the adventurous and impatient rodsman.

It is here, on such a range of water, that the salmon-fisher should exercise caution and employ method. He ought to work progressively and with deliberation, commencing above the extreme head or foot of the range in question, and compassing the whole, I do not say inch by inch, but in such a manner that no opportunity shall be given for any one fish to avoid seeing the fly. He should also beware, if possible, of disturbing the water already experimented on, as by doing so, he not only destroys the charm of a yet untried hook, but, in frequent instances, so alarms the fish as to cause them immediately to shift their quarters. Sometimes also, when thus disturbed by the approach of one's person too near their haunts, they will grow sullen and suspicious, and this effect is not always readily worn off, but will continue influencing them for days to come.

How far off a salmon can discern the transit of a fly

from its retreat, it is not easy to ascertain; and it would require a good deal of particularising to take away from the general nature of the question. This, however, is well known, that fish lying in a depth of water exceeding ten or twelve feet seldom, if ever, rise at the artificial fly. It is true there are many gullies, both in Tweed and other rivers, of nearly twice the depth above specified, where salmon are known to rise freely, but such fish are not at the bottom. They rest merely on the craggy sides and ledges which wall in the water. In some localities, they hold their out-look from a sunken fortalice of rock—the fissures of which afford them ample and secure accommodation.

That a fly-hook, say of the largest spring size, may catch the observation of salmon at a still greater depth than twelve feet is possible enough; but it is quite true that, if so, it loses all attractive effect, and a fish would as soon think of leaping at the moon as bestir itself for a mouthful so remote. So much as to sheer depth of water, when considered as distance betwixt the salmon and the fly; but let me take the case of a fish lying in a shallow break. How far off, in this instance, would the hook operate as a lure? For my own part, I think it would require to pass within four or five feet of the spot where the salmon holds watch, and I am led to think so, in some measure, from experiments made, at the end of July, 1845, at Coldstream bridge, where, during the grilse season, in a fine water, there is every opportunity for one stationed above to observe the natural powers and instincts of the fish, both as regards the matter in question and in respect to their likings and aversions manifested towards the colours and sizes of artificial flies.

Salmon, be it noted, are a duller fish, by many degrees,

than common river trout, and by no means so sharp-eyed as bull-trout and whitlings. These frequently take the hook well in waters considerably discoloured, and refuse it when the streams have resumed their ordinary size and transparency. It is otherwise with salmon, whose visual organs are generally, under such circumstances, unable to detect the transit of the fly over currents comparatively shallow; nor will they attempt to seize it or look out for prey, until the flood or fresh has very much subsided, and the floating particles of opake matter, consequent on such swell, are entirely at rest. But, although I have every reason to believe that the salmon is not quite such a quick or sharp-sighted fish as some give it the credit of being, and that, even in the clearest water, it is unable to detect the passing of the fly at a depth and distance from its retreat exceeding twelve feet, yet, should the lure employed hit its fancy, it will, if inconvenient to attempt seizing it owing to the rapidity of the current or other cause, follow the hook round over a space of many yards, until a position and rate of speed have been acquired by the latter, which either encourage the endeavour to take hold of it, or lead to the detection of its nature, as a guile or artifice. This, however, is a mode of procedure on the part of the fish by no means invariable; for salmon will often make for the fly the moment it is perceived, nay, in some instances, the instant it alights on the surface; besides, there are many casts or salmon-throws which do not admit of travelling the hook at all, such as the narrow heads and hings which frequently preface deep, ragged water, also confined places, formed by break-waters and cairns, &c. &c. Into water of this description, the fly should be heaved with care and lightness, so as not to alarm the fish. As to its primary movements, allow the

current in some measure to control them, but do not give it the full sway. Always recover the hook upwards or towards yourself after allowing it to drop, and do this by gentle impulses, not urging it into a gallop or hasty pace, but guiding it at an amble, so as to appear more life-like and natural, whether taken as an insect or as a small fish.

In salmon-fishing, never allow the hook itself to plough or ruffle the surface of the water. By the trout-fisher, whose lures are in point of size comparatively insignificant, this may be done occasionally without any bad result; but a salmon-fly thus worked will generally occasion distrust or terror, and seldom prove inviting. On the other hand, however expedient it is to keep the fly well-sunk while travelling it, one must avoid falling into the error of allowing it to sink too far. It is into this extreme that many of our best salmon-fishers are apt to run. They employ frequently, when there is no occasion for it, too much throwing line, and at the same time, while working it, lower the point of the rod beyond all due proportion. Consequently, they are often obliged to gallop in order to sustain the fly, and should a fish incline to take it, in two cases out of three they are left without any indication of its attempt; nay more, in the event even of a marked and well-directed rise, where the presence of the fish could not fail of being detected, a very long line is incapable, from its want of sufficient pressure, to insure the planting or fixing of the barb in the mouth of the salmon. It acts as too distant and too loose a method of communication betwixt the angler and his spoil. It makes it necessary for him to attempt hooking the fish by striking—a mode of operation in respect to salmon which is certainly reprehensible. In the case, however, of a strong current, or when the

angler is highly elevated above the water, as on a bridge or rock, the employment of a long travelling line is quite expedient and in no respect falls within compass of the objections above stated.

RECOMMENDATIONS HOW TO ACT ON RAISING A FISH.—
When fly-fishing for salmon, the angler requires to have a general notion of where his hook is, and how it traverses the stream or pool, but this is all. To watch it minutely, is not necessary. By doing so, the eye is frequently brought into inopportune contact with the fish itself when rising. It detects its presence before the salmon has seized the fly; and, as a natural consequence, the rodsman in the surprise or flutter of the moment, is very apt, either to draw away his hook by a sudden or violent jerk, or else to check its progress for the moment, and allow opportunity for the fish to discover the deception. In trout-fishing with the fly, we can scarcely, in the event of a break on the surface, strike too rapidly. It is different in salmon-fishing. Here, one should not alter the motion of the hook until he is actually made sensible of the presence of the fish, by feeling his weight on the line; nor even then is there any act of exertion required on the part of the angler, further than the simple raising of his rod, in order to fix the hook. When force is applied, or any motion approaching to a jerk made use of, the chances are, that either the line itself or jaw of the fish gives way: whereas, a line of mere ordinary strength and the tenderer parts of the mouth will always sufficiently resist the slight impulse which is required in order to hook salmon. But I need not to say more on this matter, for it will become natural to one practising on a salmon-river and travelling the fly properly, to strike, as it were, with effect, and also to make the most of such rises or attempts on the part of

the fish to seize the hook, as indicate something faulty in its humour or vision.

All occasional salmon-fishers have, in their experience, met with blank and adverse days ; and of these, the most tantalising happen when the fish are plentiful ; when they are inclined, moreover, to look at the hook, to follow it, and even break the surface above or near it, without making any real attempt to take hold. What, it will be asked, is to be done by way of remedy on an occasion of this sort? The practice of experienced anglers has been to change the fly over the fish ; and, indisputably, it is the correct one. It must not, however, be presumed, that there is, to meet all circumstances, a great deal of efficacy in this resort, and that one, after experimenting to a certain extent, may hit upon what he chooses to term the killing fly of the day. It generally happens, when fish are in the capricious humour I speak of (affected possibly by atmospheric causes, often by the state of the water, and as often by the action of solar light), that they remain so for a considerable time—for the space, at least, of three or four hours, sometimes nearly a whole day. The operation of a change of fly, made under such circumstances, is almost always limited to an individual fish ; were it otherwise, there could be no reason to complain ; but I doubt much, unless in the event of a change of weather or state of water, that salmon, having shown a degree of partiality to the three or four flies first used by rising at them, would, on the exhibition of a fifth or sixth, all at once discover towards these a peculiar fondness which induces them, without reserve, not merely to show face, but greedily to take hold. In the case of an individual fish, this is, I allow, possible enough to happen ; but I cannot bring myself to believe in the influence of any

particular hook, used under such circumstances, over the tastes and caprices of the general body.

For my own part, I am commonly content to find out a killing fly in the one which induces fish to rise ; and the reason I have for substituting another, should a salmon merely break the surface without taking hold, is not that I expect the substitute to prove a whit more enticing, but I would do all in my power to prevent the distrust and alarm possibly consequent upon a repeated transit of the identical lure. This distrust, however, be it noted, is only a possible event, as regards the fly-hook in question ; and the substitution of another, so far from acting as a counter-charm, may, on the contrary, operate strongly to my prejudice, occasioning or confirming the very alarm I am endeavouring to suppress.

The expediency, therefore, of changing the fly immediately, over a grilse or salmon, on the failure of its attempt to take hold, is very questionable ; nor although occasionally acting on it, am I a slave to the practice. If led to believe that the fish has missed his aim, less from shyness than over-keenness—or, it may be, owing to the inconvenience of place and position, the rapid nature of the current, improper management of the line, or other such cause, most assuredly I would not change the fly over him, until convinced that he had no inclination to rise a second time ; even then, I should be chary of bestowing a new hook without allowing him an interval of rest not shorter than a quarter of an hour. In passing, however, the first fly over him a second time, I would use little or no delay. The humour he is in for rising at it has already been tested, and there is some possibility of its subsiding, should the opportunity be given. Was I convinced, however, that the fish started came towards the hook in a dubious, distrustful mood, I

would then most assuredly allow him a reasonable respite of some minutes, and, at the same time, substitute a fly-hook of smaller dimensions—I do not say less gaudy in appearance, but rather the contrary; for it is well known, in respect to Scottish rivers, that the Irish fly, with all its glitter, is most killing under a clear sky and on low limpid water; while the Scotch one, sober in hue, develops its attractive powers in dull, windy weather, and not unfrequently when the streams are of a deep porter colour, the delight of the trout-fisher's eye. This refused, I would experiment, according to the state of the river, with a larger one; and finally, as a last resort, recur to the hook first employed.

Perhaps all this extreme fuss and trouble about a single fish may be looked upon as unnecessary, if not ridiculous. It is so, I allow, in certain rare positions; and there are those who, being placed in such, laugh at the idea of bestowing more than mere brachial exertion in the capture of salmon with the rod. Such, having their will and wont of a well-reputed stream, are less dependant for sport upon the caprice of the fish, and take less care to exhibit craft and science in the securing of them than others, whose range is limited and unprotected. These latter, however, be it understood, form the better salmon-slayers. They may be unable to boast of many captures in proportion; but it is not because they are deficient in skill or practice. What honour is due as a sportsman to the ranger of a well-stocked preserve? Is he necessarily a better shot—keener-eyed—steadier handed—more active—more enduring—abler in the management of his kennel, than one who has to toil over hill and dale, through marsh and stubble, in search of a broken covey or solitary hare? With the former, to miss his bird is a matter of small

consequence. He can afford to do so, while the other cannot. He can afford to pass it over altogether—to forgive his dogs a careless point or a run in. He requires to take no pains and encounter no fatigue. The game rises at his feet; the bag can be filled at all events. It is different with the latter. He cannot afford the throwing away of a single chance. One act of misconduct on the part of his setter—a too hasty or too dilatory pull of the trigger—an error in the fielding—a miss from over-excitement or any other cause—the escape of a wounded bird, each of these circumstances by itself tells hard against him, and is frequently an occasion of lament and grievance. Such occurrences, however, produce their advantageous effect, by encouraging the endeavour to avoid them for the future. Being felt as matters of importance and treated as such, they all act towards making the sportsman. They inculcate prudence, decision, vigilance, the study also of natural history, as far as relates to the habits of his game. They make him careful, frugal, active, and earnest—superior, as respects his occupation, to the slayer of hand-fed pheasants, as is the wild-deer in strength and fleetness to the bloated venison of some palace park.

And thus it is with the true angler. He is not made out of thick and manifold, but out of few and scattered resources. The science of his art is acquired in a rigid and exacting school. He has to reconcile himself to disappointments, to practise self-denial, to encounter hardships. He requires to study devotedly, perseveringly; to neglect or omit nothing. With subdued expectations he ought never to despond. His motto should be of bright letter—the banner-word of a conqueror.

HOW TO MANAGE A SALMON WHEN HOOKED.—On hooking a fish there remains often much to be done before he is secured. About one-third of hooked salmon escape; some through sheer carelessness or want of experience on the part of the angler, others by reason of the fish being slightly or insufficiently fastened, and a few owing to uncontrollable circumstances which occasion, without choice or remedy, the snapping or wearing through of the line. Thus, for instance, a strong fish, on being hooked, may betake itself in a direction down or across the river, while the angler, his stock of line being run out, is, from the nature of the banks or the breadth of the pool, unable to pursue; or it may, having its lair among sharp-edged rocks, exert itself with success to wear through the gut which holds it—a manifestation of cunning, on the part of an old fish, by no means uncommon, although it is seldom met with, when the salmon is fresh-run and relies for escape upon the exertion of its strength and fleetness.

On hooking a fish, the first thing to be done by the angler is to raise his rod to a proper height—to throw the point of it well back over his shoulder, or, in technical language, show the butt to his prisoner. To do this properly, one does not require to use force, or, in the smallest degree, strain his rod; nor should he, in all cases, act with extreme gentleness, but accommodate his firmness of hold to the strength of his tackle and size of hook employed. At the same time, he should be prepared to allow line, and that freely, in case the fish choose to exert its speed.

It is not always, on hooking a salmon, that the angler can immediately form a just opinion as to its size. Fish, under the control of the rod, often acquire

dimensions very different from those which, at first start, were attributed to them, and as frequently they fall short of what is conjectured. It sometimes happens, for instance, that a powerful salmon makes reserve of its strength, and by its movements, passionless and confined, appears for the space of several minutes little better than an unresisting, inanimate mass; nor, until irritated by the continued pressure; I say not, pain, resulting from the rod and tackle, does it give vent to its fury in grand impetuous bursts, which, as they shake and agitate his rod and line, stir also and agitate the heart of their wielder.

On the other hand, a comparatively small fish will sometimes, on being hooked, exert, on the instant, an unexpected degree of strength and velocity. It will dart upwards or across the stream with railway speed, and conclude each heat with a succession of somersets which, although they exhaust rapidly the power of the performer, are severally, as they occur, fraught with danger. In this case, the salmon quickly betrays its size and can be dealt with accordingly; still there is always a necessity for the exercise of extreme caution, for the more volatile in disposition the fish appears, the greater are the chances of its escape. When deeply-hooked, it is generally unable or unwilling to indulge the eye of the angler with antics of the above description, but will confine its manœuvres to its natural element, merely breaking the surface on emergencies (on the lapse, for instance, of some powerful sally), and frequently betaking itself to a different mode of action, suited as readily to snap the line or detach the barb from its mouth. The following instructions, as to playing or managing a salmon with the rod, will be found useful.

Always, in running a fish, keep well up to, or if possible, at right angles with its head. In the event of its taking across the current instead of stemming or descending it, give the butt, without reserve. In the case of a plunge or somerset, slacken line as quickly as possible, but use no delay in recovering it when the danger is over. When fish are plentiful and in humour to take the fly, it is better to risk the loss of an indifferent-sized individual which you happen to have hooked than to allow a long range of unfinished water to become disturbed, through its capricious movements. In this case, stint the line and hold on obdurately, but not beyond the presumed strength of your tackle. During the grilse season, there are many portions of water, on Tweed especially, where it would be absolute folly in the angler, were he to humour the fish to its heart's content. A lively new-run grilse may occasion more alarm among its kind than one is aware of, especially if the water be of the transparent hue it generally bears, during the summer or autumnal months. In event, however, of the salmon being few or rising shyly, I would advise that some degree of care and ceremony be taken with what fortune brings to the hook, and that, on such occasions, more regard be paid to the management of the fish under control than to the non-disturbance of a few yards of stream, where the chances of adding to one's success are, at least, extremely doubtful.

In these circumstances, avoid using undue violence. Should the fish escape, the consciousness of your having done so will only add to the disappointment. There is one precaution particularly to be attended to in respect to a newly-run fish, and that is, immediately on hooking it, use a moderate degree of pressure. The

salmon will then brave or stem the current and direct its course upwards, whereas on tightening the reins it will frequently do the reverse, and thus not only may a portion of the water in prospect become disturbed, but there is considerable chance, and in some places an absolute certainty, of the fish, if a large one, making its escape.

Baggits and kelts have often a strong inclination to descend, instead of pushing upwards; but little danger, on their doing so, accrues to the line, owing to the nature of the places they frequent, their style of running, and other causes; moreover, the loss in their case is less felt or regretted than when good, wholesome fish make off with the tackle.

THE LANDING OF THE FISH.—On Tweedside, a gaff-hook or *cleik* is generally made use of by salmon-fishers, in order to expedite the landing of the fish. I have remarked, that in some parts of Scotland a small hoop-net is also employed, for this purpose. In respect that it is not liable to abuse or injure the appearance of the salmon, the latter implement may be considered the preferable one. The *cleik*, however, is more convenient, and may be resorted to in places and at distances where the hoop-net cannot be made available. The employment of a landing appliance at all—certainly not its advantage—may be considered, in a sporting view, as questionable. I have heard it insisted on, that the angler ought always to play his fish to bank and secure him entirely by his own management, and with his own hand. To this I do not entirely assent, but I certainly think that there are occasions when the gaff-hook is brought into play quite inopportunately, when, in fact, it acts, along with its wielder, a part in the capture of the fish that can

scarcely be esteemed secondary to that engaged in by the rodsman himself. The credit of taking the salmon is thus divided betwixt two parties; and really, on many of the Tweed rod-fishings, this is the case: nay, I have already, at the outset of the present chapter, had occasion to state, besides his assistance with the landing-hook, the attendant fisherman contributes largely, in other respects, towards the sport of the angler, and is as fully entitled as the latter to claim the palm after success.

In expert hands, the gaff-hook is unquestionably of great advantage as an implement for securing partially-exhausted fish. At the same time, it curtails what many consider a portion of the sport: and I have seen it put into requisition at a stage altogether premature: the fish, on being hooked, and before its strength was nearly worn out, having waywardly edged in, so as to give the opportunity referred to. I am well aware that there are some salmon-fishers who hold the playing and landing of the fish as very inferior considerations, and who reckon the whole art and amusement to consist in the raising and hooking. With one gentleman I am acquainted, an able and eager sportsman, who, after the first burst, was accustomed to resign the rod into the hands of his attendant, in order to rid himself of what he considered a slavish or supplementary task. To such individuals, the employment of the gaff-hook is a matter of perfect indifference: but I cannot reconcile myself to their cramped and petted notions on the subject of what forms a most essential constituent of the amusement. The playing and landing of the fish are unquestionably act and part with the raising and hooking, and when separated, all interest on the part of either performer is diminished; the capture of the fish becomes a disputed

matter, achieved betwixt both parties, and claimed accordingly.*

In absence of an assistant, the salmon-fisher should always be careful to select the best landing-place within view—one to which he can readily lead his fish when exhausted, and where he has no occasion to exert further strength than he has all along been using, in order to draw it ashore. Gravel banks partly covered with shoal-water, flat rocks similarly circumstanced, or any level spot where the salmon may naturally turn over at once, without power of recovery, on his broad side, are well adapted for the purpose in question. In case of no such convenient landing-place being at hand, I would, rather than risk the loss of a good fish, guide him to some distance down the river, until, in fact, I fall in with a desirable port. Do not, however, be induced to haul a salmon up against the stream, with the view of landing it on some jut of sward, sand, or rock, that engages your fancy at the moment. Should the fish press or incline to be guided towards it, good and well; but on no occasion resort to force, when force may be avoided. The fish being grounded, shorten line to the extreme, and, holding back your rod with one hand, step forward, and with the other grasp the salmon tightly above the tail. You may then toss or carry it to the bank above, and, by a blow or two on the head, immediately despatch it. In case of your line being too long to permit you to seize the fish without quitting hold of the rod, then do so, only act with rapidity when you approach to make your seizure.

I would recommend all anglers who are in the habit of fishing salmon unattended, to carry along with them

* For directions how to employ the gaff-hook, see Chapter II, on Tackle, &c.

a short gaff or landing-hook, not exceeding in length of handle two or three feet, such, in fact, as may be slung conveniently from, or placed inside of, the pannier. This will be found, on many occasions, greatly to facilitate the securing of a tired fish, and is not intended, as is the ordinary gaff-hook, for striking with, but merely for inserting below the gill-cover of the salmon and dragging it to the bank.

In the course of the above instructions, I have touched upon most of the points worthy of notice, in connection with the subject of salmon-fishing. To extend further my line of observations, I feel to be more simple than satisfactory. The matter is far from being exhausted, but I doubt much that I could add anything of avail or interest to what I have already stated or set forth. I shall not, therefore, hamper my code of instructions, however faulty or deficient, with any additional advice, or obtrude into a region of facts what is purely theoretical in connection with salmon-fishing. A great deal that might not unappropriately have been placed under this head will be found in the chapter upon Salmonflies, and in other parts of the volume. By no arrangement of subject that might have been entered upon, could I have avoided distributing through several portions of the work what professed to belong entirely to one; nor, indeed, apart from this restraint, could I wish, for the mere sake of isolating or giving separate distinctness to the different parts, to break in upon the connection that naturally exists betwixt them.

Considering, therefore, the entirety of the work as more essential than the entirety of each of its parts, I make no apology for what may be reckoned a loose and scattered treatment of this or that subject; the more especially, as I am shut up, without remedy, to the

course before me. A reference then, as at present, from this to that chapter, being an interference with the subject-matter of either, must be held as showing the connection or intimacy already spoken of, and without which the entirety of the volume could not exist. I now proceed, in a separate chapter, to treat of Salmon-fishing as practised with the Parr-tail, Minnow, and Worm.

CHAPTER XV.

SALMON-FISHING WITH THE PARR-TAIL, MINNOW,
AND WORM.

IN Chapter VII., I have described, at some length, the parr-tail tackle, the way in which the bait or lure ought to be cut, how attached to the hooks, &c. &c. My observations upon these matters, although made in reference to trout-fishing, comprise, when applied to salmon, nearly all that can be said upon the subject. Almost the only additional instructions I can give the angler refer to the weighting of the tackle. In this respect, he requires to be liberal of his leads or plummet, and in spinning the lure careful that he keeps it well sunk; in fact, close to the bottom of the pool or stream. Salmon, when at all inclined to take the parr-tail, will do so in water comparatively still, as well as at the head of streams and rapid places. They seldom pay any regard to it when the river is discoloured or beyond its ordinary spring size, although bull-trouts, especially kelted fish of this description, will seize it greedily. It is esteemed by some surest as a bait at the latter end of May, but a clean fish will take it as it does the minnow, throughout the spring months.

In very cold weather, during March, and when the water is most uninviting to the eye, having that greenish tinge which indicates the presence of snow at its sources, I have known the parr-tail, in common with the minnow, to be a killing bait. Nay, amid thick

slabs of ice, and when the air is so frosty, as in the course of a few minutes to stiffen the wetted line, and render it unfit for work, this bait will be found for the moment, if cast where salmon are, of almost certain avail. Under circumstances, of course, such as I have last mentioned, there would be much difficulty, after hooking the fish, in securing it, as, unless forcibly dealt with, it would certainly make for shelter under the ice, and in all likelihood cut or wear through the line against its sharp edges.

In fishing with the minnow for salmon, observe the same directions as when fishing with the parr-tail. Play the lure near the bottom, and more leisurely than you would do were river-trout the object in view. Use a minnow of large size, and tackle to correspond. The parr-tail tackle of three hooks may be substituted advantageously for the common minnow tackle of two. Bright frosty days in March and April are much preferable to dull windy ones, when the minnow is used; and should the streams be clear or in a dwindled state, most salmon fishers would look forward with certainty to obtaining sport.

In the spinning of the parr-tail and minnow, as it is practised for salmon, that is with heavy leads and close to the bottom of the cast or lair, there is great danger of the tackle running foul below of rocks and other impediments. Sometimes in playing, it will become locked in betwixt two stones; sometimes one of the hooks catches against a sunken tree or mass of turf, and in either case the angler finds himself what is termed fast. On such occasions, and they frequently happen to those even who have an accurate knowledge of the ground they fish over, the angler having, without success, made every attempt at extrication which ordi-

narly suggests itself, ought, as a final expedient, to give out line liberally with his hand—say three, four, or five yards beyond what was made use of; he should then cast out from him, as if with fly tackle, in the direction taken immediately before running foul, and finally, this done, recover line quickly. I know of no surer method than this of liberating fast tackle. The experiment, as detailed, may and ought to be repeated at least a dozen times, without despair of success. Indeed, unless the locking of the tackle happened to be an involved or desperate one, I never saw it fail.

I proceed now, having thus briefly disposed of these methods of salmon-slaying, not however because they merit small regard, but chiefly, as I have already in a former chapter, engrossed all that appertains to either subject, I proceed to describe the manner of fishing for salmon with the worm, as practised on Tweedside. I am not aware that in any one of our large northern rivers, the Tay, Dee, Spey, Findhorn, Ness, or Shin, the mode of angling I am about to treat of has been more than very occasionally tried, and I can easily comprehend why such occasional experiments, although made by those instructed in the art at the feet of old Father Tweed himself, have generally proved failures.

On these rivers, to give the experiment full justice, the experimentalist would require not only an accurate knowledge of how he is to conduct the whole process, but he must have besides a most intimate acquaintance with the stream he is angling in, and be able at a glance to ascertain from its size, colour, and temperature in what humour the fish are; for in worm-fishing for salmon there is this peculiarity, that it cannot be indulged in as a common or every-day sport, but is dependant more closely upon circumstances than any other branch of

the gentle art I am acquainted with. Thus, to insure success, one must have the water at a certain reduced state to act upon; he requires to be favoured in general with a clear sky, none the worse of there being a disposition in the air towards frost. The streams, also, to which he has access must possess that degree of depth and rapidity which are necessary both to conceal the fish and assist the play of the bait; moreover, it is essential that, notwithstanding one and all of them may have been angled over repeatedly with the salmon fly, they shall not previously, during the decrease of the river, have been disturbed with the worm itself; if so, should the angler impatiently have resorted to it before they were in order, every fish then descrying it would, at its re-appearance on a favourable occasion, hold it in distrust.

The most approved of tackle for this description of angling consists of a large hook of the round-bend shape, Nos. from 14 to 16 of Adlington's. It requires to be tied upon picked salmon-gut, fresh and round; the shank-end of the wire in tying ought to be left bare to the extent of nearly a quarter of an inch—thus



The single gut or foot line, from the hook upwards, should extend at least six feet, and terminate with a loop, so as to allow of its being readily annexed to the higher casting line. It should also be furnished with a box-swivel fixed below the uppermost length.

With regard to the leads or plummets, these ought to

be placed at a distance of eighteen inches from the hook, and should consist of at least five or six pellets of large shot, Nos. 2 and 3. In all cases, the tackle in question requires to be heavily shotted, but in regulating the quantity of weight, it is quite necessary that attention be paid to the power, depth, and swerve of the cast or stream fished in.

As to the worms best adapted for salmon fishing, I require to say little. The lob or large dew-worm is esteemed the favourite. This is easily obtained in the desired quantity from almost any piece of garden ground. It is met with, stretched at length on the earth during mild nights, and especially after a shower when the surface of the soil is damp (see Chapter VI.) Besides the lob-worm, the large button-worm is sometimes used, and possesses this advantage, that it is easily scoured and becomes tougher and redder than the other. It is not, however, found in such great abundance or in all localities, and with respect to size is decidedly inferior to the lob-worm.

In baiting the hook, two, sometimes three worms are made use of. These are attached in the following way: Holding one of them betwixt the thumb and forefinger of the left hand, insert the point of your hook a short way below the head of the worm, which, I shall suppose, measures in length eight or nine inches; run the bend of the wire carefully along through the bait, to the full extent of an inch, in the direction of the tail; bring the point out again, and passing over an equal portion of the worm, re-enter it further on, drawing up, as you do so, what has already been transfixed, along the shank of the hook, then, as before, bring out the point an inch lower down. Repeat this proceeding a third time, and at its completion pull the worm up

quite free from the hook to the gut above. Select a second worm, and insert, as formerly, the barbed wire below the head; run it along underneath, until the shank, bend, and point are completely concealed. Then, with your finger and thumb, press down the first bait close against the shank, so as to hang over in small loops or folds.

In the event of a third worm being thought necessary, string on the one preceding it in the manner I have already described, and use the worm in question to cover the hook.

I find on referring to Younger of St. Boswells well-known treatise on river-angling, as practised on Tweed-side, that the tackle recommended by him, and consequently the mode of affixing the bait, differ very materially from what I have described to be in use in the neighbourhood of Kelso. I shall quote what he says on the subject at full length; at the same time I have, on my side, the authority of the most able worm-fishers, and among others, Rob Keress of Trows, Forrest of Kelso, &c., &c., for asserting that his practice is in many respects faulty.

“Anglers,” says he, “differ in their choice regarding size of the two hooks proper to be used for this sort of bait; but those most generally preferred on the Tweed are large sizes Nos. 18, 19, or 20 of Adlington’s, the others 15 or 16. As they require to be shorter in the shank for this purpose than for the fly, it is requisite to break a piece from the shank of each, when the longer one is tied to the end of the gut, the other as much further up on the gut as to allow its point to be turned round to the shank of the first hook, and a little of the shank of each to be left untied, for the purpose of catching into the worms and preventing them from slipping

down from their proper positions. The first worm is then put on, by inserting the hook at its head and running it up over that hook altogether; then turning the uppermost hook round and inserting it also at the same incision; then run the worm up over this hook also till the tail of it is fairly above the bend of the hook, and the upper part on the line above. A second worm is taken, and the hook entered about its middle, running it up also to the second hook, which is entered at the same incision, and run round in the loose end of the worm, which covers it over the bend and point. The remainder of that worm is pressed up till it appear contracted and thickened on the short piece of gut intermediate between the two hooks; then a third worm is taken and run on the first hook head foremost, leaving its tail to cover and project over the point. This is called a full and proper salmon bait. Some use only two large worms in the manner of the first and third, with half a worm, or a small one put on the second hook to cover its head and point."

Upon what I have quoted I need only to remark, that the simpler tackle and simpler mode of baiting adopted on the lower salmon casts have always been found sufficiently effective, and the feats from time to time performed by the single hook, attest that it works well, while its very simplicity is itself commendable, and affords ample guarantee for the ease with which one—the veriest novice, may employ it.

I shall now describe the most approved way of angling with the worm for salmon. The performer requires to use a long, stiffish rod, eighteen feet and upwards, such as is employed for pike trolling. The rings should be large, allowing the line to pass through them without the smallest restraint, and the reel itself

ought to be facile in the extreme, having neither catch nor multiplier. With regard to the quantity of line employed in casting, it should not greatly exceed the length of the rod itself. Considering the manner in which it is weighted, and the mode of using it I am about to point out, it is difficult to manage more.

Having baited his hook, let the angler take his place at the head of the cast or salmon-stream he intends fishing. Immediately on commencing operations, there is a matter of observance to which he must pay particular attention. It forms, in fact, to some extent the secret of the successful worm-fisher, and is embodied in this simple piece of instruction, viz.: Let him draw out with his hand, over and above what he uses in casting, a yard or so of line from off the reel, allowing the same to hang loosely down towards the butt-end of his rod. The intention of this is, that he may afford instant and unresisting compliance with the movements of the fish, on first seizing the bait. Should the least check occur in the running off of the line, the salmon will, in most cases, quit before gorging.* I perceive

* With regard to the gorging of the worm by salmon, I may here state what fell under the observation of my brother, Captain Stoddart, R.N., in the summer of 1846, while angling on the west coast of Ireland, in the river Ballynahinch, in Galway. During the hot weather which occurred in June, and preceded the long-continued rains of that remarkable season, the streams had become in some places so clear and reduced in size, that (taking the oppressive heat also into consideration), fly-fishing was rendered, at certain periods of the day, a hopeless waste of labour and ingenuity. At the same time, there was no deficiency of salmon, and these were to be distinguished, without difficulty, from the high, rocky banks by which many of the pools are hemmed in. The only legitimate manner in which one or several of them might be captured, was with the worm, and to that bait my brother had recourse. As in many instances, while employing it, he had a distinct view of such fish as chose to approach, during the whole procedure and course of attack, he

that Younger makes no mention of the expedient I refer to, esteemed of such importance by many salmon-fishers; but I am not astonished at the omission, seeing his other directions are scarcely calculated to impress the idea that he knows much of this branch of angling, at least of the finer part of the practice.

I may state here, that the late Walter Jamieson, one of the best anglers that ever waved a rod on Tweedside, and, as far as regarded salmon, the most scientific of worm-fishers, attached primary regard to the drawing out of the line, as a precautionary measure, and that it was his practice, as well as it is that of others famed in the craft, to employ a single hook, baited as I have already described. Recurring, however, to the subject treated of, I have placed the angler at the head of a cast or salmon-stream. Let him heave his bait across, and, in some measure, with the current, which I take to be so heavy or rapid as to bring round the weighted line, at a deliberate rate, until it attains its full stretch or tension. It is necessary, during this circuit, that the worm travel deep,

remarked that, on its seizing, the salmon instantly swallowed the worms, hook and all, but in nine cases out of ten as quickly disgorged them, expelling the whole mass from its mouth with considerable violence, and seldom appearing inclined to renew the charge. Accordingly, acting on a different plan from what is the recognised practice on Tweedside, he immediately, on observing the fish seize, struck with vigour, and almost always with success. Under ordinary circumstances, this expedient is almost impracticable; the fish not being observed, the angler has no direct intimation of its having engrossed the bait, and should such afterwards become vouchsafed to him, it is generally too late, the expelling process (being one of violence, and accordingly more fitted to convey the intimation in question, than the mere act of gulping over the bait) having already commenced. I may remark that, however dissimilar in appearance, the two modes of practice are quite reconcilable, and as suited to the habits of the salmon, severally, each in its own locality, deserve attention.

in contact almost with the channel of the river, otherwise it will not prove attractive to the fish. On completing its range, the angler should allow it to hing, as it were, for a few seconds in subjection to the current, and when recovering, in order to renew the cast, should do so with extreme caution and deliberation.

When a check occurs, no matter from what cause it may, on the instant, be imagined to proceed, he ought at once to give line, not merely exhausting what he has in preparation, but dealing out ungrudgingly a further supply from his reel, and this by means of the hand, so that it may run off easily, and, as it were, humour the movements of a supposed fish. The check itself may very possibly be occasioned by collision of the plummets with some stone or jut of rock, or it may proceed from the interference of a trout or eel, but this being quite uncertain, the angler has himself to blame, should he, by dealing with it as such and un-circumspectedly, give opportunity for a good fish to escape. In general, however, I may remark, a mere check or stoppage is not the usual indication of a fish having seized the worm. What takes place has more the nature of an attack, quick and vigorous as is that of the pike on a running bait. The progress of the hook downwards is disturbed by a violent jerk or pull, sometimes in the direction of the current, but as frequently to the side, towards the lair or retreat of the salmon. Should this attack on the bait be met with unresistingly by the angler, and sufficient line allowed on the occasion, it will generally, after a short pause, become repeated, with less violence indeed, but with more earnestness and effect. In the interval between the charges, however, care must be taken to sustain and give an animated appearance to the worms.

If allowed to drop to the bottom, the salmon will no longer assail them. Accordingly, recover line with the hand, and be a little more chary than at first of yielding it when the fish renews the attack. At this point it is, that a slight measure of resistance will act as a provocative; previously its effect was to alarm and beget suspicion.

The salmon will now, after two or three successive assaults, bolt the bait; and his doing so may be inferred from a peculiar strain upon the line, more fixed and continued in character than any it had yet been subject to, during the attack. The resolute and quick elevation of the rod will suffice to fix the hook deep among the entrails of the fish, and nothing further is left to be done but to fatigue and land him.

Such is the method of capturing salmon with the worm pursued in the neighbourhood of Kelso. It can be practised with success, only when the river is clear and small. A slight degree of frost is also favourable, sharpening wonderfully the appetite of the fish. The greatest feat I happen to have witnessed, in the way of killing salmon with the worm, was accomplished six or seven years ago, on the Hemp-side Ford stream, close to Kelso, by a friend of the late Sir Francis Chantrey, who himself, on the occasion I allude to, was also engaged angling on the pool immediately above. Sir F. I understand to have been held in repute as a Thames fisher, and from the specimen I then witnessed of his skill in heaving the line, the perfect control he exhibited over his rod and tackle, I could at once perceive that he was no raw or undisciplined angler. Quite otherwise it was with his friend, who, although I make no question but that he had frequently, before then, disturbed the finny tribe, was evidently a very

inferior craftsman, compared with the sculptor. The latter, however, notwithstanding that he plainly knew nothing or little of the habits of salmon, relied upon his own address and attainments, as a Cockney angler, to achieve something extraordinary. Accordingly, instead of chiming in with the approved practice of the district, he chose to resort, as a means of capturing the fish in question, to the mode of taking trout adopted on some of the English rivers, and actually plied Tweed with a tackle comprising nearly a dozen hooks and a whole string of pellets weighing almost a quarter of a pound, while the bait, in absence of a bleak or gudgeon, consisted of an entire parr or fingerling. This he pitched from him, by means of a long, stiff rod, to an extraordinary distance, not less certainly than forty or fifty yards, allowing his line to spin out through the rings, and recovering it by the double action of his reel and hand, until the bait, having completed its course of transit, hung suspended midway betwixt the butt and top-piece. He then repeated, in a similar manner, the cast or heave out, causing the parr, as it returned towards him, to revolve with considerable speed and no doubt attract the notice of all the finny tribe within range of observation. I need not, however, state the result. The craziest salmon that ever cleft water would scarcely dream of showing snout to such a contrivance. At that season of the year especially, it was then about the end of autumn, there was not the smallest chance of obtaining even an offer, and unless the tackle should happen, by pure accident, to run athwart some spawning fish lying heedless on its redd, our distinguished sculptor might have ventured cast after cast, during a whole term of weeks, without being able to hit the features of a solitary grilse.

While Sir F. was thus employed attempting to reconcile the monarch of the rivers to the food of the fresh-water tyrant, his friend Mr. W. had judiciously placed himself under guidance of T. Kerss the fisherman, who, as the water was small and the day clear, recommended the use of the worm in preference to fly. Acting according to Kerss's instructions, who stood at his elbow with the gaff-hook, Mr. W., in the course of two or three throws, had the satisfaction of fastening on a moderate-sized grilse. It was evident, however, that he had not been accustomed to deal with fish of great calibre, for no sooner was it hooked than he endeavoured, by a violent effort, to haul it directly to the edge—an act of temerity immediately repaid by the snapping asunder of his casting-line, and, of course, the escape of the fish. Being a dun grilse, the loss was by no means severe, and became speedily supplied by the capture of one in better condition. To this succeeded another, and after it a third. In short, within the course of two hours, Mr. W. landed no fewer than eleven fish, salmon and grilse, all within the distance of one hundred yards from each other—an angling feat, under the circumstances of the case, seldom equalled. It may be proper to state that the fish were none of them in the primest condition. Those taken with the worm, at a distance from the sea, seldom are so; for it generally happens that at least three weeks have elapsed betwixt the running of salmon during a flood, and the reduction of the water down to worm-fishing level.

Although the true salmon (*Salmo salar*) will seldom, in a full or swollen state of the river, show regard to bait of any kind, yet it does so occasionally. On the 24th of October, 1838, I killed a newly run grilse, eight pounds in weight, with the salmon roe, when the

Tweed was large and thick. Bull-trout and whitlings take it freely on such occasions (*vide* Chapter VIII). On the Nairn river, in 1837, I captured with the worm a small clean salmon, the water being brown and full; and I have frequently on Teviot seen kelted fish taken by means of the minnow or parr-tail, under similar circumstances. I recollect with the former bait capturing a newly-run salmon of above nine pounds weight out of the same river (17th February, 1844), under circumstances not at all favourable for the angler, the streams running large, and, although not absolutely dirty, being highly impregnated with snow water. As to bull-trout or whitlings, they will snatch at a worm, minnow, or parr-tail without much ceremony, I do not say freely or at all times, but with many degrees less fastidiousness than the salmon, during floods or while running. Cold weather also appetises them wonderfully; but when the river is clear and small they become a shy, distrustful fish. As kelts however, they are, in all states of water, voracious, and will dash equally at bait and fly, with the fearlessness and avidity of the pike itself.

CHAPTER XVI.

PIKE AND PIKE-FISHING.

Pickereel ; Jack ; Pike ; Luce ; Gedd.

FIN-RAYS.—D. 19 ; P. 14 ; V. 10 ; A. 17 ; C. 19.

GENERIC CHARACTERS.—Head depressed, large, oblong, blunt ; jaws, palatine bones and vomer furnished with teeth of various sizes ; body elongated, rounded on the back ; sides compressed, covered with scales ; dorsal fin placed very far back over the anal fin.—*Yarrell*, vol. i. p. 383.

ALTHOUGH, in common with most anglers, I esteem salmon-fishing and the capturing of trout, whether with fly, minnow, or worm, pre-eminent among river sports, the trolling for pike also in places where they are known to attain great size and are tolerably abundant is an amusement by no means uninteresting.

Of late years, I have occasionally practised this branch of the art with great success ; my principal scene of action being the river Teviot, or, in fact, two or three pools belonging to it, which lie in the vicinity of Roxburgh, a small village situated about three miles from Kelso. As these pools, or the portions of them where pike lie, (for they are not all throughout equally infested by this species of water-pirate), are neither extensive nor numerous, I generally managed to test them quite sufficiently for the day in the course of an hour or little more. In a brown water, and when the fish were in taking humour, I sometimes confined myself to a single hole or haunt, from which, ere the

elapse of twenty minutes, I have managed over and over again to abstract a large creel-load of fish, varying in point of numbers from two to six, and in point of weight from ten to two pounds. The period of the day I commonly, on these occasions, devoted to pike-trolling, ranged from one to five in the afternoon, and often succeeded a morning spent in trouting, when I was well supplied with fresh and proper sized baits. In their edible qualities, the Teviot pike are the finest I ever tasted. They cut firm and white, have little or none of that slimy flavour which this fish generally possesses, and in their formation are comparatively small-headed, deep-flanked, and broad-shouldered.

In respect to size they have varied considerably of late years, and at present, except in one or two spots difficult of access, few very large ones are to be met with.

The first time I had reason to suspect that pike were somewhat numerous in the part of Teviot alluded to was on the 29th of May, 1838. Previous to this date no one, I believe, ever dreamt of angling for them further down the river than the pool at Mount Teviot, a strictly preserved stretch of water, into which the original stock had been committed by the late Marquis of Lothian, along with a breed of perch of a valuable description, attaining individually the weight of three or four pounds. On the day in question, the water being of a fine amber colour, I had been engaged trouting at the turn above Sunlaws Mill, the Nine Wells, and lower portions of the Ormiston streams, and had met with very fair success, having captured a fine whitling and several dozen of good yellow trout. Nearly three in the afternoon it was before I thought of retracing my steps homewards in the direction of Kelso, and this I did leisurely along the south bank of

the river. On reaching that part of Teviot which runs opposite Roxburgh boat-house, I was struck, as I had previously been more than once, with the appearance of the water a little further down, as being a likely refuge place for any stray pike which some large flood might possibly have carried away from the cauld at Mount Teviot. Accordingly, acting under this impression, I mounted appropriate tackle, appending the ordinary double-barbed gorge hook, and baiting it with a small trout. Holding the rod in my left hand, I hove the lure well out beyond a bed of pickerel weed which extended to some distance from under the rush-lined margin beside me. Scarcely was the bait out of sight, when the half-expected token of a fish having seized it took place. No one that ever felt the first attack of a pike at the gorge-bait can easily forget it. It is not, as might be supposed from the character of the fish, a bold, eager, voracious grasp; quite the contrary, it is a slow calculating grip. There is nothing about it dashing or at all violent; no stirring of the fins—no lashing of the tail—no expressed fury or revenge. The whole is mouth-work; calm, deliberate, bone-crashing, deadly mouth-work. You think at the moment you hear the action—the clanging action—of the fish's jaw-bones; and such jaw-bones, so powerful, so terrific! You think you hear the compressing, the racking of the victim betwixt them. The sensation is pleasurable to the angler as an avenger. Who among our gentle craft ever pitied a pike? I can fancy one lamenting over a salmon or star-stoled trout or playful minnow; nay, I have heard of those who, on being bereft of a pet goldfish, actually wept; but a pike! itself unpitying, unsparing, who would pity?—who spare?

Returning, however, to the point in my narrative at

which I broke off. I no sooner felt the well-known intimation, than drawing out line from my reel, and slightly slackening what had already passed the top-ring of my rod, I stood prepared for further movements on the part of the fish. After a short time he sailed slowly about, confining his excursions to within a yard or two of the spot where he had originally seized the bait. It was evident, as I knew from experience, that he still held the trout cross-wise betwixt his jaws, and had not yet pouched or bolted it. To induce him, however, to do so without delay, I very slightly, as is my wont, tightened or rather jerked the line towards myself, in order to create the notion that his prey was making resistance and might escape from his grasp. A moment's halt indicated that he had taken the hint, and immediately afterwards, all being disposed of at one gulp, out he rushed, vigorous as any salmon, exhausting in one splendid run nearly the whole contents of my reel, and ending his exertions, in the meanwhile, with a desperate somerset, which revealed him to my view in all his size, vigour, and ferocity; the jaws grimly expanded, the fins erect, and the whole body in a state of uncontrollable excitement. Being provided with a single-handed rod, and winch-line suited in respect of strength and thickness to light fishing; it was a marvel that either of these stood the test on an occasion so very trying. The worst, however, was over, and although the pike, as fish of its kind under similar circumstances always do, showed signs of remaining strength, coupled with great sullenness, it nevertheless, in the course of a few minutes, submitted to its fate, and allowed itself to be drawn ashore at a convenient landing-place, which fortunately was not far off.

This fish, the first I ever captured in Teviot, weighed

nearly a stone, and preceded in its fate no fewer than four others, of the respective weights, or nearly so, of ten, eight, seven, and three pounds, all of which I took from about the same spot, in less than an hour's time. Shortly after, three or four days intervening, I killed two pike of twelve pounds weight each, close to the place mentioned, and in the same season met with an incident which, as it has some connection with pike-trolling, is worthy of being recorded in this chapter. It happened in the month of July, on which day, Teviot, owing to recent rains, was somewhat discoloured, and I had ventured as far up its banks as the Roxburgh pool, intending to trout with fly and minnow, and also to give the pike a trial. That I might not, however, consume much time upon the latter fish, I had provided myself with a couple of set lines formed of strong cord. These it was my intention to lay out in a portion of the pool hitherto untried, and to allow them to remain there, while I angled for trout higher up the river. With the view of doing this I had secured, by desultory throwing in my progress towards Roxburgh, several small trout, and when arriving at the spot where I had intended to lay the lines, was unable to resist an anticipatory trial for pike with the rod itself, which, on this occasion, was a double-handed one, and provided with a good sized reel and line to correspond.

Having affixed and baited a gorge-hook, I accordingly commenced operations, and in the course of a few throws hooked what I conceived to be a pike of extraordinary size. It pounced quickly, ran far, and forcibly crossed and recrossed the river, which, at the spot in question, is by no means narrow,—rushed upwards to a distance of at least a hundred yards and down again,

seemingly without the least fatigue. Having regained, however, the spot from which it had commenced its run, all on a sudden the fish halted, and immediately, without any jerk or strain on my part, the line came to hand, neatly severed or cut through by the teeth, above the wire-fastenings to which the gorge-hook had been appended. No slight disappointment it was. I fancied of course that I had lost a pike of such uncommon size, as to have been able to engross, in pouching, the whole extent of arming in question, measuring nearly a foot. My sole resource therefore, or hope of retrieve,—and I was by no means sanguine of the result,—lay in the setting of the two lines I had brought along with me, at or near the spot where the fish had made its escape. Accordingly, baiting each with a trout of at least four ounces in weight, I threw them in not far from one another, with small floats attached, in order to show off the lure and keep it from the bottom. This done, I pursued my way further up the river and commenced trouting. On my return, after the expiry of two or three hours, to the place where I had set the lines, I found that both the corks were out of sight and the cords stretched to the uttermost, but quite motionless. Drawing the nearer one, I was surprised to observe it, although made of strong and fresh material, snapped through at the middle. It was not so, however, with the other. There was evidently something attached to it of considerable weight and bulk, without, however, any live resistance. Imagine my surprise, when, on hauling it nearer the bank, I beheld a huge eel enveloped among the cords, quite choked and lifeless. Of river eels it was the largest I had ever witnessed, although I certainly have seen congers of greater size. Above four feet and a half in length, and in girth fully

eleven inches, I think it could not have weighed less than twenty pounds. This point, however, I wanted the ready means of determining, although I regret not having made an effort to acquaint myself with it. On examining the stomach of the monster, I found that it contained all the three gorge-hooks employed by me, and the trouts with which, individually, they had been baited. My experience in eel fishing has not been very great, but I have taken some hundreds of them in my time, and I do not remember above one or two that showed fight in the same manner this one did, while on the rod. In general, they waddle or twist about, betake themselves under rocks, stones, or roots of trees, but very seldom push out directly across or up the pool. With the gorge-hook indeed, and a small trout as the bait, I have often, both before and since the occasion abovementioned, captured them; also while trolling for pike with gimp and swivel tackle, and that in mid water betwixt the bottom and surface; nor, indeed, will eels, when impelled by hunger, shrink from assailing the largest fish, should these happen to be sickly or in adverse circumstances. It is well known that what are termed river cairns, or heaps of stones raised by the tacksman of salmon fishings for the purpose of inveigling running fish into a certain description of net attached to them, afford shelter to large numbers of eels and lampreys which, if the grilse or salmon happening to become entangled is allowed, through neglect or otherwise, to continue two or three hours in this state of thralldom, will, forcing an entrance through the gill or mouth, speedily disencumber it of its entrails; nay, if allowed to pursue their work of molestation unchecked, absolutely hollow it out, until little remains but a sack or skinful of bones.

To return however, to the subject of pike fishing, I may mention that, within the last eight or nine years, I have captured about one hundred and fifty pike out of Teviot alone, five-sixths of them with the rod, and, as has been already mentioned, chiefly during spare hours, and on my return from some trouting excursion. Of these, the largest was a male fish, and weighed about seventeen pounds. I caught another with the minnow and single gut line, on the 8th of March, 1845, weighing fourteen pounds, and I have not unfrequently taken others approaching to twelve pounds. That there still exist in the Heaton-mill cauld several fish heavier than any I have named cannot be questioned. I once hooked and played one, apparently a twenty pounder, until quite exhausted, and had I been accommodated with a gaff-hook or convenient landing-place, would certainly have secured him. As it turned out, in the absence of either, I was compelled to use more than ordinary force, in order to bring him within reach of my hand. The tackle being formed of single gut, accordingly broke, and the fish, after lying motionless for some minutes on the surface of a bed of thick weeds, made his escape. A pike weighing nineteen pounds was killed, some years ago, with the leister a little way below Ormiston-mill. This perhaps was the largest, actually secured, of Teviot pike.

The introduction of these fish into the principal tributary of Tweed, has, there is no question, conduced very materially to injure the salmon-fishings; nor, as may be supposed, have the common trout remained wholly unscathed. With regard to the ravages committed among the fry of the salmon, I may mention that almost every pike captured by me during the months of April and May contained in its stomach, or disgorged on being

landed, the remains of one or more smolts. These frequently were quite entire—to all appearance, indeed, newly killed; they were sometimes also in a partly-digested state, and on other occasions presented to the eye little more than was sufficient to distinguish them as having been small fish. I have taken five or six salmon-fry, in the stages above described, out of the stomach of a single pike. Two, three, or four, are a matter of common occurrence. Such being the case, and if it be true, what many ichthyologists affirm, that fish dissolve their food with such astonishing rapidity as to rival, in some instances, the action of fire; nay, allowing that the stomach of the pike occupied a couple of hours in completing the digestive process, the amount of havoc committed by this ravager on Teviot, during the smolt season, is quite astonishing. Confining my calculation within very moderate bounds, I shall presume that each pike, on the average, as his daily meal, during the months already referred to, engrosses four salmon or bull-trout fry. This, in the course of sixty days, gives an allowance to every individual in Teviot of two hundred and forty smolts: and supposing there are from Ancrum-bridge downward, a stretch of water nine or ten miles in length, not more than one thousand pike, the entire number consumed by these, in less than one-sixth of the year, amounts to two hundred and forty thousand, or nearly a quarter of a million of salmon-fry—a greater number, there is no question, than is killed during the same extent of time by all the angling poachers in the district put together. This work of devastation among the smolts is the more to be regretted, seeing that there is not only no likelihood of its being brought to an end, but, on the contrary, from what I have observed, there is every chance

of its extension and increase. The pike of Teviot, being well supplied with food, is of quick growth. I have ascertained pretty accurately that the average weight of a two-year-old fish runs from three to five pounds. It is also a plentiful breeder, the leaf or waim of roe frequently taken by me from the inside of a highly-pregnant female pike exceeding, in point of size, what is generally found in a grilse or salmon of equal weight, and in the same advanced state of pregnancy. The ova or pellets, moreover, are much smaller, and consequently a great deal more numerous. They are to boot, in all likelihood, better defended during the spawning season from the attacks of trout and eels; and, in fact, every circumstance in connection with their growth and breeding subserves to impress the belief, that the pike, on many parts of Teviot, is in the fair way of adding to its depredations, and becoming numerically stronger and better intrenched. As lately as the year 1845, I captured several of these fish in portions of the river which until then had continued altogether free from their presence. One of these was previously a favourite minnow-cast for trout and salmon—excelled, in fact, by none on the river. It is now, as a resort of the former, nearly deserted; and even by the latter cannot be visited with security, for large and jealous pike will not hesitate to assail and drive away a fish so defenceless as the salmon really is, when interfering with what they esteem their acquired territories or strongholds. In the cast I allude to, I lost one day four minnow-tackles in succession, all of them having been bit through, directly above the hooks, by different pike. On attaching my bait, at length, to a small gimp-set tied on for the occasion, I secured two of the gang which, though by no means large ones, being only four pounds weight each,

discovered in their shape and appearance the effects of ample and good feeding. An acquaintance of mine; also, not long after, caught a perch with the minnow in the same place—a circumstance which very rarely, if ever, happened so far down Teviot, certainly not in a rough, rapid stream which the greater portion of the cast in question consists of.

But indications of the increase of pike are, I understand, not confined to Teviot. They extend also to some of the pools in Tweed about Carham, &c. Fortunately, however, very few localities belonging to this river favour, as permanent haunts, their numerical increase. The rapid and clear nature of its waters, as well as their comparative freedom from weeds and bye-pools, secure the salmon-fry against any possibility of their suffering, as those in Teviot and Tay do, from the assaults of so merciless an enemy. It is needless, however, to pursue this subject, being entirely one of local consequence, any further; nor have I done so up to the present point, with any intention of actually depreciating the fish in question as a sporting, or what a learned judge on the Scottish bench has expressed it, a game fish; all I wish to be inferred is, that its introduction into salmon or trouting waters is a matter of policy highly questionable—that at no time ought the rearing of a few pike to be effected, at the sacrifice of what are generally acknowledged, both with regard to sport itself and in their edible qualities, so very superior.*

* Since penning the above remarks, events have occurred, which, to a certain extent, appear contradictory to what I have stated. Early in August, 1846, a flood, unparalleled in the memory of the oldest inhabitant of Teviotdale, took place, and one effect of this extraordinary overflow of the valley has been to break up the harbours of the pike in Teviot,

I shall now, therefore, proceed to make a few general observations relative to pike-fishing, and the ordinary modes of pursuing it. The pike-rod ought invariably to be long, stout in the material, and stiffish in the make. It should be provided with a reel or winch of corresponding dimensions, and line to suit. Of pike tackles, there are in common use three or four descriptions. The simplest, and in certain seasons and places the most deadly, is the gorge tackle. This consists of a double hook, having a detachable arming formed of brass wire.

The lure commonly employed on the gorge tackle is a small trout or parr, but it is capable, from its construction, of being baited in various ways and with divers delicacies and attractions, such as frogs, morsels of bacon, &c., &c. In baiting with the trout or any other small fish, enter the detached end of the wire arming through the mouth, and passing it along under the skin of the fish, bring it out again, avoiding the vent, as near as possible to the tail or caudal fin. Draw all tight, and observe that the hooks protrude freely on

and temporarily dislodge and carry off their inhabitants. I can assign no other cause for the fact, that, while in 1845 and the spring of '46 they were as numerous as I have stated them to be, they appear now, in their former haunts, extremely scarce, so much so, that, since the flood in question, although frequently trolling for them, I have not been able to capture more than four individuals, whereas, after that period, in the preceding season, I took upwards of two dozen. Taking, however, the extraordinary circumstances of the case into account, I see no reason to draw inferences of a different nature from those already expressed, with respect to the increase of pike in Teviot—an increase greatly encouraged by the thorough-draining system pursued by agriculturists, inasmuch as ever since that system has been acted on, an accession to the growth of flags, water-plants, and pickerel-weed has steadily kept pace with it, and thus there are formed strongholds and breeding-places at every nook and bend of the river, suitable for these fish to lodge in.

either side of the mouth. The tail, if thought requisite, may be fastened with thread or small twine to the wire arming, in order to keep the bait in shape and allow of its being gorged more easily.

In angling, either pitch the bait forward by means of the rod, or heave it from you with the hand. Allow it, if in deep water, to sink well, before commencing to fetch it home. Do this by degrees, impelling it towards the surface, in short urgent movements, and then, just as you catch a glimpse of it, relaxing your pull and thereby occasioning it to drop again towards the bottom. Repeat, unless prevented by weeds or other obstacles, this mode of drawing home the bait, until you bring it to the water's edge. I have already described the manner in which pike generally attack the gorge-bait and the proper way of dealing with them. One instruction, however, I shall repeat, as most essential, with respect to this kind of fishing. Always give the pike time to swallow. If he is disposed to take time, allow him five, or even ten minutes. A slight measure of resistance generally, however, provokes him to be more expeditious, and even a prick from one of the projecting barbs of the gorge-hook casually inflicted upon him, has often the same effect; but I would, in most cases, be careful how I use much freedom with the rascal, for the boldest fish are sometimes shy and distrustful, beyond expectation. When a large pike has fairly swallowed the bait, he soon gives intimation of it, and even a small one makes his chain ring.

The running tackle for pike I recommend to be made up of three hooks, like the parr-tail tackle on a larger scale, (*vide* Chapter VII), and dressed upon good gimp traces with a pair of box swivels, the lower one

fastened about eighteen inches above the hooks, and the uppermost at or near the junction of the casting and reel lines. Bait with a small trout or parr, and according to the directions already given in my chapter on minnow and parr-tail fishing, when treating of the spinning lure. Should the trout be too large to be employed entire, cut it as there instructed into two parts, using the lower one divested of its fins, tail-foremost, and the remaining or head portion, as the shape suggests. See that the bait spins freely, and let the striking of the fish command your particular attention. Never attempt this operation until he has fairly turned with the lure betwixt his jaws, and you actually feel his weight; then, knowing the strength of your tackle, drive the barbed hooks smartly across his mouth, and he is fastened to your heart's content.

In loch trolling from a boat, it is common, where pike are plentiful, to crowd the tackle with hooks. The advantage of this practice is very doubtful. Certainly, it does not in the slightest degree assist or improve the spinning, and as to rendering the getting hold of the fish more certain, experience has led me to believe that the parr-tail running-tackle, already recommended, is, if properly managed, as sufficiently effective as any other combination of hooks in use.

It may be from prejudice, but I must confess that, with regard to the form and making up of pike and trolling tackles, commonly used by English anglers, they appear to me to be, many of them, shop contrivances, mere fancy articles made to please the eye of the purchaser. In several cases also, they are the produce of a whim or speculative notion, on the part of some angler who, no doubt, can expatiate largely on the virtues and marvellous facilities of his invention,

perhaps can enumerate instances of its successful application, and bids defiance to the possibility of its being excelled or outrivalled. But there is a great difference, mark me, betwixt the actual and the possible—betwixt tackle tried by experiment and contrivances whose recommendatory points are only in the brain of the inventor. To the former, there is due a fixed degree of appreciation; to the latter, little more than the regard called forth by an object which excites our curiosity.

Of snap or spring-hooks for pike I shall say nothing, holding them, as I do, quite superfluous; neither shall I venture to describe the live-bait tackle, never having used it. I have no doubt, however, that angling for pike with the live bait is, in certain places, a very deadly mode of fishing, but there is too much of the drowsy, set-line kind of work about it for my taste. Set-lines themselves and trimmers I forbear touching upon. They are all well enough in their way, and on many occasions afford very good amusement, but I can scarcely treat of them in these pages, as legitimate means of angling, much more so in fact than netting itself is.

With regard to fly-fishing for pike, I used to practise it, many years ago, with tolerable success in a shallow loch in Fife. I have also tried it in Perthshire, but the result of my several experiments with the pike-fly is, that I am convinced it is not a lure at all attractive to large or even middle-sized fish; that, in fact, few of a greater weight than three or four pounds are ever tempted to seize it, and these do so only in shoal water, and during dull, windy days. Pike-flies ought to be big and gaudy, the wings formed each of the eye of a peacock's tail-feather,—the body plentifully

bedizened with dyed wool, bright hackles, and tinsels. Bead-eyes, also, are held in estimation, and gimp or wire arming is of course essential.

The pike, although a bold, vindictive fish, careless of the angler's presence when in pursuit of its prey, is nevertheless sulky in its disposition, not to be tempted, at times, by any bait, although dropped immediately before its snout. It is liable, also, to be operated upon by the weather, more so even than the trout is; and moreover, in many places, has its feeding hours, apart from which it is loth, unless under very favourable circumstances, to follow the bait. As regards seasons, however, I have caught it in Teviot throughout all the year, but the pike of this river may possibly form one of several exceptions to the general rule; for in the Loch of the Lowes, in Selkirkshire, as well as in certain lakes in Ross-shire, where I have over and over again exerted my utmost skill, during the spring months, to secure a single fish, I never could accomplish my object sooner than the month of May; and even then, the disposition of the pike to take freely was very questionably manifested.

Out of Till, which is an early river, and swarms with pike, I once took several of these fish, during Spring, and have no doubt, that, as in Teviot, they may be captured there at any season. Their spawning months, in the south of Scotland, are March and April; and they are considered by many epicures as finest in condition when full of roe. For my own part, with regard to the Teviot pike, at no season did I ever capture one which was not highly relishable, being firm, white in the flesh, and well tasted. Those of the Loch of the Lowes possess the same qualities; but it is very different with the pike of Yetholm Loch, of Earn, Tay, and twenty

other places where I have taken them. On the contrary, the fish of these waters are, with few exceptions, soft and slimy—in fact, positively disagreeable to the smell and taste. It is a great improvement to the fish to have it crimped, immediately on its being taken, at the water-side. I have seen grilse and salmon also treated in this manner, and it brings out the curdy firmness of the fish amazingly in boiling. After cleansing, wrap up the pike in a cloth brought for the purpose, and transfer it to your pannier. The directions for boiling it are similar to those I have elsewhere given for the boiling of salmon; only it is advisable, first of all, to immerse the fish for a minute or two in hot, scalding water, and thereby render easy the removal of the scales by means of a knife or scraper. A pike of about eight pounds in weight, when baked or roasted, forms an excellent dish. It is, of course, much improved by various sauces and stuffings; but it is not, as some affirm, mainly indebted to these for its edible qualities. As for the Teviot pike, I consider them, at all seasons, preferable to the general run of salmon captured in that stream, these being, during the Spring months, chiefly kelts or baggits, and, after September, dun, soft, unhealthy-looking fish. Occasionally, it is true, one may alight upon a lively grilse in July or August, or even a clean salmon, now and then, but such events are of rare occurrence.

I have not, as yet, attempted any description of the places generally resorted to, and held in defence by the pike or jack. They consist, in lochs, of all shoal and weedy parts, of bays and covert places, such as are formed by a projecting wall or sunken tree. In rivers, they include the bye-water, and such spots as are not much operated on by the ordinary current. Dam-

heads, moreover, or the pools superintending them are favourite haunts with this fish; the rich mould which settles and remains in many of them, after floods, conducing to the growth of various kinds of water-weeds, such as the pickerel, &c., the varied depth, also, and limitation of currents being in accordance with its tastes and habits.

Some naturalists affirm that the pike is a solitary fish. This I hold to be quite a mistake. They are, at certain seasons, as gregarious, if not more so, than the trout. True, they do not swim exactly side by side, like perch; but, as accords with their size and rapacity, maintain a wider range; and when on the bask, or in sunning humour, distribute themselves along the margin or plot of floating weeds, at short distances, each seemingly having its own lurking-place apportioned to it. I have captured frequently five or six pike, one after the other, out of the same hole, and from the same stance; although, in experimenting previously, for the space of an hour over the cast, I was unable to detect the presence of a single fish. None, in fact, I am convinced, were at that time upon the spot, and they had evidently, in the interval, taken possession of it, as a body, not as individuals.

As to the weather and state of water best suited for pike-fishing, the former I esteem most when dull and warm; there being at the time a breeze from the south or south-west. Sunny glimpses, now and then, are not unfavourable, and the approach of thunder, so inimical to the hopes of the trout fisher, may be held auspicious. On cold days, however windy, pike seldom bite well, although in Teviot, during the Spring season, I have met with exceptions. In this river also, I have noticed that these fish are in high humour for taking

immediately before a flood and when the water is just beginning to swell. This is owing, no doubt, to the anticipations entertained by them, through instinct, of being deprived for some length of time of their usual food, which, during a thick, muddy water, they are unable to discern and secure. They, moreover, bite freely, when the river is of a deep brown colour, and I have caught them in pools highly impregnated with snow; in fact, there is no state of water, actual floods excepted, during which the river pike I allude to may not be induced to take.

Before concluding this chapter, a single advice as to the mode of despatching pike when landed, and of extracting most readily and with least danger the gorge-hook, may not be reckoned superfluous. The quickest, simplest, and most effectual way of killing the fish is by spining it, that is, by urging a sharp instrument, such as the strong blade of a pocket knife, through the spinal marrow at its junction with the brain; a spot at once ascertained from its being situated immediately behind the skull bone. The pike being thus despatched, open the gill cover and cutting through the gills themselves, allow them to bleed freely. This done, take hold of the wire arming of the gorge-hook, and drawing it tightly up you will discover your hook lodged fast among the entrails of the fish. You have then only to cut it out with your knife, and disengaging it from the wire, draw the latter, along with the bait, through the lifeless and unresisting jaws.

CHAPTER XVII.

COOKING OF SALMON, &c.

I SHALL conclude these chapters with a few culinary observations on the dressing of salmon, trout, and other fresh-water fish. The method of cooking salmon on Tweedside differs in many respects from that practised elsewhere; but it is not, on this account, without its recommendations, and by one who has enjoyed in perfection what is termed a fisherman's kettle, the Metropolitan mode of dressing the king of fishes stands a chance of being resolutely decried in future. Our Border epicures, it is necessary to state, are in general good judges of a proper fish. Unlike the inhabitants of Leeds or Birmingham, they can distinguish at a glance the kelt, spring-spawner, or bull-trout from the clean or new-run salmon. They can pronounce also, without hesitation, upon the length of time a fish has been kept, whether taken from the sea or river; and if from the latter, how long ago it left the salt water. In all these matters, I grant, they are not only well versed, but somewhat fastidious, and regulate their cooking accordingly.

BOILING OF SALMON.—It is essential that a salmon intended for boiling should have been newly caught; the fresher it can be procured the better, and a fish transferred from the net or gaff-hook to the pan or kettle, is always sure to give the most satisfaction. The way of treating a salmon, under one or other of these

circumstances, is as follows:—Crimp the fish immediately on its being killed, by the water-side, making the cuts slantwise, and at a distance of two inches from each other; separate also the gills, and holding it by the tail, immerse its body in the stream for the space of three or four minutes, moving it backwards and forwards, so as to expedite the flowing off of the blood. In the meantime, give orders, if you have not previously done so, to have the fire briskened and the pot or cauldron filled, or nearly so, with spring water, set on to boil. The fish, after being crimped and bled as I have directed, must now be conveyed to a table or kitchen-dresser, and there thoroughly cleansed inside. This done, divide it through the backbone into cuts or slices, of the thickness already indicated in the crimping, throwing these into a large hand-basin as you proceed. I shall presume, by this time, that the water is at the boiling point. If so, convey to it a large bowlful of kitchen salt; do not scrimp the material or you ruin the fish. Allow the water, thus checked, again to bubble up, and then pop in the cuts of salmon, head and all. Several minutes will elapse before the liquid contents of the pot once more arrive at the boiling point; when they do so, begin to note the time, and see, as you measure it, that the fire is a brave one. For all fish under nine pounds weight, allow ten minutes brisk boiling, and when exceeding nine pounds, grant an extra minute to every additional pound. When ready, serve hot, along with the brine in which the fish was cooked. This is salmon in perfection, and constitutes the veritable kettle of Tweedside, such as frothed and foamed in the days of the merry monks of Melrose and Kelso, and what, no doubt, has been feasted on in a less civilised age than ours, by the crowned heads of

rival kingdoms within the towers of Roxburgh, Wark, and Norham. Who knows indeed but some sturdy Roman imperator has tickled his palate at a fish-kettle on Tweedside, and taken home to the Seven-hilled city, and the gourmands of the senate-house, a description of the primitive banquet?

A fresh salmon thus cooked is remarkable for its curd and consistence, and very unlike the soft oily mass generally presented under that designation. Even when it has been kept a day or two, this method of boiling will be found to bring out more equally the true flavour of the fish, than if it had been placed entire, with a mere sprinkling of salt, in the fish-pan. Under these circumstances, melted butter is preferred by some to the simple gravy above mentioned, but no true fish-eater can tolerate the substitute.

Through the kindness of Thomas White, Esq., solicitor, Berwick-on-Tweed, I have been favoured with another much approved of recipe for the boiling of this delicious fish:—

“Cut off the tail of the salmon, grilse, or sea-trout about four inches above the fin, then split the fish in two halves along the bone, and after removing the entrails cut it across into pieces of about two and a half or three inches in breadth, or a little broader if required. Remove all the blood from the bone and wash the cuts perfectly clean in cold water. Hard water, both in washing and boiling the fish, is to be preferred. The scales ought not to be scraped off.

“The water in which the fish is boiled ought previously to be made nearly as salt as to float an egg; and the cuts should be put into this salt water or pickle when boiling, with the skin uppermost. The quicker they boil the better.

“ If the fish weighs twenty pounds, let it boil twenty minutes; if fifteen pounds, eighteen minutes; if ten pounds, fifteen minutes; and if five pounds, ten minutes. While the cuts are boiling, the pickle ought to be continually and carefully skimmed, and when sufficiently boiled, the cuts cannot be too speedily taken out of the pickle. Dish quickly, skin uppermost, with a quantity of the pickle in which they are boiled.”

THE CURING OR KIPPERING OF SALMON.—Kippered salmon is a well-known article of food, and in high esteem for its relishable qualities, at the breakfast table; but it is generally met with in a faulty state, either too hard or too salt.

The salmon best adapted for kippering are large fish, averaging from fourteen pounds to thirty pounds in weight; the smaller ones and grilses make, however, excellent green kippers, to be eaten when soft and juicy. Such kippers as are intended for winter use should be prepared in the month of October, immediately before close-time. Although the term kipper signifying a he-fish, is likewise applied to salmon cured in a particular way, it is really a matter of indifference whether the male or the female be used for the purpose in question. It so happens, that in the kippering season, the generality of males captured are of a coarser, if not larger description than individuals of the other sex; the market-price also is, in consequence, somewhat lower, and they are generally preferred as fitter to be operated upon.

In kippering a salmon, the first step taken is to lay the fish on its broad side on a board or table, and by means of a sharp knife cut it up from tail to head, close along the back-bone, taking care not to injure the belly or keel by inserting the blade too far. Disengage and

throw away the entrails and gills; also wash the fish well, removing and pressing out every bloody particle from the inside. Take out the eyes and insert a pinch or two of salt in their place, also cut away the vent. This done, sprinkle a handful or two of brown sugar over the inside, and above it, the same quantity or rather more of common salt. The latter will occasion the sugar to penetrate and help to improve the flavour of the salmon better than if the materials had been previously mixed up together. Some recommend the rubbing in of salt and sugar, by means of the hand, against the scales of the fish externally, as well as over the inside; but this is not at all necessary. After the application in question has been made, lay the salmon flat upon a board, the inside turned uppermost; cover with a cloth and allow it to remain twenty-four hours, or if preferred saltish, thirty-six hours in a cool place; after which, give it a slight wash, in order to improve its appearance, and arrange two or three wooden pegs or skewers along the interior from flank to flank, to keep it stretched; then hang it up to dry in a place neither too hot nor too cool. Should the weather prove fine, an hour or two of exposure to the sun and air will conduce to accelerate the curing process, and render it less liable to be injured by dust and smoke. Salmon, on being kippered, are subject to a considerable loss of weight; for instance, a fish that originally weighed sixteen pounds will, when cured, not exceed eleven. In broiling kipper, it is a great improvement to wrap up the cuts, which ought not to be made too thin, in white paper. This will prevent them being smoked or becoming too hard externally. Fresh salmon broiled in the same manner is delicious, and made to retain its flavour in full perfection.

The gentleman already mentioned has also favoured me with an account of the modes of kippering and pickling salmon, adopted at Berwick, and communicated to him, the one by a fish salesman, and the other by a celebrated salmon curer in that town.

“KIPPERED SALMON.—Split the fish in two halves, along the bone, from the tail to the head, but without separating the two halves, and after removing the entrails and all the blood from the bone, wash the fish perfectly clean, in cold, hard water. The scales ought never to be scraped off.

“Rub a little dry salt upon the outside of the fish, against the scales, from the tail to the head, and throw some loosely upon the inside, without rubbing. Lay the salmon or grilse, when thus salted, upon a flat table or board, and cover with another piece of board or thin deal; let it remain so covered for forty-eight hours or twenty-four hours, according to the size of the fish. A salmon of from ten pounds to twenty pounds requires to lie in this state for forty-eight hours,—a grilse requires twenty-four hours only. Three or four plaster laths or hoop sticks must then, to keep it flat, be placed across the fish, which should afterwards be hung up by the tail to dry.

“The fish is in perfection, as a kipper, after it has been dried about twenty-four hours; and it will keep, thus kippered, for many months, though apt to get too salt, and require steeping in cold water, before use.”

“PICKLED SALMON.—Allow the fish to lie twenty-four hours in winter, or twelve in summer, after being caught. It will not take the salt when quite fresh. Then split, wash and cut into junks, as directed in boiling salmon. Boil these in a very strong salt pickles allowing to a fish of eight pounds weight, nine minutes;

one of twelve pounds ditto, fourteen minutes; one of fifteen pounds, seventeen minutes, and one of twenty pounds, twenty-five minutes. A number of salmon boiled together of ten pounds weight each, require fifteen minutes. The time must, in all cases, be calculated from the moment the water returns to the boiling point, and not from that in which the fish are put into it.

“When the salmon has boiled the proper time, take it out of the pickle as expeditiously as possible, put it on a drainer and allow it to cool for twenty-four hours, in summer. It should then be packed, skin uppermost, in kits or jars, and completely covered with cold vinegar and a small quantity of the pickle or liquor in which it was boiled. To exclude the air effectually, the kits or jars in which it is placed should be run over, on the top of the vinegar, with a little boiling lard and the whole secured by a tin or earthenware cover. Jars are preferable to kits, as the air can be more readily excluded from the fish. Care must be taken, on the exhaustion of the vinegar, to add a fresh supply. Salmon, in this state, will remain good for months.”

The method of cooking or roasting salmon at the lakes of Killarney, in Ireland, is pretty generally known. but as the recipe is an excellent one, and I have seen it acted on in Scotland, with this difference, that the skewers employed were cut from the juniper bush instead of arbutus, I shall insert it.

“The salmon, as soon as caught, to be cut into slices, which are split and a strong skewer of arbutus run through each as close to the skin as possible. These skewers are then stuck upright in a sod of turf, before a clear wood fire, and constantly turned and basted

with salt and water ;—the fish, when sufficiently roasted, is served up on the skewers, which are supposed to communicate a peculiar aromatic flavour.”

RECIPE FOR POTTING CHARR AND TROUT.—The following are the ingredients required, in order to pot a stone weight of fish.

3	tea-spoonsful of ground black pepper.
3	” ” allspice.
2	” ” mace.
1	” ” cloves.
1	” ” nutmeg.
$\frac{1}{2}$	” ” cayenne.

Keep these carefully corked up in a small phial, and add, when employing them, a little salt.

Cut open the fish and clean well with a dry cloth. Remove the heads, tails, and fins, along with the back bones. This done, apply the mixture, transferring them, as you do so, to a baking dish. Cover well with fresh butter, and place the dish in a slow oven, allowing it to remain there until the bones of the fish become dissolved ; drain off the butter and remove the charr or trout into potting dishes : press them well down and pour fresh butter over them. Trout, treated in this manner, ought to be red-fleshed and not exceed three-quarters of a pound in weight. If well selected and in good season, they will be found not a whit inferior to the best charr.

SIMPLE RECIPE FOR COOKING A WHITLING OR GOOD TROUT BY THE RIVER-SIDE.—Kindle a fire of dry wood. Take your fish when just out of the water. Fill his mouth with salt : roll him up in two or three folds of an old newspaper, twisting the ends well together. Immerse all in the water, until the paper has become thoroughly saturated. Then lay the fish among the

embers of your fire. When the paper presents a well-charred appearance, the trout is properly done, and will prove a savoury and acceptable morsel. The fish I may observe must *not* be cut open and cleaned. During the firing process, the intestines and other impurities will draw together, and not in the slightest degree injure the flavour of the trout.

THE FRYING OF TROUT.—Preparatory to frying trout, it is common in Scotland to enwrap the fish in a coating of oatmeal. I am not national enough in my tastes to approve of this mode of concealing its flavour, and I certainly prefer, if the fish is to be encrusted at all, the adoption of bread-crumbs and the yolk of an egg. Good red-fleshed trout, however, require no disguise, on being fried, and simple lard or butter is sufficient for the purpose. Trout upwards of half a pound in weight ought to be split open by the back bone, and placed flat in the pan, which should previously be well heated, over a clear fire, and elevated, when the fish are laid on. Small trout and parr make a delicious dish, if properly fried.

BOILED AND BAKED PIKE.—Pike and eels are fish not much relished in Scotland, at least on Tweedside. I hold both, however, in high esteem, as articles of food. The former, if intended for boiling, ought to be crimped when caught, and treated in the same manner as I have described the salmon to be by Tweed fishermen. A baked pike with bread stuffing is excellent, and oysters form a great improvement. The scales, or even the skin of this fish ought always to be removed; the flavour resulting therefrom not being the most agreeable. This is done by plotting the pike in hot water and thoroughly scraping or flaying him. Pike associated with trout, whether taken from a river or

loch, are always better tasted than those which feed on eels and frogs.

Angler! that all day long hast wandered by sunny stream, and heart and hand, plied the meditative art, who hast filled thy pannier brimful of star-sided trout, and with aching arms, and weary back, and faint wavering step, crossed the threshold of some cottage-inn—a smiling, rural retreat that starts up, when thy wishes are waning into despondency, how grateful to thee is the merry song of the frying pan, strewn over with the daintiest of thy spoils and superintended by a laughter loving hostess and her blooming image! and thou too, slayer of salmon! more matured and fastidious, what sound, when thy reel is at rest, like the bubbling and frothing of the fish-kettle! what fare more acceptable than the shoulder-cut, snowed over with curd, of a gallant sixteen pounder, and where, in the wide world, is to be found wholesomer and heartier sauce, to the one as well as to the other, than a goblet generously mixed of Islay, and piping hot? Stretch thy hand over thy mercies and be thankful.

CHAPTER XVIII.

TWEED AND ITS TRIBUTARIES.

OF our Scottish rivers, Tweed unquestionably ranks next to Tay. This stream, as is well known, has its origin fifteen hundred feet above the level of the sea, in a small spring or well situated at the base of a hill, on the confines of Peebles-shire and within half a mile of the counties of Lanark and Dumfries. From the same hill, issue also the Clyde and Annan, the three rivers intersecting the south of Scotland in different directions, and each maintaining the lead, in point of size, over its particular division.

The tribute which Tweed receives, before accomplishing many miles of its course, is indicative of its after amplitude. On one side, it is increased by the Core, the Menzionburn, the Friud, and the Tala, as well as numerous streams of less magnitude. On the other side, it is supplied by a hundred rills, many of them, during summer, mere threads of water, but when swollen by melted snows, impassable torrents. A small loch termed Gameshope, abounding in trout, is the source of the principal feeder of Tala. On reaching the Crook-inn, Tweed presents every appearance of being an excellent trouting stream, and as such, is justly appreciated, in its upper, as well as its lower districts. Salmon, or rather bull-trout, there often mistaken on account of their size, for the true *salar*, find their way up almost to the sources of the river, and are killed,

few indeed by the rod, but in considerable numbers, by means of the spear or leister. The burn-trout are very abundant, but except in the main river, seldom attain the weight of half a pound. After passing Crook, and pursuing its way down to Rachan and Drummelzier, Tweed is joined by the Biggar water, a stream well known to the angler, containing trout of considerable size, and excellent in point of flavour. At Rachan, there are two small lakes; one stocked with trout and the other with perch. Near its junction with the Biggar water, Tweed is six hundred and fifteen feet above the level of the sea. After proceeding seven miles, it is entered by the Lyne, a considerable stream, much frequented by the fly-fisher. During this portion of its course, it has descended sixty-five feet. Its average declivity from Tweedsmuir is about twelve feet per mile. After Lyne, Tweed passing through Peebles-shire, successively receives the Manor-water above Neidpath castle, the Eddleston at Peebles, the Quair at Traquair, Leithen at Innerleithen, not to mention several other petty feeders. All these, more particularly the Manor-water, swarm with small trout, while the main river on the occasion of large floods is visited, during autumn and winter, by the migratory *salmonidæ*.

It is not, however, until it reaches Ashiestiel, several miles below Innerleithen, that Tweed is looked upon by salmon-fishers with much regard. Higher up, the fish killed with the rod are comparatively few, and these, most of them, in execrable condition. It is very seldom that what are termed clean salmon push so far, without halt or stay, during which they lose altogether their fine external appearance. Should large floods, however, occur in the months of August, September,

and October, they generally bring up to that stretch of water lying betwixt Holy-lee and Caddon-foot a fair sprinkling of grilse. The flies used there are mostly sombre in hue. Hooks dressed in the Irish style, are not found nearly so killing. The fishings belong principally to Lord Elibank, Mitchell Innes, Esq., of Stow, Sir James Russel of Ashiestiel, and J. Pringle, Esq., of Torwoodlee. At Cloven-ford on the Caddon-water, about half a mile distant from Tweed, there is an excellent inn, much resorted to by anglers. On the hill above, lies a small lake or pond stocked with trout. After receiving the Caddon-water, the river takes an abrupt bend, and passing below the bridge at Yair, is joined, two miles further down by the *ETTRICK*. This stream has its rise on the borders of Dumfries-shire and occupies a course of about thirty miles. Its principal tributaries are the Timah, Rankle-burn, and Yarrow. *Ettrick* abounds in nice trout, weighing on the average a quarter of a pound, but I have killed them occasionally, below Thirlestane, upwards of a pound, and recollect seeing one taken there nearly three times that weight. From the burns which empty themselves in the upper districts, I have known my friend John Wilson, Esq., Jun., of Elleray, to capture with the worm twelve dozen, in the course of a forenoon. Sea-trout, both of the whitling and bull species, ascend the *Ettrick* in November, sometimes in great numbers. As many as three score have been slaughtered, by means of the leister, in one night out of a single pool. The true salmon killed on an occasion of this sort are comparatively few.

YARROW enters *Ettrick*, a short way above Selkirk, It proceeds from St. Mary's loch, the upper part of which is situated nineteen miles from the town referred

to. As an angling stream, it is in good repute, and contains nice trout weighing from one and a half pound, downwards. Near the loch, the average is about half a pound, and I have frequently taken two or three dozen of that weight. The woodcock wing and mouse-fur body form a favourite fly. Minnow, also, during summer, is highly attractive in some of the streams. The lower parts of the Yarrow are strictly preserved, but it is open above Broadmeadows. In Douglas-burn, one of its feeders, are numbers of small trout.

ST. MARY'S LOCH from which this river makes its escape, is well stocked with trout, averaging in weight half a pound. I have often, however, killed them a great deal heavier, and recollect on the Bourhope side encreeling a yellow trout, that measured nearly twenty inches in length. Such an occurrence, however, is extremely rare. Besides trout, St. Mary's loch contains pike and perch; the former of late years are much on the increase, whereas in the loch of the Lowes, which is connected with it by a stream not fifty yards in length, they are manifestly falling off in number. About sixteen years ago, when I first angled in these lochs, the upper one contained no trout whatsoever, and the under one, if any, few pike. Now, the upper one, on the south side, has abundance of trout, and these better in quality than what are met with in the lower lake. In an edible point of view, the pike of the above lochs are very superior to the fish of this description generally met with, and attain to a great size. I recollect killing one that weighed nineteen pounds. My implement was a small trouting-rod, and when I brought the fish to bank, there was only a strand composed of three horse-hairs left near the hook

to support him, the other two strands of the winch-line having given way.

Discharging themselves into these lochs, are several streams, the largest of which is the Meggat-water, an excellent summer trouting river, where I have caught fish upwards of two pounds in weight. At the foot of Meggat, close to where it enters St. Mary's loch, I recollect, on the occasion of a flood, killing with the fly, three panniers full of trout, each containing a stone weight and upwards, in the course of a day. These were all taken out of a space of water, not exceeding half a mile. Another large capture made by me on this stream, took place while in company with the Ettrick Shepherd, and the creel-fulls we respectively emptied out on arriving at Henderland (we had fished down during a small flood from the head of Winterhope-burn, a course of four or five miles), would have astonished even a Tweedside adept.

The Chapelhope-burns and Corse-cleugh which enter the loch of the Lowes also contains numerous trout. There are plenty of perch in the upper lake, and the lower one is occasionally visited by salmon and bull-trout. I have caught both of these fish with loch-flies from the margin, but never met with one in edible condition. There is excellent accommodation at Mrs. Richardson's cottage, situated betwixt the two lakes, the rooms being fitted up expressly for anglers. The house is not an inn, but wine and spirits may be obtained from Moffat or Selkirk, at a short notice, carriers passing, not far off, several times during the week. The landlady will be found extremely attentive and obliging. There is an inn on Yarrow, the Gordon Arms, nearly opposite Altrive, the residence of the late Ettrick Shepherd, and two, the Tushielaw Inn, and

Ettrick-bridge ditto, between Selkirk and Thirlestane, on the Ettrick.

On the high grounds, betwixt where the Rankleburn discharges itself into the Ettrick and the sources of the Ale-water, a tributary of Teviot, are situated several lochs, the largest of which are Clear-burn, the Shaws-loch, and Alemoor. Clear-burn abounds in nice trout, averaging half a pound in weight. The others contain pike and perch, and one or two of them good trout. They are not much angled in, lying as they do out of the usual track.

Reverting to Tweedside, there are two or three stretches of water occupied as rod-fishings for salmon, not far from where the Ettrick enters the main river. Those above its junction are the Yair fishings, belonging to Alexander Pringle, Esq., of Whytbank, and further down the Faldon-side, Bold-side, and Abbotsford waters, (—— Scott, Esq., of Gala-house). During the three weeks that precede close-time, should a flood occur, on the removal of the nets, the sport met with in this quarter is sometimes excellent. Kelts also are killed here, in the spring, in considerable numbers; but throughout the greater part of the open season the salmon fishing is generally very indifferent, and depends entirely upon the state of the river.

Not far from Abbotsford, on the opposite side of Tweed, the Gala water effects its junction. From the mouth up to the town of Galashiels, about two miles distant, the bed of this stream is one unseemly ditch, blackened with dyes, and containing refuse of various descriptions. At Torwoodlee, however, and from thence to its sources, it is a pure limpid rural river, abounding in trout of respectable dimensions, weighing from a pound downwards. There is a small loch termed

Cauldshiels, on the Abbotsford estate, containing pike and perch.

A little below Galashiels, is situated on the main river, the Pavilion or Melrose water, extending from the mouth of the Gala, as far as the bridge at Melrose or thereabouts. The salmon fishings on this stretch of Tweed belong to Lord Somerville, and are at present rented by —— Broadwood, Esq. The former lessee was his Grace the Duke of Buccleugh. Many of the casts are excellent, and after a succession of autumnal floods, abound in grilises. Upwards of three hundred fish were killed here in a single night, during the open season, by means of the leister, not many years ago from one boat. These I may mention were all dun-breeders and useless as food.

Next to Lord Somerville's fishings follow those of Thomas Tod, Esq., of Drygrange, which terminate at the bridge near Leaderfoot. They were let recently to one of the Purdies, well-known fishermen in that district, and are held in good esteem by anglers. The LEADER is an excellent trouting water, but the fish are not large, few exceeding a pound in weight. There are several comfortable inns on its banks, one near the head, at Carfrae-mill, another at Lauder, and a third at the beautiful village of Earlston.

Below Leader-bridge the salmon fishings on Tweed, as far down as Dryburgh, are connected with different properties on the bank of the river. Gladswood, Old Melrose, Bemersyde—each asserts its claim to a separate stretch of water, and under these are the Dryburgh fishings and those belonging to Charles Riddell, Esq.; also a disputed cast or two, to which Sir William Fairfax and his Grace the Duke of Roxburghe form the claimants. In all these stretches of water, which taken

together extend about four or five miles, the rod fishings for salmon are of a superior character. The river runs at a tolerably rapid pace, and takes several abrupt bends or turns. These are favourable to the formation of good salmon casts, especially in such a channel or *alveus* as that which Tweed possesses, during the greater part of its course. The trouting here is also of a first-rate description.

A little way below Dryburgh, the Mertoun fishings belonging to Lord Polwarth commence. These, or a portion of them, are rented by Sir Richard Sutton, Bart. They extend about two miles, and are then, on the south-side, joined below Littledean Tower, by the Rutherford water, belonging to Sir Edward Antrobus, Bart., and held on lease by Alexander Low, Esq., Edinburgh, and John Spottiswoode, Esq., London. The Rutherford water forms the commencement of a series of the best rod-fishings for salmon in Great Britain, and as such, along with the streams that succeed it, deserves particular notice. It consists of a succession of casts or pools of various characters—one still and lake-like, another rugged and shallow, a third combining tranquillity with swiftness, and a fourth depth with considerable turbulence. These casts, of course, have all their separate names, descriptive, generally speaking, of their external features, or the uses they are put to. The highest up are the Corse-heugh and Lang-stream, at the foot of which there is a ferry-house inhabited by the fisherman or bailiff of the water, John Aitkin, and containing accommodation for the lessee and his friends during the fishing season. Connected with the Lang-stream is the Dub or Cauld-pool, occupying a great extent of channel, more so perhaps than any other pool in Tweed previous to its junction with

the Teviot. This is the favourite resort or refuge-place of kelts while undergoing the process of mending, and during their descent from the upper parts of the river. The execution done among these fish with the rod, throughout the Rutherford water, is sometimes enormous, but no more partakes of the character of sport than does the running of as many logs of wood. In 1846, a short time after the expiring of the fence-season, no fewer than thirty-seven of them were captured in a single day by two gentlemen in this stretch of the river. Below the Cauld-pool lie the Mill-stream, the Damfoot, the Corbie's-nest, and the Clippers, all excellent salmon casts.

The trouting on the Rutherford water is superior to any in Tweed. I recollect my friend, John Wilson, Esq., capturing with the minnow, a creelful of fish, out of one or two of the pools, among which at least a dozen and a half exceeded in weight one and a half pounds each, and as many more were full pounders. I have more than once taken trout there with the parr-tail that weighed well on to three pounds.

Below the Clippers of Rutherford-water, commences the Makerston range. The salmon fishings here belong to two proprietors, those on the North side of Tweed to Sir Thomas Makdougall Brisbane, Bart., and those on the South, to his Grace the Duke of Roxburghe. They are rented for a small sum by Robert Kerss, or as he is familiarly termed Rob of Trows. There is not a finer specimen of his class on Tweedside than our old friend Rob—one that never had an enemy of his own making nor cringed to form his friendships—the same in his courtesy to anglers of all ranks and degrees, to a beggar as to a duke. As a rod-fisher for salmon, Rob Kerss has few equals, and in all matters regarding

fishing, he is enthusiastic beyond measure. To be in the boat with him, when the fish are in taking humour, is a treat well worth the paying for. He never grudges the escape of a fish, and has always an encouraging or original remark at hand to keep up the spirit of the amusement, too often, as regards salmon fishing, apt to flag or die away.

The Makerston water consists of the following casts which occupy about two miles of the river; Willie's bank, Hirple Nelly, the Orchard-heads opposite Makerston house, the Dark Shore, the Clippers, North and South, the Laird's Cast, Elshie stream, Shot, Red Stane, Side Straik, Doors, Nethern heads, Willie's Ower fa', and passing over some highly impetuous water, the Kill-mouth pool. From the Red Stane downwards, the Tweed is confined betwixt walls of rock, and hurries along with rapid violence. The name given to that portion of the river is the Trows crags—the word, "*trows*" being the Scotch for troughs, of which vessels, two joined together at one end, used to be employed, instead of a boat, for the spearing of salmon. I recollect seeing a pair of them not long since at the village of Denholm, betwixt Jedburgh and Hawick, which had frequently been put to the test, in night-leistering on Teviot. They consisted of the wooden receptacles, or something of the like construction, out of which cattle are fed, and were so joined that the one formed a sharp angle with the other. In using them, the spearsman kept his legs astride, a foot being placed in each trough, and struck at the fish, through the space formed by the angle.

I have elsewhere spoken of the Red Stane and its attractive powers, as a stronghold for salmon; never, in fact, from one end of the year to the other, does it want its occupants; sometimes, in the months of August and

September, it is crowded with salmon and grilse which, when the river is low, are driven into nets or slaughtered with the sanguinary leister. The Nethern heads also is a famous resort for large salmon, and many is the woeful face mirrored by shining Tweed above this cast, when down, at the rate of a racehorse in full speed, rushes the aroused fish, snapping, like the touch of fire, the tackle of the angler and carrying with him the daintiest fly that the fingers of Forrest ever put wing to—all, bitt and harness, with high hopes and stirring fancies, into the abysses beneath.

A little way from Killmouth, the lowermost stream of the Makerston range, is situated, on a bank among trees, Rob Kerss's cottage, where the old fisherman, through the kindness of his liberal landlord, is provided with every comfort and convenience. Many an angler, peer and peasant,—aye bard and philosopher, hath this roof sheltered, and many a "kettle" has been held here, boiling over with song, jest, and anecdote—Long may it be so. God bless thee, honest Rob!

Close to the cottage of Rob of the Trows, commences the Floors water belonging to his Grace the Duke of Roxburghe. This nobleman possesses the most valuable rod-fishings for salmon on Tweedside, and the largest range of water in the district. On the south side of the river, his right of salmon fishing extends from the Rutherford water to Carham burn, in the county of Northumberland, a distance of nine or ten miles; not including Teviot, where he has property of the same nature, from its junction upwards over a considerable tract of river ground. On the north side, his fishings range from the boundary wall at Killmouth, along the policies of Floors, to about half a mile below Kelso, a stretch of nearly four miles.

His grace is a most enthusiastic and efficient salmon-fisher, and the feats he has frequently achieved are unsurpassed by those of any living angler, in Great Britain. It is a matter of not uncommon occurrence for him to kill with the rod betwixt twenty and thirty fish, salmon and grilses, in the course of the day, on the Floors stretch of water alone. He has recently much improved the fishing capabilities of this range of Tweed, both by constructing dykes, in order to form pools, and by adding large stones to the channel of the river, so as to induce the salmon to remain within the precincts of the estate. The casts on the Floors water are as follows, the Slates, Blackstane, Weetles, Huddles, Shot, recently improved and formed into a sort of cauld or dam, Hedge-end, Shirt-stream, Skelly rock, Coach Wynd, Income, Cobby-hole, Putt, Back Bullers, Maxwheel. Immediately below the Back Bullers, the junction of Tweed and Teviot, unquestionably a meeting of waters, unsurpassed by any in the United Kingdom, takes place. His grace's fishings in this quarter are under the superintendance of Mr. Stevenson, who has liberty to construct cairns in certain places, for the purpose of netting salmon, and who takes charge of the angling boats, &c.

Immediately below Kelso, commence the Sprouston fishings, rented, along with the ferry, a couple of miles down the river, by Thomas Keress, a relative of Old Rob's at Trows, for about seventy pounds per annum. These, in connection with the salmon casts belonging to John Waldie, Esq., of Hendersyde Park, embrace the following streams and pools, Hempside Ford, the Bank, the Grain, Winter Cast, Mill-stream, Mill-pot, Butterwash, Bushes, Scurry, containing the well known Prison-rock, Dub, Mill-end, Falls, Eden-water-foot. Mr. Waldie's fishings begin at the Mill-stream and termi-

nate along with the Sprouston casts. They are taken on lease by a few gentlemen from the north of England who pay the large sum of one hundred and eighty-five pounds yearly for their amusement, besides the expense of maintaining a fisherman, boats, &c. Their courtesy and accommodating disposition to anglers in general, form a striking contrast to the selfish and usurping spirit manifested by several of the frequenters of Tweed-side, who look upon a fishing-rod in any other hands but their own, in the same light as they would do the weapon of a poacher, at work among their game covers.

The casts above mentioned are, one and all, excellent, and contain a great variety of water. Sprouston Dub is of large extent, and forms generally, in the event of a breeze, the afternoon beat. During September and October, it is always well stocked with salmon, and indeed, at no season of the year, wants fish of this description. It has been conjectured, by those competent to judge, that in this pool alone, there are often congregated, at the same time, a thousand salmon and grilses. I have witnessed five or six good fish, not kelts, taken out here, in the course of little more than half-an-hour, as fast in fact, as they could be hooked and played to bank. The fisherman employed on the Hendersyde water is brother to the tacksman at Sprouston. At Birgham, the next fishing station further down the river, two or three other Kersses are engaged in this occupation, one of them being a son of Old Rob's at Trows. At Carham, Wark, Lees, and Tweed Mill, a family of Scotts hold rule, and about Melrose, in the upper waters, are several Purdies, a name which the author of Waverley has made celebrated.

Before descending Tweed to the Birgham water, I shall recur for a single moment to its principal tributary

Teviot. This stream, in its trouting capacity, is well worth the attention of the angler. It is not, however, one where sport is at all certain, or where the fish are at any time to be captured without skill. They are more shy and moody, in fact, than in most rivers, and require, in order to allure them, the finest tackle, and a particular size and colour of fly. Dark hackles, or dun-coloured dubbings are irresistible, but the hook these are fitted to must agree in magnitude with the condition of water and season of the year, in order to do much execution and induce large trout to take it.

The TEVIOT has its sources at Teviot stone, on the heights which separate Dumfries-shire from Roxburghshire. The length of its channel is upwards of forty miles. It receives a great number of tributaries. Those near its head are the Lymy-cleugh and Frostly burns, the Allan and Borthwick waters, after which it is increased by the Slitrigg, the Rule, the Ale, the Jed, the Oxnam, and the Kale. Of these, the last-mentioned stream is in best repute among anglers. Some years ago, in the neighbourhood of Hownam, ten or eleven miles from Kelso, my friend Mr. Wilson and myself captured betwixt us thirty-six dozen trout, in the course of a day. The Kale, early in the morning, happened to be in full flood, and in consequence, we commenced our operations with the worm, by means of which we took several large trout. One caught by Mr. W. weighed about two pounds, and I landed another out of the same stream, and at the same moment, only half a pound lighter. In the Jed water, trout were at one time numerous, but the bursting of some lime-kiln near its sources completely destroyed them, and several years have passed without altogether restoring this river to its original renown. The Jed trout are pink fleshed

and well flavoured, in point of taste. Ale is a good angling stream, and so naturally are the other tributaries of Teviot; but of late years they have all been much harassed by net-fishers, whose practices the Earl of Minto's act, is, I am glad to state, in the fair way of putting a stop to. The best portion of Teviot for angling in lies undoubtedly betwixt Ormiston and Sunlaws mills. I have killed, upon the whole, larger and finer trout in that stretch of water than anywhere else, and on a favourable day, with minnow or worm, it is of common occurrence to take several upwards of a pound weight each.

The rod-fishings for salmon on this river are very precarious, but with perseverance, one may manage to capture a good many fish in the course of a season, using the duller varieties of Tweed flies, and making himself well acquainted with the several casts. Here, as on the main river, more salmon are slaughtered by means of the leister than the rod. I do not allude to the practices of poachers in close time, which as respects the killing of salmon are often ridiculously magnified, but, the open vaunted of, destruction which takes place throughout the rest of the year, whenever the low state of the river will admit of its being resorted to. At Kirkbank, for instance, as many fish are sometimes killed in this way in a single night as would suffice to exercise the ingenuity and encourage the perseverance of twenty honest anglers throughout the season. A fishing-club was lately organised in the lower districts of Teviot-dale, under the name of the Teviot-dale angling club. It comprises about sixty members, and four medals are competed for during the course of the season. To these, which are purely honorary prizes, it is proposed to add a fishing-rod, as an encouragement

to further competition. The club is yet in its infancy, and its meetings which take place in the months of May and July, under cover of a marquee, have hitherto, with one exception, met with little favour from the elements.

About three miles below Kelso, the Eden, a small rivulet, but held in good repute by the angler, enters Tweed. I have already alluded in the body of this volume to the superior quality of its trout, which are red fleshed, and deep in the shape. There is a fall on this stream at Newton Don, below which, the true breed of Eden is intermixed with other varieties. May and June are the months when the Eden trout are in highest perfection, and the worm at this period is a deadly bait. The largest trout I ever killed in Eden weighed above two pounds, and I have frequently taken, among others, a dozen weighing a pound a-piece. Of late years, the fish have greatly decreased in size, but their quality, when in season, is still good.

The Birgham fishings on Tweed commence about half a mile below Eden-mouth, and comprise, along with the Carham water, a number of excellent pools and angling casts, the principal of which are Birgham Dub, containing Burn-mouth, Corbie-nest, Galashan, Jean-my-lady, Cork Stane, after which follow the Burn-stream, Carham-wheel, including Cuddy's-hole, Dyke-end, Long-ship-end, Mid-channel-stream, Flummery, Kirk-end, Dritten-ass, Glitters, Bloody-breeks, Under-cairn, the Caldron-hole, Three-stanes, Pikey, Three-brethren, Nether-stream, the Hole-stream, the Hole, Craw-stanes, Lang-craig, Mark's-skelley-head, Bell-stane, Segg-bush, White-eddy, Whinbush-skelley, Shaw's-mare, Know-head.

The casts in the Wark water, belonging to Earl Grey,

are the Snipe, the Brae, the Dub, Anna-edge, Cuddy's-hole, Skellie-rocks, Willow-bush, Island-neb, Black-mark, Fa'en-down-brae, Hedge-end, Red-heugh-stane, Hell's-hole, Mid-hole, Temple, Cauld-end, Coble-neb, Coble-hole, Bulwark. The fishings on the north side of the river belong to the Earl of Hume, those on the south, below Carham-burn, to the Compton family, Carham Hall. Succeeding these are the Wark fishings, and further down the Lees water, recently taken for the purpose of rod-fishing by a party of gentlemen from Glasgow, at a rent of seventy pounds per annum. This range of river extends nearly to Coldstream, where the Leet, an insignificant stream, but containing trout of considerable size and very superior flavour, discharges itself. The Leet passes through the Hirsell grounds, seat of the Earl of Hume, where there is a fish pond. In the New Statistical Account, it is stated that the late Earl, who perhaps killed more salmon with the rod than any angler of his day, captured one in Tweed of the extraordinary weight of fifty pounds; it is also affirmed that pike have been taken out of the Hirsell loch, weighing thirty-two pounds. At Coldstream-bridge there is a good cast, which seldom wants its fish, and where in the grilse season, when the river is clear, one has an excellent opportunity of studying the habits and likings of the salmon in fresh water—what fly is most attractive, &c. &c. The trouting about Coldstream is very superior—but the rod-fishings for salmon, with the exception of the cast above mentioned, somewhat precarious. Three miles below Coldstream stands Tweed-mill, nearly opposite which the Till enters.

Although not a Scottish river, yet, as one of the tributaries of Tweed, and fed in part by Scottish springs, the Till merits a single moment's attention. It is a

deep, sluggish water, singularly fantastic in its windings. The fish it contains are pike, perch, trout, and eels; but the migratory sorts, especially whitlings, enter it freely, and much earlier than they do any other branch from the main stream. Not many salmon, however, are caught by the rod above Etal, their progress being much obstructed by a waterfall in that locality. The sea-trout, on the occurrence of a flood, force their way up into the Glen, a stream entering Till two or three miles below Wooler, and formed by the junction of the Bowmont and Colledge waters, the one passing Yetholm from Roxburghshire, and the other from the foot of Cheviot. The Glen is in high repute as an angling stream, and contains abundance of small, lively trout. There are good inns at and adjoining Wooler, and a small one at Bender. Connected with this district is the Glendale fishing-club, a numerous body of Northumbrians, comprising several able and intelligent anglers.

On the Tweed, at Till-mouth, there is an excellent cast for salmon; but here, as at Coldstream, the fish are very capricious, and show little inclination to favour the angler. The salmon-fishings betwixt Carham and Berwick belong to various proprietors, among which are Earl Grey, — Collingwood, Esq., Sir F. Blake, — Wilson, Esq., of Whitmore, &c., on the English side of the river; and on the Scottish, Sir. W. Marjoribanks, of Lees; Earl of Haddington, D. Robertson, Esq., of Ladykirk; J. Home, Esq., of Wedderburn; — Macbraire, Esq., of Broadmeadows, &c. &c.

About five miles above Berwick, the Tweed is joined by the Whitadder.

The WHITADDER takes its rise at Johnscleugh, in the county of Haddington, at an elevation of eleven

hundred and fifty feet above the level of the sea. After running three miles, it is joined by the Fassaney water at Millknow. It afterwards, a short way above Ellemford, receives the Dye, with its tributary, the Watchburn; and on reaching Allanton is augmented from the west by the Blackadder. Both the main stream and its tributaries abound in trout; in point of numbers, perhaps, there are few rivers in Scotland that surpass them; and the Blackadder, which has its sources at Wedderlie, nineteen miles distant from its junction with Whitadder, is in high repute for the size and excellence of its fish. They resemble, in some respects, the trout of Eden, and when in season are red-fleshed. Sea-trout, it is said, do not ascend the Blackadder, but take freely to the channels of its fairer sister. The same assertion was made to me, with respect to the Leet; but I quickly disproved it by capturing several fish of this sort in its pools: and from the Eden, a stream of the same nature as Blackadder, I have frequently, below the falls, taken bull-trout and whitlings. The *salmo salar* has also been killed close to Ednam, during the fence-season.

One of the oldest and largest fishing-clubs in Scotland (the Ellemford) is connected with the Whitadder, and takes its name from an angling station on this river. It originated in 1827 or 1828. The funds at its disposal, in 1844, amounted to above four hundred pounds. A handsome rod and reel, the bequest of the late Andrew Girvan, Esq., one of its original members, form the leading prize, and are annually contested for on the Whitadder in the first or second week of May. There is also a medal given in perpetuity by George Trotter, Esq., of Chirnside, to the captor of the best dozen of river trout—the rod, along with an honorary medal, the property of the club, being awarded for the

greatest weight. The Ellemford fishing-club is under the control of a council and secretary, Alexander Low, Esq., to whose enthusiasm and judicious management it owes much of its prosperity.

The best stations for anglers on the Whitadder and Blackadder rivers are Longformacus Inn, at the junction of the Dye and Watch; Ellemford Inn, six miles from Dunse, and Allanton, at the junction of the Whitadder and Blackadder.

With regard to the salmon-fishings of Tweed, I have been favoured with the following communication from a gentleman in Berwick, who has every facility for acquiring correct information on the subject. In reply to the inquiries made by me, he observes:—"As regards the rent of the salmon-fishings on the Tweed, I cannot state exactly what it is from Norham downwards; but the assessment from Eden-mouth, a little below Kelso, down to the sea, and including the sea-side fisheries four miles north and five miles south from the river, was, last year, (1846) made upon a rental of 5358*l.* 2*s.* The average number of boxes of salmon shipped in ice (containing each about ten stones) has been for the last ten years 4610. The local consumption of salmon, &c., I can hardly estimate; but it is chiefly in the months of July, August, and September, when it is cheapest; and I should think it can scarcely be called less than two or three hundred boxes in the season. During the last twenty years, there have been, and always will be, a great difference in the quantities of fish taken, when compared one year with another, as there are seldom two seasons alike; sometimes there are more salmon and fewer grilse, and *vice versa*. Trouts also vary very much in number and weight; and, in consequence, it is almost impossible to state generally as to the increase or falling

off, either in the numbers of the fish or the value of the produce, without giving the particulars of separate fishing-waters, which it would not be proper to do. Taking, however, the number of the boxes shipped, as a sure criterion of the weight of the produce, I should say the quantity of salmon, grilses, and trouts collectively, has been considerably greater, during the last ten years, than in the ten years preceding; at the same time, the seasons of 1845 and 1846 have been much worse than 1844. Last year, especially, was one of the worst grilse and trout-fishings that has occurred for a very long period of years. The heaviest salmon killed in Tweed that I recollect was one of fifty-six pounds, nearly thirty years ago; but now, there is occasionally one of twenty-eight or thirty pounds; and the average for the whole season, I think, will not exceed eleven or twelve pounds. For a week or two, in the height of the grilse-fishing, there are sometimes very large hauls taken near the mouth of the river; and I have known as many as eight hundred or nine hundred captured in one day at a fishing so situated; but this is a rare occurrence; and when two hundred or three hundred are taken in the twenty-four hours, the fishing is considered very good. In stating these large numbers, I mean salmon, grilses, and trouts to be all included; and the proportion is generally about one salmon to ten or twelve grilses, and two grilses to one trout. The principal time of the fishing may also be mentioned to be from about the middle of July to the end of August; after that, the quantities are comparatively small."

The EYE, in Berwickshire, was at one time esteemed a good angling stream. It is said, however, to have been much injured of late by railway operations, but will probably, after a time, regain its former reputation.

There are few lakes, and those of small dimensions, in the counties of Berwick and Roxburgh. Coldingham Loch, containing perch, is the largest natural sheet of water in the former; and in the latter, Primside or Yetholm Loch producing pike and perch; Hoselaw, where there are perch; and Essenside, Shielswood, Headshaw, and Ashkirk yielding, along with the fish above named, a few trout. The four last are situated in the parish of Ashkirk.

The TYNE, in Haddingtonshire, is celebrated for its connection with the case of *Fergusson v. Shirreff*, the decision on which has so largely affected the interests of the angling community in Scotland, and has left behind it a degree of irritation not easily removed. Its sources are in Middleton Moor, and it travels, at a somewhat sluggish pace, upwards of twenty miles, before reaching the sea, near Dunbar. The trout it contains are of excellent quality, and acquire occasionally large dimensions. I have frequently killed them, upwards of two pounds in weight. When in season, they are a shy fish, and refuse the ordinary-sized flies, preferring the midge varieties and dull colours. Minnows also are in esteem, if properly selected, and in the streams when small, the trout take the worm with avidity. Salmon ascend the Tyne, as far up as the fall at East Linton, but not in great numbers. The burn of Biel, not far off, contains nice trout; and the loch of Pressmennan, connected with it, is stocked with the Loch Leven breed, as well as carp and tench. This artificial piece of water is nearly two miles in circumference. The right of salmon fishing in the Tyne is possessed by the Earl of Haddington, who has also the coast fishings on both sides of its mouth, from the Peffer-burn to within a short distance of the Biel water.

CHAPTER XIX.

FORTH AND ITS TRIBUTARIES.

THE FORTH, or BODOTRIA of the Romans, has its fountain-head on the north side of Ben Lomond, and traverses Stirlingshire for about ten miles, under the name of Duchray. Its current during this part of its course, is sluggish, and the banks, which are formed of black moss, possess no features to attract or interest the tourist. It then enters Perthshire, and receives, near Aberfoyle, a large accession to its streams in a river issuing from Loch Ard. At its junction with this water, it takes the name of Avondow, and after running five miles in Perthshire, again passes into the county of Stirling, and obtains the name of Forth. Still, until in the vicinity of Stirling itself, it is not much distinguished either for its size or beauty; and only after having pursued a course of thirty-four miles, and receiving accessions from the Teith and Allan waters, does it become entitled to the rank of a first-class river. The surface which it drains, as it proceeds, has been estimated at five hundred and forty-one square miles, and it conveys to the sea about one-fourth of the quantity of water carried down through the channel of Tay.

In the Forth are found salmon, grilse, trout, pike, perch, sparlings or smelts, along with eels and flounders, and occasionally sturgeon. The salmon-fishings in the vicinity of Stirling belong principally to the town and

the estate of Craigforth. The rent of these in 1840 amounted to seven hundred and sixty-six pounds. At present they fetch nearly one thousand pounds. The lower fishings, those betwixt Stirling and Alloa, draw about the same sum. Forth salmon are held in high repute, being large and rich-tasted. Many of them weigh from eighteen up to thirty pounds, and some have been killed as heavy as fifty pounds. Their price, at the beginning of the season, is two shillings and ninepence or three shillings, and near the close, as low frequently as sixpence or eightpence. There are no net-fishings in this river above its junction with the Teith, but it contains several good salmon-casts for the angler. The main stream, however, is much injured by the quantities of moss floated down from the upper districts of the county. It yields a considerable number of yellow trout, but these in general, although strong and active, are not large. The heaviest one taken there of late years was captured by Mr Sawers, secretary to the Stirlingshire Fishing Club. It weighed two-and-a-half pounds. The best salmon-fly for Forth is one having yellowish-dun wings, tipped with white, black body, and black hackle, with silver tinsel; the tail-tuft yellow, and a little orange dubbing worked on, at the root of the wings.

The TEITH, which is by far the largest tributary of the Forth, is a clear, fast-running river, with a good deal of gravel at the bottom, and is much preferred to the main stream by salmon and sea-trout ascending to spawn. Its course from whence it springs in the braes of Balquhiddy, to where it joins the Forth, lies entirely in Perthshire. There are properly two branches that form this river; one from the braes above mentioned, which takes its way through Lochs Voil and Lubnaig,

and the other passing out of Loch Vennachar, having previously descended Glengyle, and traversed the whole length of Lochs Katrine and Achray. These unite immediately above Callander, and proceed, receiving the Keltie during their progress, by the village of Doune towards Stirling, a distance of nearly fourteen miles. All the lochs through which the Teith flows contain trout, and those belonging to the south branch of the river produce pike. This last-mentioned fish has been taken in Lochs Katrine and Vennachar of great size. The trout in Loch Vennachar are of a very superior description, and weigh from one to three pounds, cutting red and firm. In Lochs Katrine and Lubnaig, there are a few charr, and in the latter, trout of enormous weight have occasionally been captured. One belonging to the *salmo ferox* species was taken, two or three years ago, by my friend Charles Ker, Esq., a member of the Stirlingshire Fishing Club, weighing fifteen pounds six ounces several hours after its capture; and a still larger one is reported to have been caught by another party, on a previous occasion. Loch Voil also contains trout of large size. One of the proprietors on its banks, J. L. Stewart, Esq., Glenbuckie, frequently kills them, with trolling tackle, of the weight of six or seven pounds. Salmon are sometimes secured by the rod-fisher in Loch Vennachar, and occasionally also in Loch Lubnaig; the falls at the pass of Leny proving, however, a considerable obstruction to their progress. On the Teith, under these falls, there is a tolerable salmon-cast for the rod, and below Callander, a succession of pools frequented by the monarch of the tide.

In some places the sea-trout fishing, although by no means first-rate, is in its season worth engaging in.

The angler, along the lower portions of the Teith, is much incommoded by trees and steep banks, below which he has to wend his way with caution and considerable difficulty. Good yellow trout are taken, by means of the spinning minnow, throughout the course of the river. In the Keltie and Bracklinn-burn, also in Stanck-burn, which falls into Loch Lubnaig, I have met with tolerable sport. There are two ponds on the braes of Doune containing pike and perch, Lochs Watston and Loch Maghaig. A cruive-dyke extends across the Teith at Doune Castle, fitted with boxes for catching salmon. The rent it draws is a mere trifle.

Of the streams which enter Forth higher up, the largest proceeds from Lochs Chon and Ard. The trout of these lochs weigh from one to four pounds, and are esteemed equal in flavour to the fish of Loch Leven. They have been captured of the last-mentioned weight by W. Macdonald, Esq., of Powderhall, in Lochs Chon and Arklet, the latter communicating by a small stream with Loch Lomond. Pike are sometimes caught here, weighing from fifteen to twenty pounds. Loch Dronkie, which empties itself into Loch Vennachar, lies at no great distance. It contains fine red-fleshed trout, half-a-pound and upwards. Farther down, the Forth is joined by the Goodie water, from the lake of Monteith. In it, and particularly in the lake itself, sometimes called Inchmahome Loch, fine trout exist. These, however, are not very abundant, and of remarkable shyness. Pike were at one time plentiful here, but are now on the decrease, having been thinned with nets. Loch Rusky, in the neighbourhood of Inchmahome, produces this fish and abundance of perch. There are two or three other small lakes not far off, but none of them merit the angler's attention.

A short way above Stirling, on the Perthshire side of the river, the Forth is joined by the ALLAN water. This stream runs by Ardoch and Dumblane, entering Stirlingshire at the bridge of Allan. It contains trout, and in the upper parts a few pike. Occasionally, whitlings enter its mouth, and a stray grilse or two.

In connection with the rivers and lochs of Stirlingshire, a fishing club was recently instituted, comprising upwards of seventy members, and governed by a stringent code of laws. Under the able and judicious management of a highly respectable council, and its secretary, John Sawers, Esq., Procurator Fiscal for the county, it has every prospect of flourishing. The prizes contended for consist of a medal, fishing-rod, and other appurtenances connected with the angler's art.

Below Stirling, Bannockburn joins the Forth from the south, and a little way further down it is increased by the Devon from Clackmannanshire. The main river, from Stirling to Alloa, is deep, sluggish, and winding in its course. It is also, at certain states of the tides, navigable for vessels of considerable burden, and steamers ply regularly to and fro. The Devon joins it about two miles west from Alloa. Including its windings, the course of this stream is twenty-six miles; exclusive of these, that is, taking it in a direct line from its source to its embouchure, it does not exceed six miles. In the upper parts of Devon I have killed great numbers of small trout, but machinery and other causes have considerably thinned them lower down. A few whitlings and grilses find their way up, during close-time, as far as Dollar. Below Alloa, an insignificant stream, termed the South Devon, discharges itself. It contains some pike, and in its neighbourhood is situated an artificial expanse of water,

covering, when full, an extent of one hundred and sixty acres, and designated Gartmorin-dam. It was stocked originally with trout from Loch Leven, but these are supposed to have died. Pike were afterwards introduced into it, and I recollect one forenoon capturing five or six with the rod, the largest weighing about eight or nine pounds. One was taken out of it, I understand, of the weight of twenty-four pounds. Sturgeon are frequently killed, at the mouth of the Forth, and as far up the river as Stirling. In August, 1842, I witnessed the capture in the salmon nets of two of these fish. The largest known to have been killed was in 1823, and weighed one hundred and eighty pounds.

After forming its firth or larger estuary, Forth, on the south side, is supplied with numerous contributions. The Carron, Avon, Almond, Water of Leith, and Esk, successively discharge their waters along its shores, and on the north side it receives the Leven and other small streams. Of these, the Carron contains a few trout and perch; and in Loch Coulter, which it passes, besides the last-mentioned fish, are found pike. The Avon produces trout, some of considerable size, while the lochs near its sources, of which there are several, yield perch and eels. In the Almond and Water of Leith, I have caught numbers of trout, also in the Esk and Compensation Pond. Leven, in Fifeshire, and the Orr, its tributary, contained, several years ago, a good many fish, among which were trout of large dimensions, pike, and perch. I think it probable, however, that the first-mentioned fish are now very rare in the Fifeshire rivers; the *dulcia* of the angler having vanished before the *utilia* of the community. In the Eden, which passes Cupar, there still, I am told, remain a sprinkling of

river trout, and a few of the migratory species push up into its waters.

In connection with the rivers discharging themselves into the Firth of Forth may be mentioned the far-famed **LOCH LEVEN**, in Kinross-shire. This lake previous to its late partial drainage extended to four thousand six hundred and thirty-eight imperial acres. It is now diminished, when in its maximum state, to three thousand five hundred and forty-three acres, or by one-fourth of its extent. In consequence of the drainage, the feeding grounds of the trout inhabiting it have been greatly reduced in size, and the fishings, according to the calculation of Dr. Fleming, of Aberdeen, prejudiced to the extent of seventy-three pounds per annum. The present rental is upwards of two hundred pounds, and the price of the trout at Kinross one shilling per pound, that of pike two-pence, and perches two-pence per dozen. Betwixt thirty and forty years ago, the Loch Leven trout were sold there at four-pence per pound. The fishings in this loch commence on the 1st of January, and close on the 1st of September. In my opinion, they are open at least three months over and above what they ought to be. No trout, in any lake in Scotland, arrives at edible condition before the 10th of February, and few ought to be eaten later in the season than the middle of August. The fishings of Loch Leven employ two boats and four boatmen, during a considerable part of the season. One of the largest trout captured here weighed nearly eighteen pounds, and they are frequently killed half that weight. In 1822, a pike was caught in this loch, weighing forty-two pounds, Dutch weight.

The following is an extract from an article, in the Transactions of the Royal Society of Edinburgh (Tran-

sact., vol. xiv. pp. 9 and 10.), with regard to the *Salmo Levenensis* or *Cæcifer*, a species of trout common in Loch Leven, by Richard Parnell, Esq., MD., F.R.S.E., &c.

“This species of trout, which is well known to many persons as a delicious article of food, is considered by most naturalists, as a variety of the *salmo fario*, or common fresh-water trout, the redness of its flesh depending on the nature of its food. I consider it however not only as distinct from the *salmo fario*, but as one of the best defined and most constant in its characters of all the species hitherto described. It is at once distinguished from the common fresh-water trout, by the number of its cœcal appendages, which vary from seventy to eighty; whereas, in the *salmo fario*, they are never more than forty-five or forty-six in number. Its tail is crescent-shaped at all ages, and the body has never the vestige of a red spot.”

The QUEICHS, North and South, are the principal feeders of Loch Leven and the streams to which its trout resort, in the spawning season. The North Queich, being the larger of the two, was the one preferred for this purpose, but it is now, owing to the removal of the shelter which its banks and channel afforded, little frequented. After a large flood in September and October, many hundreds of breeding fish were at one time killed here during night with the spear, by parties of poachers; and at the dam dykes belonging to the small mills, high up the stream, whole sackfuls have sometimes been taken out, on a single occasion.

CHAPTER XX.

TAY AND ITS TRIBUTARIES.

THE TAY discharges a greater bulk of water than any other river in Great Britain. As ascertained by Dr. Anderson, the quantity which is carried forward, per second, opposite the city of Perth, averages no less than three thousand six hundred and forty cubic feet. This noble river is formed of the various streams which empty themselves into Loch Tay, and passing through its basin make their escape, in one body, at the lower end of the lake. Of these, the principal are the Dochart and the Lochay, both of which, especially the former, deserve the attention of the angler. The course of the Dochart, after issuing from Loch Ure, extends above ten miles. It contains excellent trout, some of which attain the weight of two or three pounds. Salmon also ascend it, but not in large numbers, as they are greatly obstructed by a water-fall of considerable height, near the mouth of the river, at Killin. This fall is an object of equal interest to the fisher and the scene-hunter. The former may here practise, if inclined, a mode of angling for salmon, which, although it does not test the caprice of the fish, or even the skill of the fisherman, yet affords, under the circumstances of the case, legitimate sport. The apparatus used is simply a strong rod or staff, to which are appended a cord and heavy plummet, along with a set of

large hooks, "tria juncta in uno." These, the angler, taking his position on a rock close to the cataract, drops into the foaming water below, the spot where the salmon generally rest having been pointed out to him. On the plummet coming into contact with the bottom, he merely requires to give a jerk upwards with his rod, and should a fish, which frequently happens, be in the way, he has every chance of getting hold of it. I have seen the same mode of fishing practised in the Orrin in Ross-shire, and I understand that, in certain states of water, it proves very successful.

The salmon-fishings in the neighbourhood of Killin are let, on the average, for one hundred and fifty pounds per annum. Besides the falls on the Dochart, there is a splendid cataract on its sister stream, the Lochay, three miles from their junction.

LOCH TAY contains salmon, pike, trout, and charr. The two former have been captured in it of the weight severally of thirty-six and twenty pounds. A friend of mine, some years ago, caught, while trolling near the head of the lake, a common trout weighing eight pounds. This sheet of water is about sixteen miles in length, and in breadth above a mile; its depth, in some places, exceeding six hundred feet. There are excellent inns both at Kenmore and Killin, also a small one at Lawers, and boats are kept for hire at the head of the lake.

Tay, on issuing from Loch Tay and passing Taymouth—the seat of the Marquis of Breadalbane, receives the Lyon, a considerable stream, which takes its rise from Loch Lyon, at a distance of forty miles from where it enters the main river. I have caught excellent trout in this water. It is also frequented, during floods, by salmon. These are taken chiefly,

where the streams are rough and rapid, near the falls of Sput-ban and Moar. Valuable pearls are found both in the Lyon and Dochart rivers.

After receiving the Lyon-water, Tay sweeps on through a highly picturesque country, for a distance of twenty miles, before it becomes again augmented by any stream deserving of attention. There are a few small lochs, containing trout on the heights above, which communicate with it as it passes, but none of these merit the regard of the sportsman. As an angling river, during this or indeed any part of its course, it is entitled only to a moderate share of praise. Although frequented by salmon in considerable numbers, these, generally speaking, are shy of the hook, nor is the nature of the water and the disposition of rocks and channel such as to encourage them to rise freely. By local anglers, however, well acquainted with their haunts, they are taken occasionally of great weight. The yellow trout in this portion of Tay, are by no means numerous, but they acquire considerable dimensions. The best lure for them is the spinning minnow, and in clear water, a fine red worm. Immediately below Logierait, the TUMMEL enters.

This river, the largest tributary of Tay, forms the drain to a vast extent of Highland territory. It takes its rise properly beyond the moor of Rannoch, on the south side of Glen Etive, not far from Kingshouse and is there designated the Gauer or Loud Sound. Augmented in its course, by numerous hill-burns, it swells out quickly into a considerable stream, and after passing through several smaller lakes, including Batha, a beautiful sheet of water, two miles long, enters Loch Lydoch. The situation of Loch Lydoch is wild and

desolate in the extreme, but the lake itself possesses many attractions, being studded with wooded islets, the haunts of the eagle and red deer, and withal abounding in trout. Of these, the generality that rise at the fly are not large, but I understand from a gentleman who, some years ago, there being no boat, trolled a part of the lake, with the assistance of a lath or otter, that it contains trout of great magnitude, upwards of a stone in weight. After leaving Loch Lydoch, which is six miles in length, the Gauer progresses towards Loch Rannoch, a distance of eight or nine miles, and forming an island at the head, discharges itself, by two entrances, into the lake. I have fished with great success at this point, which is close to George-town, a small hamlet, affording, with its inn, tolerable accommodation to anglers.

Not far from where the Gauer enters Loch Rannoch, the EROCHT river also empties its waters, pursuing the latter part of its course with great violence. The loch from which it issues is one of the longest and dreariest expanses of water in Perthshire, extending from the inn at Dalwhinnie, above sixteen miles. It contains plenty of herring-sized trout, and I make no question, larger ones are to be obtained by trolling. In Loch Rannoch, trout have been caught of thirty pounds weight, and upwards of three feet in length. They ascend one of its feeders, the Ald Eithach, about the end of September, for the purpose of spawning, and are there killed with the leister by the inhabitants of the district. It is affirmed that no salmon find their way up to this loch, being unable to surmount the falls on the Tummel, but the statement is in part incorrect, for many of these fish are known to overcome the place in question, and I am inclined to think that some of the large

spawning trout referred to are neither more nor less than dun salmon.

On its escape from Loch Rannoch, the river glides slowly along for some distance, and then becoming all at once impetuous, receives the name of Tummel. After a course of several miles, it reaches Tummel-bridge, where there is a good inn, and every accommodation for anglers. A little way below this point, the river once more assumes its placid character, and shortly after widens out into

LOCH TUMMEL.—This sheet of water is well esteemed among anglers, not for the numbers, but for the size and quality of the trout it yields. These weigh generally from one and a half up to nine or ten pounds, and are taken chiefly by means of the fly. In point of shape and edible qualities, they greatly surpass the far-famed trout of Loch Leven. As many as a dozen of these fine fish are frequently captured by the angler in the course of a day. I recollect a number of years ago securing two of them from the bank, at the outlet of the lake, and having my tackle carried off by a third. I had fished up the river from Moulinearn, and it was past sunset before I arrived at the loch. On the day following, the calm and thundery state of the weather prevented further success, and being on a pedestrian excursion, I was induced to proceed, without again disturbing its finny inhabitants. I understand, however, from my brother, who, for the last two or three seasons, has visited Loch Tummel, for the purpose of angling, that the success he there meets with, in killing large and beautiful trout, is highly satisfactory. The fly he recommends as most killing is winged with grouse feather, the body formed of purple dubbing, dark hackle, and silver twist. A boat is easily procured, and there

are no restrictions in force against *bond fide* rod-fishing.

The falls of Tummel are situated three or four miles below the loch, and not far from the junction of that river with the Garry. Their height is eighteen feet, but salmon, as I have said, are known to surmount them, and have been caught, as well as numerous smolts, farther up. The trout of the river are not remarkable either in point of abundance or quality. Large individuals have occasionally been caught by means of the minnow and parr-tail, but the appearance of these overgrown specimens is far from inviting.

At Faskally, this river is joined by the GARRY, or water of the Den, which issuing from Loch Garry, near Dalna-spidal, maintains a course of above thirty miles, and is increased, successively, by the Erochkie, Bruar, and Tilt, along with numerous lesser streams. The lower parts of Garry, at the pass of Killiecrankie, are visited, during June and July, by grilises and sea-trout, which, in some places, take the fly freely. Good freshwater trout are met with in the loch, from which it derives its name. Those, however, native to the stream, as well as the trout of Glen Tilt and Bruar, are small-sized, seldom attaining half-a-pound in weight. The rent of the salmon-fishings in Tummel and Garry does not much exceed twenty pounds. On their junction, these rivers proceed amicably together, passing the village of Pitlochrie and inn at Moulinearn, to Logie-rait, and there become absorbed in the waters of the main river—the Tay. From the heights to the left, during this portion of their course, they receive its slender tribute from a small lake famed among anglers for the quality of its trout. I allude to Loch Broom, or the Loch of Showers.

Tay being thus reinforced by rivers of no small magnitude, proceeds majestically onwards, in the direction of Dunkeld. Not far from where it travels, and on a line nearly with Loch Broom, lies to the left a chain of lakes, all of which eventually connect their waters with the Tiber of British rivers. These are commonly termed the Dowally lochs, and comprise Loch Ordie or Ard, noted for its fine trout—the Loch of Craiglush—Loch of the Lows—Butterstone Loch—Lochs Rotmel—Oishnie—Cluny, and Drumellie. The latter abound in pike and large perch; one or two also are said to contain trout of great size. These lochs are connected, most of them, by the burn of Lunan, which falls into the Isla, but as they border upon the district I am treating of, I have thought proper to refer to them at present. They are, I believe, those at least which belong to the Duke of Athol, strictly preserved and fished of course, oftener and more diligently than they would be, especially by keepers and their friends, were they thrown open to anglers in general.

On arriving at Dunkeld, Tay is joined by the Braan water, which has its source in Loch Freuchie—a well-known and much-frequented trouting loch. The fish there are not large, but lively, and of good quality. There is an excellent and commodious inn at Amulree, in the neighbourhood. A great number of small lochs skirt the elevated ground, along the course of the Braan, and are easily traced by the rivulets they discharge. Some of these tarns contain pike and perch, and others trout of good quality. The Braan is not a first-rate angling stream, but is celebrated for its cascades and fine scenery.

After leaving Dunkeld, Tay proceeds about ten miles in a circuitous direction, when it meets the ISLA—a

river of considerable size, which has its origin in Forfarshire.

The principal tributaries of Isla, are the Dean, Ericht, and Lunan waters. The first-mentioned proceeds out of the Loch of Forfar, and although a deep, slow-running water, abounding in pike and perch, contains trout of large size and renowned quality. These are taken, early in spring, with a light-coloured or yellow fly. The Ericht is formed by the junction of the Shee or Blackwater with the Ardle, and is received into the Isla about two miles below Blairgowrie. Neither the Ericht nor Isla are much esteemed as trouting streams, and in regard to salmon, with which at one time they abounded, these are now, comparatively speaking, scarce, at least during the open season. The whole rental of the Ericht, from Keith to Blairgowrie, amounts only to twenty-one pounds twelve shillings; whereas, in 1804, no fewer than three hundred and thirty-six salmon and grilse were taken at one haul, out of a single pool close to the above-mentioned village. There are some small lochs containing trout, pike, and perch on the hills that bound Glen Shee and Strath Ardle, but none of these claim much attention from the angler.

Not far from where it receives the Isla, the Tay forms what is called the Linn of Campsie, falling over a rugged basaltic dyke, which crosses the river, and is known to extend many miles on either side. This is the only part of the Tay where the rod-fishing for salmon can be pronounced good, I do not say by any means first-rate, but more to be depended upon than what is met with on any other part of the river. This is owing of course to the rocky nature of the bottom, which affords protection and positions of outlook for the fish, while the rapid character of the stream helps, by disguising the fly or

lure sufficiently to deceive them. The mode of fishing here, however, although perhaps rendered requisite, is not altogether in accordance with the notions of true sportsmen. Instead of being used as an implement of craft and skill, the rod properly tackled is simply laid astern of the boat, which is rowed gently up and across the current, so as to impart a certain extent of motion to the fly. There is little or no attempt at casting a line, and the sole demand upon the angler's skill extends to the management of the fish, on its being hooked or rather after hooking itself, without any intervention on his part. I have captured with minnow excellent trout on that portion of Tay, which succeeding the Linn of Campsie, progresses towards Perth. It appears to me, that they are found in greater abundance here than in any other part of its course.

After Isla, the only other rivers of note which empty themselves into Tay are the ALMOND and EARN. The former of these, about twenty years ago, was much frequented by whitlings, but they are now comparatively scarce, at least in the upper portions of the river and above Buchanty. Almond abounds in small trout, especially in the Glen which is of a highly romantic character. I have frequently fished there and enjoyed, if not the sport, at least the scenic attractions of that part of the stream. Small pike are very numerous in the Tay, at the mouth of the Almond. Some years ago, no fewer than seventy of these fish were captured, at one draught of the drag-net.

EARN, which joins the Tay several miles below Perth, issues from Loch Earn, a beautiful expanse of water, measuring in length about seven miles, and of the depth, in some places, of one hundred fathoms. This lake contains abundance of fine trout, and there is ample

accommodation for the angler on its banks, both at Loch Earn-head and St. Fillans. On leaving the loch, the river wanders through some of the finest scenery in Perthshire, comprising Duneira and Abruchil, until it reaches Comrie, where it is joined by the Ruchil and Lednock. Of these, the former has its sources in the deer-forest of Glenartney, and although at a considerable distance from the salt water, is frequented by large quantities of sea-trout. Indeed, there is at present no stream in the county that equals it in this respect, and what is very remarkable, while it manifests the rapidity with which these fish ascend our rivers, although Glenartney, taking into account the windings of Ruchil and Earn, is above eighty miles from tide influence, yet, on the occurrence of a fresh or *spate*, not twelve hours elapse before the highest parts of the stream, ten or twelve miles from Comrie, are stocked with newly-run sea-trout or whitlings. I have several times met with excellent sport in this wild and rocky district, but it is necessary that the waters be swollen with previous rains, in order to obtain much success. It is not uncommon for the angler to capture upwards of a dozen sea-trout, weighing from a pound to four pounds each. The bed of the Ruchil is rocky and filled with large stones, among which, and in fierce rapid water, the fish, when hooked, display great activity and make short work of cutting or snapping the angler's tackle, if not well guided and looked to. The fresh-water trout in Ruchil are small but numerous.

Quitting Comrie, the Earn pursues its way towards Crieff; and on its approach to that town, is increased by a small stream, well known in song, the Glen Turret. This rivulet finds its way from an upland loch, famed among anglers. It contains beautiful red trout, averag-

ing from half-a-pound to two pounds in weight. I have frequently fished it; and on one occasion, June, 1833, while along with the late Professor Gillespie, of St. Andrews, a well-known angler, and the author of an article on the subject of worm-fishing in Blackwood's Magazine, captured upwards of six dozen trout, seven or eight of which weighed above one-and-a-half pounds each.

A good many sea-trout frequent this part of the Earn; but the salmon, comparatively speaking, are few. Large pike are to be found in many of the pools, especially at the mouth of the Pow-burn, two or three miles below Crieff. Yellow trout also abound in some places; and, with minnow or worm, one may occasionally fill a good-sized pannier. Not far from Crieff lie the artificial ponds at Drummond Castle. These were stocked originally from Loch Leven; but I understand the trout have much fallen off in point of flavour, although still maintaining their redness of flesh. There are pike and perch in the pleasure-lakes at Auchtertyre and Abercairney, and trout in the Loch of Balloch, at the foot of Torlum.

Below Crieff, a number of small rivulets enter the Earn. Of these, the Mahony and May-waters are the principal. The latter abounds in nice trout, and is one of the best angling streams, taking its size into account, in the whole of Perthshire. It is, however, under very strict preservation.

The salmon-fishings on Earn have much fallen off in point of produce. Those connected with the Moncrieffe property are rented for about thirty-one pounds per annum; those in the parish of Forgardenny for about ten pounds. The best stations for the angler are at Crieff and Comrie, where there are excellent inns. Loch Turret, I may mention, is now under reservation; but

Earn and Ruchil, with the exception of that portion of the former river which adjoins Strowan, are open to strangers; also the whole of Loch Earn and the district of Glen Almond, not far from Crieff.

Having given a detailed account of most of the streams and lakes connected with Strath Tay, I shall now add a few particulars regarding the salmon-fishings in the main river. Of these, the principal proprietors are the city of Perth, Lord Gray, Sir John Richardson, Earl of Kinnoul, Mr. Hay, of Suggieden; Duke of Athol, Earl of Mansfield, &c. &c. The fishings belonging to the town of Perth were let in 1837 for betwixt eight and nine hundred pounds. Twenty years ago, the rent was equivalent to fifteen hundred pounds. All the salmon taken above Newburgh are shipped from Perth to Dundee by lighters, and conveyed per steam to London. In 1835, the numbers shipped exceeded twenty-five thousand salmon and fifty thousand grilse, making five thousand boxes, or two hundred and fifty tons of fish. The average for the last twelve years, however, has not exceeded four thousand five hundred boxes. About nine thousand pounds may be stated as the gross rental of the whole salmon-stations from Perth to Newburgh. Lord Gray's stations were let *in cumulo*, in 1837, for upwards of three thousand pounds. Not long before, they fetched four thousand pounds; and as an example of the variation which this sort of property is subject to, I may mention, that the fishings belonging to Lord Mansfield, and extending from Scone Palace to Cambus-Michael, conjunctly with a portion of those belonging to Lord Kinnoul above Quarry Mill-dam, were let, in 1844, for one hundred and twenty pounds. Eighteen years ago, the rent was eleven hundred pounds. This singular reduction is owing, partly to the rival

keenness and energy with which the lower fishings are worked, and partly to the alterations made as to the close time, which formerly extended from the 26th of August to the 12th of December, and now dates from the 14th of September to the 1st of February. Another instance of this variation occurs, in regard to the Redgorton fishings, which used to bring five hundred and fifty pounds, and were lately let for sixty-five pounds per annum.

CHAPTER XXI.

RIVERS OF ANGUS AND ABERDEENSHIRE.

THE ESKS.—There are several rivers of this name, which signifies *water*, in Scotland; but as salmon-streams, as well as on account of their size, those belonging to Forfarshire are the most important. The NORTH ESK takes its rise in the mountains of Angus, and travels about fifty miles. Its basin may be estimated at two hundred and thirty square miles. Its mean depth is one-and-a-half foot; and velocity per minute, one hundred and ten feet; the breadth where it enters the sea being forty-seven yards. This river is formed, properly speaking, by the junction of three smaller streams,—the Lee, the Mark, and the Brany. During the upper part of its course, it receives the Effock, Tarf, Keeny, and Turret, along with other petty rivulets. The Lee, augmented by the Unach, passes through a small lake before joining the Mark and Brany. Further down, the North Esk receives the West, Cruik, and Luther streams. The trout in these waters are generally small, but plentiful; those of the Cruik and Luther are noted for their fine flavour. The coast-fishings for salmon at the foot of the North Esk were at one time very valuable; and, including those of the river, brought, as late as 1837, a rental of £3591. In these fishings, which extend but a small way, as many as three thousand fish, salmon, grilse, and sea-trout, have

been taken in one day. There is tolerable rod-fishing for salmon on this river, as high up as Edzel, where a station, rented at fifty or sixty pounds, was formerly maintained.

SOUTH ESK has its sources in the parish of Clova, in a loch of the same name. After a descent of sixty or seventy miles, it enters the German Ocean at Montrose. Besides Loch Esk, two other lakes lie situated among the mountains where it rises, Lochs Wharral and Brany; all three contain trout. Those in Loch Esk are, many of them, large in size, and of good quality. Sea-trout find their way up, in October, as far almost as this lake. The tributaries of the South Esk are the White-water, the Prosen and its feeders, Lednathy, Glenoig, and Glenlogy—the Carity, Lemno, Noran, and Pow waters. These all contain trout, and are severally held in esteem by the anglers of the district.

The fishings for salmon on the South Esk were at one time very productive, those of Rossie yielding annually ten thousand salmon and grilses. The present annual rent of the Rossie fishings is about six hundred and fifty pounds; they have been let as high as eight hundred pounds. Those of Usan were let lately for fifty pounds, and the station at Boddin Point draws about four hundred pounds. In the parish of Farnell, the salmon-fishings fetch two hundred and fifty pounds.

The LUNAN water proceeds through a chain of lakes, Restenet, Rescobie, and Balgavies, which abound with pike. It falls into the sea ten miles below the last-mentioned loch. Along with its tributary, the Vinny, it contains excellent trout, and a few salmon ascend it in the spawning season. There are two fishings near the mouth, which are let for about one hundred and forty pounds.

The principal rivers in Kincardineshire, besides the Dee and North Esk, which divide it from the counties of Aberdeen and Angus, are the Bervie, Carron, and Towie waters. The Bervie has a course of sixteen miles from the hills of Glenfarquhar, where it rises. It is highly esteemed as a trouting-stream, and salmon occasionally ascend it. The other two are of insignificant size, during summer, and but indifferently peopled with small trout.

The DEE, which springs from the mountains of Braemar, four thousand and sixty feet above the level of the sea, has a course, including its windings, of nearly a hundred miles. Its mean velocity is three-and-a-half miles per hour, and its average depth four feet. As a salmon-river, it is in considerable repute among anglers, abounding in rocky pools and streams, which are frequented, from the mouth to within a few miles of its sources, by the monarch of the flood. The yellow trout of Dee, however, are both scarce and small; and in this respect, it differs much from its neighbour, the Don, which is famed for the abundance and size of its fresh-water inhabitants.

Of the tributaries which Dee receives in the upper valley or glen, the principal are the Lui, the Coich, and the Clunie. Connected with the Clunie-water, is Loch Calader, the resort of a small variety of salmon, weighing seven or eight pounds. Loch Brodichan, also, is situated in the same district, and contains excellent red trout. These lakes are on the estate of Invercauld, and not far from Castleton, of Braemar. At Ballater, Dee is joined by the Gairden and Muick rivers; the latter from Loch Muick—a sheet of water two miles in length. The scenery is bold and romantic, and there is a fine cascade on the stream, about the middle of its course. Not far from

Ballater are several other lakes, one of which, the Dhu loch, or black lake, although small in extent, deserves notice on account of the terrific grandeur of its situation. There are also connected with the Dee, by the burn of Dinnet, near Aboyne, the lochs of Cannord and Dawan, both of which contain trout. Here, also, the Tanner and Feugh waters discharge themselves into the main stream. Near where the latter joins, but on the opposite side of the river, is the Leys Loch, containing pike, and frequented at certain seasons by great numbers of water-fowl. The Culter-burn is the only other stream worthy of the name, which enters the Dee above Aberdeen.

The Dee, during its course, has been estimated to drain nine hundred square miles of country. Its waters rival in purity the most limpid of our Scottish rivers, the Aven in Strathspey alone excepted. Like those of many of our salmon-streams, its fishings are said to have declined greatly in value. About two hundred men are employed at Aberdeen in salmon-fishing. The quantity of fish caught, in an average season, has been estimated at twenty thousand salmon and forty thousand grilse. This number includes those taken by stake-nets, and at the mouth of the river, on the adjacent beach. A variety of the *salar*, termed canavegs, from the smallness of the head, is said to ascend the Dee considerably later than the generality of other salmon. These, judging from the description I have heard of them, are evidently nothing more than the spring or clean fish of the river, which possess this peculiarity to a conspicuous degree wherever found. The best stations for the angler are Kincardine O'Niel, the Huntly Arms at Aboyne, Ballater and Castleton of Braemar. The salmon-flies in use on the Dee are close in the hackle,

the dubbings lightly put on, and occasionally omitted. The wings also are narrow; and these, too, sometimes dispensed with, in the fabrication of the lure, so that thus reduced, the fly has the appearance of a large palmer-worm. The Tweed and Tay fly-hooks, however, have been found as killing as the local ones.

As a trouting stream approaching to the first class in point of size, the Don has few equals in Scotland. It has its sources about five miles above Corgarff, and, including its windings, travels a course of sixty-one miles, emptying itself into the sea near Old Aberdeen. The Don contains trout and a few pike: salmon and sea-trout also ascend it, but not in great abundance, and seldom in their clean state. River trout are frequently killed of the weight of five pounds. On an average, however, they do not weigh more than half-a-pound. The principal tributaries of Don are the Bucket from Glen Bucket, the Esset, and the Ury. Of these, the Ury, as an angling stream, is by far the most celebrated. Trout are sometimes captured in it of three, four, and even six pounds weight. This river takes its rise in Strathbogie, and has a course of about twenty miles, including its bends. It is fed by the Colpie burn, the Kellock, the Shevock, and the Gady. Kintore, Inverary, Monymusk, and Alford are good stations for the angler. The flies used on Don are similar to those fished with on Tweed. Salmon were at one time very abundant in this river, within the memory even of many still alive. No fewer than forty of these fish were killed during one season near the bridge at Alford by a single individual, from the same pool, notwithstanding that it was frequented by all and sundries. The large trout of Don are red-fleshed and beautifully shaped.

The pearl fisheries of YTHAN, the ITUNA of the

ancients, have spread its reputation far and wide. It has been affirmed, upon reasonable grounds, that the large pearl in the crown of Scotland is part of the produce of this river, and there is no doubt that a patent was granted to one Robert Buchan for the fishing of pearl-mussels on the Ythan, and afterwards withdrawn by act of parliament, in the reign of Charles the First. The pearl in question is said to have been found at the junction of the water of Kelly with the main river, near Haddo House.

Ythan takes its rise in the parish of Forgue. Its course extends twenty-seven miles, and its height above the level of the sea at Fyvie Castle is one hundred and twenty-four feet. For about four miles at the mouth, the water is brackish, being influenced by the sea tides. It is esteemed, along with most of its tributaries, a first-rate trouting stream. Salmon, sea-trout, and fin-nocks ascend it in considerable quantities. Ythan is much resorted to by anglers from Aberdeen. Its salmon-fishings belong to the Hon. W. Gordon, of Ellon, and are rented by the Earl of Aberdeen. The principal feeders are the Ebrie, Brony, and Foveran, all of which are in high esteem among anglers. There are inns at Newburgh, Ellon, Methlick, and Lewes of Fyvie. A few lochs are situated not far from the mouth of the river, the principal of which is the Muckle loch of Slains. There are also two lakes, covering about forty acres of ground, within the policies of Haddo House.

The only other river in Aberdeenshire deserving notice is the UGIE, which flows into the sea near Peterhead. It is formed of two streams or branches, the North and South Ugies—the one rising in the parish of Aberdour, and the other, or principal branch, in that of New Deer. These unite at Longside, and enter the

sea about four miles from the point of confluence. The Ugies contain a plentiful supply of burn-trouts, some of large size. Their course is sluggish and meandering. Salmon ascend Ugie, but not in great numbers. Near the mouth, finnocke are plentiful. The fishings belonging to Mr. Arbuthnot of Ugie Bank, draw, at an average, forty-five pounds of yearly rent. The Rathen-burn, near Fraserburgh, is an excellent angling stream, and contains trout of considerable size; but salmon do not appear, in the present day, to ascend it. At Pitfour, on the Ugie, not far from Deer, there is an artificial lake, twenty-five acres in extent, stocked with tench, carp, and Loch-leven trout. There are also several lochs near the coast, betwixt Fraserburgh and the village of Rattray. Of these, by far the largest is Strathbeg Loch, covering an expanse of five hundred and fifty acres. It abounds with trout, both red and yellow; perch also have been introduced into it and thrive well.

CHAPTER XXII.

RIVERS OF THE MORAY FIRTH.

SPEY takes its rise in a small loch, situated on the braes of Badienoch, and bordering on Lochaber, in Inverness-shire. Colonel Thornton, in his Sporting Tour, relates that out of this insignificant expanse of water, a pike was taken of the enormous weight of one hundred and forty-six pounds; and in Loch Alvie, which is not far distant, he himself caught one that measured in length five feet four inches, and weighed forty-eight pounds. From Loch Spey to the Moray Firth, the course of the river is not less than one hundred miles. Throughout its entire progress, it presents no natural obstacle to the ascent of salmon, which accordingly, having escaped over the cruive-dyke above Fochabers, wend their way up, during close-time, to its highest sources. The first tributaries worthy of mention which Spey receives, are the Trium and Tromie waters, both of which are connected with hill-lochs, Lochs Quoich, Vroltan, and Turlich, containing abundance of small trout. After passing Kingussie, and before entering Rothie-murcus, Spey expands into a lake, termed Loch Inch, escaping from which, it is joined by the Feshie water from Glen-Feshie. Lochs Alvie, Rothie-murcus, Morlich, Pittenlish, and Garten, also empty, in close succession, their surplus contents into its channel. The breadth of Spey, on its transit through this district, may be reckoned

about fifty yards, and its depth ranges from one to twelve feet. It contains, along with the neighbouring lakes, trout and pike in abundance. Salmon are by no means so plentiful, except during the spawning season. Charr also appear in the river for about a fortnight, in the month of October. The pearl-mussel is fished up in considerable quantities. The best stations for the angler in this district are Kingussie and Aviemore Inns.

Above Grantown, Spey is joined by the DULNAIN water, and afterwards, on entering the counties of Banff and Moray, by the AVEN, its largest tributary. The Aven takes its rise from a loch of the same name, situated at the foot of Ben Macdui. Its course exceeds forty miles, and it is increased, as it proceeds, by numerous streams. Of these the principal is the Livet water, augmented by the Crombie and Tervie. Loch Aven is three miles long and a mile broad. It abounds in trout of a black colour and slender shape. In its neighbourhood are a number of small lakes, termed the Black-lochies, containing trout. Loch Bulg also is inviting to the angler, and discharges its over-flows into the river Aven. There is perhaps no stream in Great Britain so remarkable for the limpid purity of its waters as the one in question. Such, in fact, is its uncommon transparency, that it is reckoned dangerous for strangers to attempt fording it; what appears to be only knee-deep being sufficient to take a man over head. Aven abounds in nice trout, and is frequented, although not in such great abundance as formerly, by salmon.

The FIDDICH is the only other water of note which enters Spey. Its principal tributary is the Dullen. Both contain trout, and are occasionally visited by

salmon. There are two inns affording accommodation to the angler in the neighbourhood of Aberlour, one the New Inn, at Charleston, and the other the Cottage Inn, on the opposite side of the burn. Besides these, there is an inn on the Aven at Tomantoul, another at Inveraven; also at Fochabers, Rothés, and in various places throughout the district of Strath-spey.

As an angling river, the Spey is very unequal. It contains, in the neighbourhood of Laggan, abundance of yellow trout. Among these, several years ago, although in July, and when the weather was particularly sultry, I recollect meeting with tolerable sport. Further down, it is much infested with small pike, which commit great ravages among the fry, both of trout and salmon. The salmon-fishings upon this river belong principally to the Duke of Richmond, and are rented by the Messrs. Hogarth of Aberdeen. They extend from the mouth of Spey nine or ten miles, and include a right of erecting a cruive-dyke, which prevents in a great measure the upward passage of the fish. In fact, during the open season, there is no possibility of their surmounting this obstacle, except on the occurrence of a large flood which overtops the line of masonry. On Sundays, indeed, the slap-gate is thrown open, but 'this precarious mode of admission into the upper parts of the river is not much taken advantage of by the salmon when in a clean state. Accordingly, above Rothés, the number of fish annually captured in Spey is a mere trifle to what are taken in the Gordon fishings. The rental at present paid by the Messrs. Hogarth is six thousand pounds; not long ago it was eight thousand two hundred pounds. As many as three thousand salmon and grilses, chiefly the latter, have been captured in one day out of this part

of the river. Almost all the fish are sent, packed in ice, to London. For this purpose, eight smacks are kept constantly in employment, each at the expense of forty pounds per month. The average cargo of one of these vessels consists of two hundred and eighty boxes, containing severally one hundred weight of salmon. These boxes have been estimated at five pounds a-piece, and the number of voyages undertaken by the eight vessels during the year, additional ones being provided when required, has frequently exceeded seventy. Allowing that the average weight of each fish is eight pounds, the quantity of salmon and grilse captured yearly in the neighbourhood of Spey-mouth, and exported to London, will amount to two hundred and seventy-four thousand, four hundred pounds. The salmon-fishings on Spey are chiefly conducted by net and coble. The men employed are divided into twelve bands, each band consisting of seven fishermen, and a "kenner," or overseer.

In regard to rod-fishing for salmon, permissions to indulge in that recreation are to be obtained from the Messrs. Hogarth of Aberdeen, the fish taken, of course, to be delivered up to the kenner. During the grilse season, I understand that the sport is frequently first-rate, and a practised angler may haul in eight or nine fish, and hook as many more, in the course of a forenoon or evening, all of these being new-run, well-conditioned, and active. The flies used I have elsewhere described, but may mention that the most favourite ones are those which are winged with the brown mottled feather taken from the back of the mallard—and having a long-fibred hackle, generally one of those which depend from the breast of the male heron, brown or dun-coloured dubbing, and a strip of fretted tinsel, wound, not too closely, around the body.

It is a circumstance worth mentioning connected with the salmon-fishings on Spey, that in order to give protection to the spawn against the attacks of the water-ouzel, it was formerly the custom to reward any person who during the season had killed one of these birds, by giving him permission to fish salmon with the rod during close-time. This clause, however, is not embodied in any modern enactment relative to salmon-fishings, nor is it at all likely to be introduced in time to come. Still, there is no question that the havoc occasioned among the spawning beds, by means of the ouzel or water-crow on most of our rivers in the present day, exceeds all the damage that could possibly be achieved by rod-fishers, whose lures and artifices few fish intent on breeding ever regard. I have often seen, on a single stream in Tweed, three or four of these little birds, busily employed filling their paunches with unhatched *ova*. On these occasions, they appear to act in concert—proceeding regularly, pair by pair, up the shallow water. They remain under the surface, generally about half a minute, sometimes longer; every dive, on the bird again emerging, is succeeded by a short flight, and on betaking itself once more to the bed of the stream, it does so with a considerable degree of violence. While below water, it walks with apparent ease, and makes the most of its time. The water-ouzel has a fine melodious voice, and on Tweedside pours forth its lay earlier than any other of our feathered songsters.

To revert to the Spey; it is considered to be the most rapid of our first-class rivers. Its general velocity has been estimated at four-and-a-half miles per hour. At the mouth, and along that portion of it where the salmon-fishings are principally conducted, it is liable on the occasion of a flood to shift its channel; consequently,

few yellow trout are met with below the cruive-dyke : but finnock, and at certain seasons sea-trout, are plentiful. The finest salmon-pools for rod-fishing, above Rothes, are situated in the neighbourhood of Aberlour.

FINDHORN has its rise in the Monad-lead group of hills, in Inverness-shire, and discharges itself, after a course of sixty miles, not including its sinuosities, into the Moray Firth. It is a rapid, impetuous stream, subject to sudden and dangerous risings, which make, at certain seasons, its banks and channel unsafe ground for the angler to venture on. In many places, the bed of the river lies confined betwixt walls of rock, to ascend which is utterly impracticable; and should, as frequently happens, great rains occur near the sources, while none take place lower down, a body of water several feet in height, with a front resembling that of a huge wave, invariably; without warning; usurps the course of the dwindled stream, carrying everything before it, and silencing at its first dread burst the shriek of horror uttered by the surprised wader. The Gaelic names given to numbers of the pools and fords commemorate many such catastrophes, and speak to the heart, if not to the recollection of the local inhabitant, more forcibly than any other description of warning.

The yellow trout found in Findhorn are not in general of large size, but they are abundant and take the fly freely. The principal tributaries of this river are the Moy-water from Loch Moy, and Bruach from Loch Bruach. Loch Moy, which is a mile and a half in length, is famed for its charr, which, however, do not take the fly freely, but are captured principally by means of the net. Loch Bruach contains fine trout. Above Dulsie-bridge, Findhorn is joined by the Pallan-

shock, and afterwards by the Dorback from Loch-an-Dorb. Near Loch-an-Dorb lie a number of small lakes, some containing trout and others pike. The Muckle-burn, to which sea-trout have access, discharges itself at the mouth of the Findhorn. It abounds in small fresh-water trout.

The salmon-fishings on this river are by no means so productive as formerly. The great flood of 1829, by altering the course of the river at its confluence with the sea, assisted much to reduce their value. They are now, however, as far at least as the lower fishings are concerned, improving, and likely to return to their wonted state of productiveness. On an average, there are six hundred boxes of salmon shipped annually for the London market, the value of each box being about five pounds. The rent paid for the river, sea, and bay-fishing was, a few years ago, one thousand one hundred and eighty pounds.

At Sluie, several miles from the mouth of Findhorn, the fishings were at one time of great celebrity. As far back as 1648, when the mode of taking salmon was very imperfect, it is stated in the *New Statistical Account of Scotland*, that, according to a letter from the Earl of Moray to his Countess, no fewer than thirteen hundred salmon were taken in one night on the pool of Sluie alone, and at a single draught six-and-twenty scores. About thirty-six years ago, three hundred and sixty salmon were caught in the same pool in one day. The number now captured in this portion of the river does not exceed, during the whole season, seven hundred fish. The right of angling is retained by the Earl of Moray, but the fishings are held by Messrs. Hogarth and Co., of Aberdeen. At the Ess, or fall, which is about six feet in height, there is practised a singular

method of taking salmon. The fisherman has his seat upon a rock, immediately under the overshoot; in his hand he grasps what is termed a *clip*, consisting of two or three crooked prongs attached to a handle of ten feet in length. Provided with this instrument, the points of which are held in readiness under water, he watches the opportunity of the fish being driven towards him by the force of the fall, and striking with a quick jerk the prongs into its body, generally manages to bring it to land. It is affirmed that one of the fishermen formerly employed at this spot, while hauling in a salmon of large size, lost his balance and was overwhelmed in the foaming eddies underneath.

The flies used on Findhorn for salmon-fishing differ considerably from those employed on the Spey, and are more assimilated to the Tweed hooks. Long-fibred hackles, however, are generally in esteem, and heron feathers, both for wings and legs, in great requisition. Irish flies also are sometimes made use of, and found successful.

The best places of resort for the angler are Freeburn Inn, the bridge of Dulsie, and Forres.

Among the lochs not far from the lower portion of Findhorn, I have omitted to mention those on the estate of Altyre, which abound in trout. The most important of them are the loch of the Romach, nearly a mile in length, and the loch of the Blairs, recently enlarged by the proprietor and stocked with choice varieties of the finny tribe.

The sources of the DOVERAN are traceable to the confines betwixt Banffshire and Aberdeenshire. Exclusive of its windings, the distance betwixt the fountain-head and mouth, at Banff, is thirty-five miles. The first stream of any consequence which enters it, is the Bogie,

having a course of fourteen miles. It is fringed thickly along the banks with alder-wood, and affords excellent trouting. The Islay, also, which joins the Doveran at Rothiemay, is esteemed a good angling stream. Further down, the Forgue burn, Turiff, and King Edward waters successively enter Doveran. The salmon-fishings on this river belong principally to the Earl of Fife. They are rented for about one thousand six hundred pounds. There are also bag-net fishings in the sea, on each side of the river's mouth. That on the east side belongs to Lord Fife; that on the west, although laid claim to by the same proprietor, has been let hitherto, in behoof of the town of Banff, for a sum approaching to two hundred pounds per annum. Besides these, there are other bag-net fishings at the mouth of Cullen Water and Boyne Burn, also at Blackpots, near Whitehills, the aggregate rentals of which are considerable. The scenery on the Doveran, at the bridge of Alvah, is highly attractive, and surpasses what is met with on rivers more frequented by the tourist. Owing to obstructions at the mouth, the upper salmon-fishings of this river are not nearly so productive as they were some years ago. The rent of three miles of water, above the village of Turriff, does not exceed five pounds per annum. A fair estimate may be deduced from this with respect to the angling capabilities of Doveran, as far as salmon are concerned, higher up.

The LOSSIE has its origin in a small sheet of water called Loch Trevie. It is connected, also near its rise, with Loch Dallas, Loch Noir or Grass Loch, and the loch of Rheninver, in all of which there is abundance of excellent trout. Its mountain tributaries are small but numerous, and on one of them, the Glen Latteragh or Angry Burn, is a splendid waterfall, upwards of fifty

feet in height. A little way above Elgin it is joined by a rivulet from the valley of Pluscarden, and further down by the Lochty and Lenoeh burns. Its course extends about twenty-five miles, exclusive of the windings. It is of sluggish character, especially below Elgin.

The sources of the NAIRN river are at Cairn Gregor, in Inverness-shire, and its length, including the windings, exceeds thirty-six miles. Not far from its rise, it receives a trifling accession to its waters from Loch Duntelchaig. It is connected also, with a small expanse of water near Loch Moy; but its tributaries, with the exception of Cawdor Burn, which attracts more by the romantic nature of its scenery than on account of its size or angling qualifications, are not deserving of notice. The Nairn, or water of Alders, abounds in small trout, and is frequented by salmon, sea-trout, and finnocks. Of the latter, I have frequently killed near its mouth from one to two dozen. A small black hackle, (No. 5 Adlington) proved, in clear water, the favourite fly; but, on the occasion of a flood, larger hooks did more execution. Both the gray and white species of sea-trout frequent this stream: these, in point of weight, range from one up to three pounds.

A few miles from Nairn, on the property of Mr. Brodie of Lethen, there is a small lake, having no perceptible outlet, called the Loch of Belivat. It abounds in fine red trout of three distinct varieties: the average weight is two pounds. This loch is remarkable for the immense flocks of sea-birds with which it is visited during the breeding season. On the occasion of an excursion there, undertaken by me in 1836, during the early part of May, there were assembled on a morass, at one extremity of the lake, not fewer than ten thousand of aquatic birds, gulls, kittywakes, &c.

The salmon-fishing at the mouth of the Nairn, and along the shore, draws a rent of about sixty or seventy pounds. The upper fishings are worth, in point of produce, five or six pounds.

The course of the Ness, from its parent lake to the sea, is not more than eight miles long; its width is about sixty-five yards, and the average depth of the river during summer three or four feet. At one time, the salmon-fishings of Ness were very productive, so much so, that, forty years ago, they brought a rent of one thousand one hundred pounds per annum; they were lately let for three hundred and seventy pounds, and a further reduction has possibly been made since, as that sum was considered by the tacksman beyond their present value. This decrease in the number of salmon is partly attributed to steam navigation; its occasion has also been traced back to the opening of the Caledonian Canal, down which, instead of the Oich and main river, the fry bred in the Garry, Morrison, and other streams betake themselves, in order to reach the sea, and are either destroyed by pike in the smooth waters, or perish in getting through the locks.

Loch Ness is twenty-four miles long, and averages a mile and a-half in breadth. Its greatest depth is one hundred and thirty fathoms. The principal feeders of this large expanse of water, are the Oich river from Loch Oich, the Moriston, Enneric and Coiltie waters, the Foyers from Loch Foyers, and Farigag from Loch Ruthven. The three first-mentioned streams are frequented by salmon and sea-trout, and all contain abundance of common trout. In the hill-lakes, also, from which they take their rise, the angler will find every encouragement to pursue his occupation. They contain, some of them, trout of great size and delicious flavour;

others are stored with pike, and one or two yield the *torgoch* or mountain charr. In Loch Ness itself, there are salmon fisheries, but these are not remarkable for their productiveness.* Both salmon and sea-trout are to be captured with the rod from the side. They frequent certain bays and localities, not far from the margin, and will rise, the one at large flies, such as are used on Tweed and Tay, and the other at the hooks commonly

* I am indebted to my friend, R. Carruthers, Esq., of Inverness, and Mr. Alexander Tait, tacksman of salmon-fishings on the river Ness, for the following communication, drawn out by the latter gentleman, respecting the rivers and lakes in the neighbourhood of Inverness:—

“The salmon-fishings in the Ness are at present held by three tacksmen. For some years past the rent paid has been very trifling. At one time the lower fishings alone were let for £1,100. The average weight of the spring salmon in this river is nine pounds. It is the general opinion, that, were the Ness permitted to be fished in the months of December and January, as it formerly was before the passing of Home Drummond’s absurd Act, salmon would be caught there running from twenty to thirty-five pounds. The largest salmon that I ever saw caught by the net weighed forty-two pounds. One of my men told me that he once assisted in capturing with the net in the Ness a trout which weighed fifty-four pounds and a-half Dutch weight. This took place in 1820. The largest salmon caught in the Ness or Loch Ness, that I ever heard of, weighed forty-seven pounds Dutch weight. Previous to the passing of the Act of 1828, the Ness opened in the beginning of December, from which time until the latter end of January there were more salmon killed than there now are throughout the whole of the open season. The twenty days’ extension allowed by the present Act to net-fishing both in sea and river, has proved very injurious to the breeding stock.

“Gaudy flies I find at all seasons preferred by salmon on the Ness; but they are captured also with the soberer kinds, winged with orange-brown, mottled turkey, peacock, gledd and mallard feathers. For trout, the mallard wing, with black, orange, deep crimson and brown mohair for body, black or red hackle and silver tinsel; also lark, landrail or starling wing, and hare’s ear body suit admirably. The salmon-flies used in the Beaulay are generally winged with turkey and mallard feathers. In the event of snow-water being in the river, a favourite

employed in loch-fishing. I recollect having an excellent day's sport along the range of water which extends betwixt the General's Hut and Dores, on the 6th of July, 1835; my pannier at the close of the afternoon containing several sea-trout, averaging in weight from three to one-and-a-half pounds, and a number of large yellow trout, some of them upwards of two pounds. Had I been previously acquainted with their resorts, I have reason to believe my success would have been much greater. Very large yellow trout are occasionally captured by the troller in Loch Ness. The Garry river, discharging itself into Loch Oich, and the Oich, which connects that loch with Loch Ness, are frequented by salmon, and afford, occasionally, fair sport

wing is made of the herls of the peacock. On the river Conan the same wings are used with orange bodies and gold or silver twist.

"Few salmon, except in close-time, ascend the falls in the Bealey at Kilmorack, and it is very rarely indeed that this fish surmounts the Moriston falls.

"In Loch Ruthven are found very fine red trout, weighing from a quarter of a pound up to one pound and a quarter. It is much raked over, as well as Loch Ness, by the lath or otter. Loch Duntelchak, nine miles from Inverness, contains both trout and pike. In Loch Ashie the trout are very small. The flies for these lakes are the drake or lark wing; orange, black, crimson, brown and hare's ear bodies, red hackles, and silver twist. Summer is the best season for fishing them. In Loch Ness trout are occasionally caught by the troller weighing from six to twenty-five pounds. There are pike at the west end. It may be fished with success all the year round.

"The Moriston is an indifferent angling stream, except for pike. In Loch Oich and the river Garry splendid sport is frequently obtained. The flies used are those winged with the turkey and mallard feathers. Hooks dressed in the Irish style are also found killing. Loch Lochey and Loch Moy are in no great esteem among anglers.

"The grilises ascend the Ness eight or ten days later than they do the Conan and Bealey rivers, but continue running much longer."

to the angler. Pike are plentiful in both lakes, and attain large dimensions. There are good inns at Drumnadrochit, Invermoriston, General's Hut, and Fort Augustus. Part of the rod-fishings on the Ness are rented by an inhabitant of Inverness, who, on the payment of a sum of money, accommodates strangers with a day's fishing.

CHAPTER XXIII.

THE BEAULEY AND CONAN, &c.

THE BEAULEY is formed by the junction of several streams, the principal of which are the Glass, Farrar, and Cannich rivers. All these have their connection with lochs of considerable extent, situated in a wild and little-explored district of country. The largest are Lochs Affaric and Benevian, communicating with the river Glass; Loch Moyley discharging itself through the channel of the Cannich; and Lochs Monar and Muille, which have their means of escape in Glen Farrar, and cede their tribute to the main river at Castle Erchless. Of these lochs, the most in repute among anglers is Loch Monar, where there is an excellent fishing station, and trout of good quality are very abundant. At Loch Muille, Lord Lovat has erected a neat shooting box. Loch Affaric abounds in small trout. The finest trouting lake, however, connected with Beauley, is situated in a more accessible region. It is called Loch Bruiach, and lies somewhat more than four miles due west of the parish church of Kiltarity. There are found in it seven varieties of trout, many of them of large size. Charr also are abundant, and take the fly occasionally. Loch Gorm, Lochnambrodarg, and Lochcarnabattan are all in good esteem, as well as Lochgarbrad, situated about a quarter of a mile from Loch Bruiach. Loch Neattie,

in the same district, contains pike. The Glass, Farrar, and Cannich, are not in much repute as angling streams. They are thinly stocked with small trout. Occasionally, a large one is met with, and in some places, a few pike are found.

The Bealey so called, extends from the point of confluence betwixt the Glass and Farrar rivers, to the Bealey Firth, a distance of nine miles. It abounds, below the falls of Kilmorack, with salmon, grilses, and sea-trout. Lord Lovat is sole proprietor of the fishings on this river. They bring a rent of nearly two thousand pounds per annum, and are conducted by the tacksman at a comparatively small expense, employing only twelve men. A singular story is related as to the way in which these fishings came into the possession of the old Lovat family. It is said that Simon, Lord Lovat, on the occasion of the estate being forfeited after the first Rebellion in 1715, requested the Duke of Gordon, his personal friend, to present a petition which he had drawn out to the king. The substance of his request was, that "one lea rig behind the castle" might be given to him and his heirs in perpetuity. Amused with the eccentricity which appeared to have dictated this demand, the king gave orders that it should be complied with. The "lea rig" meant the river.

About two miles west from the village of Bealey, are situated the celebrated falls of Kilmorack. These, in conjunction with the story of the kettle, into which salmon leapt of their own accord, have been often described, and are visited annually by numbers of tourists. The lower of the falls is about eight or ten feet in height. Over it the salmon find their way with comparative ease. The principal obstacle to their progress is the upper cataract, which, besides being at least a couple of feet

higher, is more violent and headlong in its character. Accordingly, in their attempts to clear it, the fish are frequently driven back and cast upon a rock near the foot, whence they slip into their native element. To prevent their doing this branches of trees were wont to be placed on the natural platform alluded to, so as to hem them in while struggling and render their capture easy. At present, however, no recognized means are resorted to for taking salmon at this spot, but there is a box cruive at the foot of the lower falls, and one the dyke of which extends across the river, about a mile further down. A few salmon find their way up into the Glass and Farrar rivers; but their number is so small as to present no temptation to the angler. There is an excellent inn at the village of Beauley, and a small one at Struy-bridge, near the junction of the Glass and Farrar, about ten miles higher up. Independent, however, of the hospitality of its inhabitants, this district affords but scanty accommodation for travellers. At the shepherd's houses in Strath Affaric, the angler will always be welcomed and find snug if not comfortable quarters. Boats also can be procured on some of the lakes.

The CONAN.—Loch Roshk or Chroisg has been assigned as the parent lake to this river—the great drain of a very considerable portion of Ross-shire. The source referred to is distant about five and thirty miles from the Cromarty-firth, at the point of debouchement. The Conan has been estimated to discharge seventy thousand cubic feet of water per minute. Its name is said to have relation to its being formerly infested by numbers of otters. Like the Teith and Ythan, it is famed for its pearls, which are numerous and of great beauty. Loch Roshk, where it rises, has a high reputation among anglers, but is seldom visited, being situated

in a wild mountainous district. On its escape from this lake, the Conan enters Strath-Bran and passes Ledgowan loch, a small sheet of water lying about two miles west of Achnanault. Ledgowan loch contains pike and trout of great size, varying from three to ten pounds. These are captured, both by trolling, and with large flies, dark in the colour, resembling those used in many rivers for summer grilises. About a mile from Achnanault, where there is a good inn, the Conan expands into another lake, termed Achin, also in high esteem, and stocked with large trout. Succeeding it is Loch Huelim or Cullem. Here, I once captured from the margin, several yellow trout weighing about two pounds a-piece. Pike frequent both these lochs and infest the Conan throughout its course. At Grugie, the main river is joined by a stream from Loch Fanich—an expanse of water fully twelve miles in length, abounding in small trout, and containing, probably, some of great size. After a further course of about two miles, Conan enters Loch Luichart, a fine lake extending fully six miles; and filled with delicious trout, varying from half-a-pound to a pound in weight. Of these, with the fly, I have frequently killed three or four dozen in the course of as many hours. On leaving Loch Luichart, the Conan, during a further course of two miles, dashes along with great violence and rapidity. At one place, not far from the lake, it forms a grand and imposing waterfall, which is rendered to the eye of the spectator more effective by the savage and singular nature of the surrounding scenery. Beyond this, salmon are unable to ascend, but it was at one time in contemplation to cut and blast out the face of the rock, so as to form a staircase by which these fish could gain entrance to the

spawning grounds of Strathbran and Fannich. A short way below the falls stands the hamlet of Upper Scatwell, consisting of a few poor hovels. Here the Conan is joined by a stream of considerable dimensions, the Meig, which has its origin in Glenigag, passes through Loch Benachan, and traverses Strath-Conan so named. A short way above, where this river enters Conan, lie the falls of Meig, below which is a salmon cast in good esteem among the inhabitants of the district. There are also, on the Conan above Scatwell, one or two pools where rod-fishing for salmon is often successfully practised.

On the hills betwixt Scatwell and Grugie-bridge is situated a small lake, about a mile in circumference, out of which, in July, 1835, I captured a trout, weighing nearly seven pounds, and excelling in shape, beauty, and quality, any fish I ever saw. The Gaelic name given to me for this sheet of water was Loch Badienoch. I was, previously to fishing it, informed that it contained nothing but a few eels, but resolved, notwithstanding, to give it a trial, in passing, with ordinary-sized trout-flies. In the course of ten minutes after commencing, I became master of the prize just mentioned, and in addition to it, caught two other trout, each upwards of a pound in weight. Below Scatwell, Conan, for about a mile, pursues a sluggish course, and, in some places, is of great depth. On reaching Muirtown, however, its character again changes; and, after accomplishing a leap of some height, its waters glide along with considerable velocity. There are several casts for the salmon-fisher near this point; and the river, at certain seasons, especially in July and August, abounds in fish. Yellow trout, however, are by no means plentiful; but finnock and sea-trout ascend in considerable numbers.

Below Muirtown, Conan is enlarged by the RASAY or

BLACKWATER, another stream of some magnitude. In the upper part of its course, the Rasay is termed the Garve river. Its sources are in Strath Vaich, on the confines of Loch Broom, at Lochs Tolimuir and Garra-gan. On descending Strath Garve, it swells out into a lake of about a mile-and-a-half in length, containing pike and trout of superior size and quality, but extremely shy. Of these, I seldom have captured above three or four in the course of a day, averaging from four-and-a-half to one-and-a-half pounds. The last occasion on which I fished it happened about the middle of August, 1844. Having provided myself with a few parrs, I affixed the tail of one of them to the appropriate tackle, and took my first cast in the stream, not far from the head of the loch. Almost immediately, I hooked a fish, which, from its strength, I concluded was a salmon or grilse, great numbers of these, owing to a previous flood, having passed up over the falls of Rogie into the higher waters. It proved, however, to be a yellow trout of four-and-a-half pounds weight. I shortly afterwards killed another, of about a pound, had my tackle severed by a large pike, and, descending to the loch, succeeded in capturing three more trout, of the respective weights of three, two, and one-and-a-half pounds. I also secured two pike, and was again despoiled of my hooks by a fish of this description. The trout of Loch Garve are remarkable for the fewness of their spots or maculæ, and the green copper lustre that pervades the upper portion of their flanks. They are also deep in the shape, and cut redder than salmon.

Below Loch Garve is a smaller sheet of water, through which the Rasay passes. It contains pike, and a few trout. The first-mentioned fish also infest the stream in great numbers. Immediately above Tarvie Wood

the river takes a bend, and forms a kind of small lake. Here I have frequently killed, both with fly and parr-tail, trout of great size. In 1835, I recollect capturing, along with many others, four trout, weighing severally betwixt three and four pounds. On this occasion, two of these were taken with the common gorge-hook, employed for pike; the other two I caught with large-sized loch flies. I fished this pool very carefully in August 1844, both with fly and small trout, but succeeded merely in capturing three pike, of about four pounds weight each.

A short way below the places referred to are situated the falls of Rogie—a fine natural cascade, embosomed among birch-forests. It is only during a large flood, which increases what may be termed a wing of the fall, that salmon can force their way up. Below this point, the rod-fishing, for upwards of a mile, is of a very superior description, and the appearance of the water and channel at once indicate that it is so. The fishings belong to the estate of Coul (Sir George Mackenzie, Bart.), but are rented by Horatio Ross, Esq., Craigdarroch, along with the shootings. Owing to the dark nature of the water, salmon, after ascending into Rasay, soon lose their silvery appearance. Great injury was done to the fishings, both here and in Conan, by the saw-mills under operation in the neighbourhood of the river. From these there was floated down, ever and anon, a large quantity of dust, which completely impregnated the stream during summer, occupying the channel for miles; and, when stirred thence, on the occasion of a flood, fronting and absolutely choking the running fish. I have been told, on good authority, that, as far down as Moy Ferry, below the junction of the Rasay with Conan, the sea-trout captured by means of the drag-net, had often their paunches extended with

saw-dust, encountered and gorged by them during their ascent from the Cromarty firth.

The salmon frequenting Rasay are of a variety quite distinct from those of the Conan and Meig, but they are all three sorts remarkable for their richness of flavour. The cruive dyke below Brahan Castle, prevents their access to the upper waters, except on the occasion of large floods or through the Sunday slap. When the water is of moderate size, and salmon have been on the run, they will not rise at the fly in Rasay, until after a day's rest, as has been ascertained, by the circumstance that new-run fish are only to be captured there on the Tuesdays and Wednesdays, and never on the Mondays. A stay of three days in the river is sufficient to give them a tinge of blackness, and rid them entirely of the *monoculus piscinus*, or sea louse.

The lowest pool on the Blackwater where salmon are fished for with rod and line, is that at Contin Bridge, near which there is a comfortable inn.

About a mile to the south, on the road to Scatwell, is situated a beautiful sheet of water, Loch Achilty, surrounded with weeping birches, and containing charr and fine trout. Of the former, in July 1835, I captured, one forenoon, by means of the brown hackle and other flies, no fewer than eighteen, along with four dozen trout. Loch Achilty is fed by a small rivulet issuing from a chain of lakes above Craigdarroch. It has however no visible outlet, but is connected subterraneously with the Rasay or Blackwater, as the springs on the side of that river lying nearest the loch sufficiently indicate. Following its feeder upwards, we are guided through a woody dell to another small lake, Loch an Dramh, containing nice lively trout, and beyond it to a larger one, termed Loch Nech Beann, or

the Lake of the White Horse. This sheet of water is held in high repute for the quality of its fish. They are red-fleshed, and, on the average, weigh nearly a pound. Of these, about a dozen and a-half are reckoned a fair number to capture with the fly, in the course of a forenoon. An islet at one end of Loch Nech Beann was occupied, until lately, by a small heronry, but the trees on which the nests were built having rotted and given way, it is now, I understand, nearly deserted. Still higher up than this sheet of water, lies a fourth lake, not half a-mile in circumference. Its connection with the others is scarcely traceable, except after heavy rains. Here, I once captured with large flies eleven trout, none of which were under two pounds in weight, and the greater part of them above three. These were planted about seventeen or eighteen years by the late Capt. Murray, R.N., Craigdarroch, and originally taken out of the feeder, at Loch Achilty. The whole stock placed in the lake amounted to six dozen, and in the absence of a sufficient breeding stream, no increase evidently had taken place.

Reverting to the Rasay, this river joins the Conan about two miles below Contin. Few salmon rest in its lower pools, which are of a sluggish nature, and their principal inhabitants are pike. There is a salmon fishing where the rivers meet, immediately above Moy-ferry. The angling, however, until we arrive at the cruive dyke, two or three miles further down the river, is very indifferent. From this point to the sea, finnocks, during certain months, are abundant, and occasionally grilse and salmon-trout afford sport to the rod-fisher. On the hills above Brahan Castle, and close to Strathpeffer wells, are situated two lakes, Loch Kinellan and Loch Ussie, both of which contain pike, but no trout.

The Orrin discharges itself into the main river on its south side, about three miles below Contin. Salmon ascend it, but not, during the open season, in great numbers. At a fall, three or four miles from its mouth, the same method of catching them is practised which I have described as taking place on the Dochart, near Killin.

As it is only within these few years, that the stake-nets at the mouth of Conan were abolished, it is difficult to say what effect their removal will ultimately have on the river fishings. The cruive-dykes, so general on our northern salmon streams, are still serious impediments to ascending fish, even during close time, and when the slap-gate is thrown open. They are now so constructed that their intention is evidently, not to entrap, but to detain or keep down the salmon, so that they cannot get beyond them, and may be captured with the drag-net out of the pool or pools below. The cruive itself is in many cases a mere farce, and so encompassed with bug-bears, that it is a matter of little importance whether the slap-gate remains open or shut, as no salmon are permitted to approach it. This surely was not the original intention of those charters, upon which a right of erecting cruive-dykes from bank to bank, for the purpose of taking salmon is founded, and I question much, if any law-court, made acquainted with the practices by which the owners and tacksmen of the lower fishings on many of our salmon streams, contrive to damage the property of those immediately above them, would so construe the grants in question, as to sanction the continuance of a system manifestly unjust. These remarks are not intended particularly to apply to Conan, where I believe a fairer passage, as far as the nature of the barrier can afford it, is given to the fish,

than in most rivers, having cruive-dykes built across them.

The best stations for the angler in this part of Ross-shire, are Achnanault, Garve and Contin inns.

The only other streams worth mentioning, which enter the Firth of Cromarty, are the Peffery burn, near Dingwall, the Ault-graad and Skiack, near Kiltearn, the Alness and Balnagown waters. Of these, the first-mentioned contains a few black trout. The others, when swollen, are frequented by finnocks, sea-trout, and a sprinkling of salmon. In Lochs Glass and Moir, where respectively the Ault-graad and Alness waters take their rise, the angling is said to be good. Loch Glass is about six miles in length, and connected with it, are a number of smaller lochs abounding in trout, some of which attain large dimensions. There are one or two small inns on the line of coast betwixt Invergordon and Dingwall, at the villages of Alness and Evan-town, where the angler may procure quarters.

CHAPTER XXIV.

THE RIVERS OF THE DORNOCH FIRTH.

THE OIKEL has its sources in Loch Ailsh, a wild mountain lake to the east of Ben-More of Assynt. Its length is about thirty-five miles. The Cassley is its principal tributary, and it meets the Shin at the head of the Dornoch Firth, or what is termed the Kyle of Sutherland. It also receives supplies from the Ross-shire border, but except the Eanaig and Carron, the latter of which enters immediately above Bonar-bridge, none of these merit observation. The Cassley flows through a lengthened valley of the same name, and the Shin, issuing from Loch Shin, has a course of about six miles. All these rivers afford good salmon fishing.

In the upper part of the Oikel and Cassley there are numerous lochs, but their contents have been so imperfectly, if at all, investigated, that I am left with respect to them, void of every source of information. Some of them, however, contain charr, which is ascertained from the circumstance of this fish being found during the spawning months in several of their feeders. On the Cassley, about a mile above Rosehall, there is a salmon-leap of considerable height.

At the sources of the Carron river also, there are several lochs—the most attractive of which, but difficult of access, is Loch Chorrh, containing trout of five or six pounds weight. Loch Shin, out of which the

Shin river flows, is a large expanse of water, twenty-four miles in length, and measuring it by a straight line through the centre, eighteen miles. It is one of a chain of lakes, including Loch Merkland and Loch More or Rynie, which extends nearly across the island; the west end of Loch More being only a mile distant from Loch Stac, and within three or four miles of Loch Laxford, an arm of the Atlantic. At the head of Loch Shin, the *salmo ferox* is frequently captured, and exists, I have no doubt, throughout the entire chain of lakes just referred to. Its principal feeders are the Figach and Tyrie waters,—the latter of which is connected by a rivulet with Loch Craggie, distant from Lairg three or four miles. This lake is famed above all others in Sutherlandshire for its fresh-water trout. These vary in weight from one to five pounds, and take the fly readily. In quality, they are esteemed very superior. Not far off, in the north-eastern extremity of the parish of Rogart, are situated two lakes of the name of Lochs Beannached or lakes of blessing, which are also in high repute.

The rivers of the Dornoch Firth are among the earliest of our Scottish salmon streams, and the best rod-fishing months, before the grilse commence running, are March and the early part of April. The Duke of Sutherland retains most of the fishings in his own hands, and the system adopted by him with regard to the nettings and cruives, tends much to increase the produce of the several rivers where it is followed out. One regulation insisted on by his Grace bears reference to the close-season which commences a fortnight before the legal time,—rod-fishing alone being carried on until the 14th of September. The angler visiting Sutherlandshire requires to be provided

with a passport from the duke, or one of his factors. Although generally excluded from fishing in the Shin and Brora rivers, the range of waters to which, independent of these, he gains access, is quite sufficient to satisfy the most eager cravings after sport, in all its varieties. The great drawback is the comparative scarcity of stations or inns, from which ready access can be obtained to the best lakes and streams. Of these in the district I have alluded to, there are several, but an additional one placed at the sources of the different rivers would find, during summer, abundant frequenters.

In regard to the rivers and lochs on the east and north coasts of Sutherlandshire, I have been favoured by the kindness of a gentleman residing in the neighbourhood of Bonar-bridge, with the following notes, which embrace, among other particulars, the names of most of the angling stations throughout the county.

“In Loch Shin the *salmo-ferox* is common. Last June, 1846, four trout were killed in the course of three hours, the largest of which weighed eleven pounds three ounces; the second, a common fresh-water trout, five pounds eleven ounces; the third, three pounds three ounces. These were all captured with ordinary sized trolling tackle, and afforded good sport. The *salmo-ferox* is found in greatest plenty at the head of the Loch, and in the spawning season numbers of them are taken with nets in the rivers fourteen pounds in weight. They are occasionally caught as heavy as twenty-five pounds. In Loch Geam, immediately above Loch Shin, very large ones have been killed by the troller. Common trout are plentiful. Mr. Dunbar, the best practical angler in the district took, in April last with fly, as many as eight dozen, weighing in all twenty-nine

pounds. There is excellent angling for trout in a loch at the foot of Ben Eui, not far distant. Salmon are never caught in Loch Shin. Very superior trout averaging one pound in weight, inhabit Loch Culrain, four miles from Bonar-bridge. These are remarkable for their symmetry and external beauty, but very shy. In Migdale Loch, behind Bonar, pike abound, weighing from fourteen pounds downwards. Within four miles of Lairg, are two lakes close to each other, called Crackle, which yield red-fleshed trout of superior quality. As many as eleven dozen have been killed by the rod in the course of six hours. About the same distance from Lairg, on the Achanay property are situated Lochs Craggie and Doula. The trout of these lochs are equal, if not superior in quality and colour, to the finest salmon. They weigh from one up to four or five pounds.

“The salmon fishing on the Shin river commences in the month of March. Grilse seldom ascend before the 20th of May. Last season, Sir G. Mackenzie killed frequently five salmon in the course of a day, weighing from ten to twenty pounds each. The largest ever caught in Shin weighed forty-two pounds. The grilse angling from the end of May to September is very good—average weight five pounds. Of the flies used on the lochs for trout, the most killing is an imitation of the common May-fly. The favourite for salmon is a large hook with mixed wing, red, blue, and black hackle; with jay feather for the shouldering, crest of golden pheasant for the tail, and silver tinsel. A similar hook, but reduced in size, is used as the season advances; and when the water is low, during the grilse months, the fly ought not to exceed in its dimensions a large trouting hook.

“There is excellent angling in the Cassley which

joins the Oikel, in the months of May, June, and July, should floods occur. Mr. Dempster of Skibo killed sixteen fish in one day in the latter river, and Colonel Oswald, who is a most expert angler, captured upwards of fifty salmon and two hundred grilse in the course of a few visits. The Oikel fly is formed of the golden pheasant's tail, blue hackle, silver twist, and light yellow body; should the water be small, a dark fly is the most suitable. The Brora also is a celebrated river in this district. Of the flies used there, the greatest favourite is a plain dark brown or black fly, winged with turkey-feather, and having silver tinsel. The spring size measures in length one and a half inch. On the Carron, dark flies were at one time much used, but lighter ones have lately been substituted and found successful.

“Loch Naver is deservedly celebrated both for its salmon and trout. I have known seven grilse to be caught in two hours and a half in the river issuing from it and the Mollart, a stream that falls in at the foot of the loch. In Loch Loyal or Layghal, which lies equidistant from Tongue and Altnaharra eight miles, are found, in great numbers, the *salmo-ferox*, common trout, and charr. There are none of the first mentioned fish in Loch Naver. The Lakes in Assynt are all remarkably good. Loch Assynt itself contains salmon, grilse, the *ferox*, &c. In Caithness, the only good salmon river is one near Thurso; with the exception of the Ness, it is the earliest in Scotland. The common trout in Sutherlandshire are not in general particularly nice. A large hook ensures the best fish. They also take the common earth worm greedily, and maggots toughened in bran are very deadly. During summer, the common blow-fly on an undressed hook is a capital bait, especially in calm, clear weather. Near

the mouth of the Fleet, above Little Ferry, there is a place, the only one in Scotland where salmon can be captured with the rod in salt water. A certain state of tide is necessary, but the season is of no consequence.

“Throughout the county, there is regular communication by means of mail gigs, at least three times a week, in various directions. Where these are not procurable, a pony and gillie are always to be obtained. The places and inns at or near the principal rivers and lochs are as follows. On the Shin, Inveran for spring angling, Lairg Inn for the Loch and during the grilse season; both are first-rate houses. The Cassley lies eight miles from Inveran, and a few miles from Oikel Bridge Inn, on the banks of the Oikel. In the village of Brora the angler can be accommodated. Ardguy Inn is convenient for the Carron; Innismadamph for Loch Assynt; Inver Inn for the Inver; Altnaharra for the upper part of the Naver and loch; Betty-hill, on its banks, for the mouth of the river. Scourie is situated within six or seven miles of the Laxford.”

The innkeeper at Lairg, I may mention, has the privilege of permitting strangers to fish in Loch Shin until the 12th of August. The premises, during the shooting season are generally occupied by Lord Francis Egerton and suite.

The BRORA has its source in the forest of Ben Clibrig, and after proceeding about fifteen miles, receives the Blackwater, a considerable stream which rises in Ben Ormin, and running through a long extent of deep mosses, acquires the dark tinge from which it derives its name. Shortly after the junction, the united streams pass into Loch Brora, emerging from which, after a further course of five miles, they enter the sea, at the village of Brora.

At certain seasons, the angling for salmon in this part of the river is excellent, but the assistance of rains is frequently required, as its streams quickly decrease in size, and become too clear and shallow for rod-fishing. Loch Brora, which is about four miles long, contains salmon, sea-trout, charr, and several varieties of fresh-water trout. Not far from this lake, is situated Loch Tubernach, a small expanse of water; at one time in high repute with the angler, on account of the size and superior excellence of its trout. It has, however, of late years, considerably fallen off in these respects. On the Blackwater, are two fine cascades, one near Balnakyle, and the other at Kilcalmkill.

The river FLEET has its origin on a rising ground betwixt the parishes of Rogart and Lairg. During the first ten miles of its course, it proceeds with considerable rapidity, but before discharging itself into Loch Fleet, an arm of the sea, moves at a sluggish pace. It contains trout, and occasionally salmon. There is a good inn at the village of Golspie, and another at Brora. The rental of the Brora salmon-fishings, or rather the sum paid for its produce, which is sold to a company at a stipulated rate per pound, is about three hundred pounds per annum.

The river HELMSDALE has a course of upwards of twenty-two miles. It takes its rise among several lakes in the higher parts of Kildonan, and is increased, during its progress, by numerous streams and mountain torrents. The salmon-fishings on this river, and at its mouth, are exceedingly productive, and are managed with great judgment on the part of the proprietor. Of the lochs that form its sources, the largest are Cuen and Badan, both of which contain trout and charr. The one most in repute, however, amongst anglers, is

Loch-leam-na-clavan. It is situated betwixt Ben Griam-more and Ben Griam-beg, and possesses, as well as numerous charr, trout of great size. Lochinruan, Ascaig, and a number of others, are also plentifully stocked with both of these descriptions of fish, but there are no pike in any of them, or indeed, with the exception of Migdale loch, throughout Sutherlandshire.

The salmon of Langwell and Berriedale are remarkable for the fineness of their quality. These rivers unite, when about two hundred yards from the sea, and, as is the case generally throughout Scotland, the breed of fish native to the one, are rarely to be found in the other. The fishings of Berriedale were rented not long ago by the Messrs. Hogarth, of Aberdeen, for the annual sum of two hundred and seventy-five pounds. The herring-fishings, now removed, were said to affect the salmon-fishings in this quarter very considerably, and a comparison has been instituted, in regard to the produce of the latter, betwixt Dunbeath and Berriedale; the former river, which, in other respects, seems the preferable station, drawing a rent of only twenty-seven pounds. The fishings on the Berriedale and Langwell rivers belong to Mr. Horne, of Langwell, those on Dunbeath, to Mr. Sinclair, of Freswick.

The river of Wick flows from Loch Watten, and after receiving a small tributary from Loch Toftingall, is further increased by the burns of Bilbster and Hauster. The fishings on this river are much on the decline; so also are those on the Wester water, although both streams are occasionally visited by salmon and sea-trout.

The salmon-fishings on the river and bay of Thurso are let for about one thousand pounds. The angling, however, is precarious, and at the best, very indifferent.

With the exception of those in the Reay and Halkirk districts, few of the lochs in Caithness contain large trout and many, the lochs at Dunnet-head for instance, possess no fish of any kind. In the loch of Syster, there are a few trouts. The Reay territory, however, which lies partly in Caithness, and partly in the county of Sutherland, is in high esteem among anglers. Its principal rivers are the Forss and Halladale. The Forss originates in a small lake south of Ben-na-Bad, and passing through Loch Shurery, empties itself after a course of seventeen miles, into the bay of Cross-kirk. It abounds, at a certain season, in salmon, grilses, and sea-trout. The Halladale takes its rise in the boundary betwixt Reay and Kildonan, running nearly due north for about twenty miles, and falling into the bay of Bighouse. Its average breadth is sixty feet. As an angling river, it is superior to the Forss. Of the lakes in this district of country, the largest are Loch Shurery, Loch Cailm, Loch Scirach, and Loch Sleitill, the last-mentioned of which contains red trout of a superior description, measuring, it is affirmed, from two to three feet long.

In the parish of Halkirk, there are no fewer than twenty-four lakes, of which Lochs Calder and More are the principal. Most of these are connected with the Thurso river, and contain trout of various kinds. There are inns at the mouth of most of the rivers throughout the county of Caithness, also at Halkirk on the Thurso.

CHAPTER XXV.

RIVERS OF THE NORTH AND NORTH-WEST COAST.

THE NAVER, after issuing from Loch Naver, an expanse of water seven miles long, travels upwards of eighteen miles, exclusive of its windings, before entering the sea. Its principal tributary is received at the outlet of the lake, and proceeds from Loch Coir-na-Fearn. The course of the Naver is comparatively gradual.

STRATHY takes its rise from a loch of the same name, and Borgie also, which enters the sea near the mouth of the Naver, has its origin among numerous lakes, the principal of which is Loch Layghal. These waters all abound in salmon and sea-trout. The best months for angling are July and August, and the favourite flies are those with mottled wings, orange tips, dark hackle, and brownish dun-coloured dubbing; the tinsel should be sparingly put on. Blue dubbings and flosses also seem attractive, and have been much used lately.

To the west of the Naver, are situated the Hope and Dinart rivers, proceeding severally from lochs of the same name. The former has a very short course of two miles, but carries along with it a considerable body of water. The latter forces its way over a rugged channel of ten miles in length. On both of these rivers cruives are employed, as well as coble fishing.

On the BORGIE, are caught annually about two thousand fish, salmon and grilse. The Hope and

Dinart afford excellent angling, especially for sea-trout and finnocks.

Passing from these, we come to the west coast rivers, several of which, belonging to the county of Sutherland, are highly appreciated by anglers. The one, however, deserving special attention is the Laxford, from Loch Stac. Its course is short, not exceeding a couple of miles, but the rod-fishing it yields has been pronounced first-rate.

IN LOCH STAC, sea-trout are very abundant, so much so, that, favoured with a breeze, the angler may readily kill from three to four dozens. The use of the boat, however, is requisite, in order to obtain the best sport. When the river is in trim, and weather not too hot, the fishing for sea-trout becomes a secondary matter, and the angler is generally induced to leave the loch, and adopting larger flies and stronger tackle, descend to the river. Here, if at all versed in the art, and able to detect the resorts of big fish, he will not be long in provoking a salmon to seize his glittering lure, and as the one most disposed to take, is, in rivers like the Laxford, generally fresh-run, he will have no reason, should he capture only a couple of twelve pounders, to complain of want of sport. Six or seven grilse, however, are not unfrequently taken in the course of an afternoon, by means of the rod on this river. Near the Laxford, flows the Inchard water from Loch Garadna. Its course is even shorter than that of the other, and being besides a smaller stream, it is held in less repute. There are no inns in this district, except at Scourie and Rhiconich, either of which is six or seven miles distant, but the angler can be furnished with a comfortable bed in a shepherd's cottage, at the head of Loch Stac. He will require, however, unless he can accommodate him-

self to the simplest of fare, to bring a stock of provisions along with him. The best mode of approach to the Laxford river is by Assynt, to which from Golspie, by Lairg, there runs two or three times a week a diligence gig or car conveying the mail, and fitted up to carry three or four passengers. Another proceeds from Lairg to Tongue. On arriving at Assynt, the most direct approach is through a part of the district to Kylesku, at which there is a ferry across to Edderachillis. Edderachillis is close to Scourie, whence there is a road leading to the river in question.

The streams, on the west coast of Sutherland, have all connection with fresh-water lochs; their courses are short but rapid, running as they do, through a wild and rugged district of country. As angling waters, they maintain much of the same character, heightened or otherwise, according to their size, the nature of the upper spawning grounds and the facility of access afforded to the fish, at the mouth or estuary. Besides the Laxford, the Inver, from Loch Assynt, and the Kirkaig, from Lochs Faun and Vattie, afford excellent sport, especially in the way of sea-trout fishing. Loch Assynt itself possesses considerable attractions for the angler, and contains several varieties of trout. It was visited some years ago by Sir William Jardine, the naturalist, who minutely inspected the different kinds of *salmonidæ* inhabiting the waters of this sequestered district. The lakes in the parish of Assynt are upwards of two hundred in number, and vary in size from six-and-a-half miles in length to a mile in circumference; the mere tarns are not included in this calculation. From the tops of some of the mountains, no fewer than one hundred of these expanses of water may be discerned at one and the same time. The greater proportion of

them abound in trout of a superior description, and many contain charr. The next in size to Loch Assynt are Cam Loch, Loch Urigill, Vyeatie, Na-gana, Beanoch, Gormloch, and Culfreich.

From its source in Loch Maree to its confluence with Loch Ewe, an arm of the sea, the Ewe is little more than a mile in length. Considering the shortness of its course, it is unrivalled as an angling stream for salmon. It was quite of common occurrence for the late Sir Hector Mackenzie, grandfather of the present proprietor, to capture twenty fish and upwards in the course of a day, all of them new-run salmon and grilse. Many of the salmon taken with the rod on this river are of great weight, exceeding thirty pounds, and they afford sport that one accustomed to kelt fishing has little idea of, frequently unwinding at a single burst, from sixty to ninety yards of line. The sea-trout angling in July is incomparable, and by many preferred to the nobler amusement. On a favourable day, these fish may be raised at every cast. A high wind on Loch Maree has the effect, while it lasts, of knocking up every chance of sport on the river below, which of course it considerably augments, causing the fish to disregard every species of lure. The Gairloch salmon fishings were let in 1836 for one hundred and fifty pounds, that portion of them which is carried on by cruives, stell-nets, &c. The angling is generally rented along with the shootings.

Loch MAREE is eighteen miles in length, and one and a-half in breadth. It contains salmon, trout and charr. The scenery is magnificent, and no fewer than twenty-four wooded islets ornament the lake. There are inns at Gairloch and Poolewe, near the latter of which the river is discharged; also at Kinloch, close to the head of Loch Maree.

The GRUINYARD river, and that which enters at the head of Loch Broom, as well as a small stream on Loch Torridon, teem occasionally with grilse and sea-trout, but they are, like many of the west coast rivers, difficult of access, and the rod-fishing during Summer is uncertain.

On the river CARRON, which discharges itself into a salt-water loch of the same name, not far from Jeantown, I recollect having a week's excellent sport among sea-trout, running from half-a pound to three pounds in weight. This happened about the end of July 1835. On one occasion, betwixt nine a.m. and three p.m., I captured upwards of forty of these fish, and a grilse or or two. The water was clear and small, and the scene of action, which lay almost at the mouth of the river, included only two or three streams. At one draught of the long net, below the cruive-dyke at New Kelso, I saw taken upwards of two hundred salmon and grilse, along with an immense number of sea-trout. A singular feat was achieved on this occasion, by one of the fishermen employed. In enclosing the fish, which was managed by a person wading round the pool with one end of the net in his hand, while the other extremity remained held by two or three individuals on the bank, the man wading descried a grilse of about eight pounds in weight, which, from the position it occupied, was likely to escape being captured; diving down, he seized hold of it by the tail with his disengaged hand, and flinging it ashore, continued his circuit amid the cheers of his comrades.

The Island of Lewis possesses several rivers where salmon are found. Of these the best is the Laxay, but the Creed, Tong, and Gress also produce this fish. The trout belonging to its numerous lochs are not remark-

able in point of size. A few carp are said to exist in some of these lakes.

In the district of Kintail are two well-reputed salmon streams, the Sheil and the Croe, running at a short distance from each other. I have fished in both, but as neither was in trim, met with little sport. In the upper pools of the Sheil, however, I descried, looking down from the banks, numbers of salmon and grilse, and have no doubt good angling is occasionally obtained on this small river. The Loing and Elchaig also are frequented by salmon.

CHAPTER XXVI.

THE AWE, AND RIVERS AND LAKES OF
ARGYLESHIRE.

THE course of the AWE does not exceed four miles in length. Its average breadth is forty-three yards, the depth variable, from two or three feet up to twenty. It is considered one of the finest salmon streams, for rod-fishing, in Scotland, and is little influenced, in comparison to most rivers, by heavy falls of rain, which often, as in the case of Tweed, try the patience of the angler. Sea-trout also ascend it in considerable numbers, and at the pass of Brandir, the celebrated *salmo ferox* descends to spawn, entering, for this purpose, the streams immediately below the outlet of Loch Awe. This river is the only one in Scotland that escapes in a lateral direction from its parent reservoir.

The length of LOCH AWE has been variously estimated. It certainly exceeds twenty-four, and is under thirty miles; its average breadth not being a mile, although in some places it expands into a width of three miles. Its depth, in several parts, is seventy fathoms. It contains a great variety of fish—salmon, the *ferox*, common trout, pike, perch, charr, along with two or three species of sea-trout. The pike are considered to be of recent importation, and their ravages among the smaller and more delicate kinds of fish have been, of late years, very considerable. The *salmo ferox*

has become scarce, and a good specimen can only be obtained after much perseverance. The charr frequent the extreme end of the lake, where the outlet is said at one time to have been. The salmon generally push upwards towards the mouth of the Urchay, but also make their resorts in the bay and creeks, where rocks and shelter-places are abundant; as for the native trout, they are found in various parts of the loch, according to the situation of the feeding-grounds.

The principal feeder of Loch Awe, indeed the only one of any note, is the Urchay, which issues from a small lake in the upland part of its glen, and after a course of sixteen miles, empties itself into its larger depôt, not far from Caolchurn Castle. It is a favourite resort of salmon, and there are several good pools for the rod close to the inn at Dalmally, which, I believe, are rented by the landlord for the convenience of those frequenting his house. Besides Dalmally, the inns at Cladish, Portsonachon, and Bunaw, afford excellent accommodation.

The salmon and trout-fishings in the parish of Glenurchy yielded, in 1843, about three hundred pounds per annum. These include the Awe fishings, or at least the larger part of them, as well as those of the Urchay and lake.

I have already, in my chapter on salmon-flies, described the lures of this description used in the Urchay and river Awe, and have introduced into my lists of favourites, under the name of the black dragon, a hook originally adapted with killing effect to the latter river, when in a reduced state; I have here only to mention that the merit of its contrivance is due to Colonel Robertson, an excellent and indefatigable salmon-fisher, who is well acquainted with the rivers in that

quarter, and rented moreover, as a sportsman, the Ewe in Ross-shire, during a course of several years.

In respect to the trouting-flies used on Loch Awe, I am informed by Professor Wilson, who fished there in 1845 and '46 with considerable success, that he found green bodies on all occasions attractive, but that one of the most killing flies is winged with mottled feathers taken from the bustard, the upper part of its body formed of blue, and the lower of orange dubbing; a light brown hackle carried well down towards the bend of the hook imitates the legs. Tinsel and a tail-tuft also are introduced; the latter consisting of two or three fibres from the tippet of the golden pheasant.

The ETIVE is a stream of considerable size, but situated in a lonely, almost inaccessible district of country; on this account it is little frequented by anglers,—but in its season, I understand, that is during the months of July and August, should the weather prove favourable, affords excellent sport, both among sea-trout and grilse. At the recommendation of Professor Wilson, his son and I visited it several years ago, and were only deterred by the impracticability of procuring night quarters from giving it a trial. At Dalness, there is a pool of great depth, headed by a waterfall, above which salmon seldom or never ascend; but they may be perceived at certain seasons, occupying the bed of the river underneath, in great numbers, and at a depth of several fathoms. The course of this stream exceeds sixteen miles.

It would be impossible, within reasonable limits, to give an outline of the various streams and lochs in Argyleshire; nor, in reference to the former, is the task required. They all partake much of the same character, both as respects their contents and the nature of

the channels along which they move. They are dependent also, the whole of them, upon the state of the weather, and require, in order to induce the migratory *salmonidæ* to frequent them, the occurrence of floods and certain positions of wind and tide.

Of these, the rivers or streams, I shall only mention a few by name, pointing out the localities or districts they belong to.

Falling into Loch Etive, besides the Etive, are the Kinlas, Liver, Noe, and Esragans, greater and lesser. Into Loch Creran are discharged the Creran, with its tributary the Ure, the Buie, Tendal, and Dergan. Near Oban runs the Euchar from Loch Scamadale, the Oude from Loch Trallaig, &c. Regarding the lochs in this district, I have received the subjoined details from Charles Ker, Esq., who is well acquainted with them:—"There are numerous lochs from within one to four miles of Oban, amply stocked with trout, which vary in quality, as the bottom happens to be moss or gravel. The finest fish are found in a small lake near Dunstaffnage, called Donolly Beg Loch. These trout are all from three-quarters to one and a half pound in weight, very short, thick, and quite red in the flesh. It communicates with the sea, but no white trout frequent it. The next worthy of mention is Loch Nell, about three miles east of Oban. It is nearly six miles round, and communicates with Loch Feochan, an arm of the sea, by a small river called the Clugh. The trout here are very large. I have seen them six and eight pounds weight. There are also plenty of salmon, and shoals of small sea-trout, called in Argyleshire *banochs*. In this loch there are also plenty of charr. I recollect seeing one upwards of one pound in weight, caught by Captain Hamilton, R.N., of Oban. The ground

around this lake belongs to two different proprietors; one allows fishing, the other not, so that, with a boat, any part of the lake may be angled in. Loch Scamadale also communicates with the sea, by the water of Euchar, a rocky impetuous stream. It is about the size of Loch Nell, but contains more salmon, and plenty of sea-trout. Yellow trout have been caught five or six pounds weight, but average much less. The fishings are let; rod-fishers, however, meet with no interruption.

“In the black lakes three miles from Oban, sea-trout abound, and I have frequently killed four or five dozen in a day, averaging three-quarters of a pound. They contain no salmon, but swarm with small trout. A boat is necessary. On the island of Lismore, opposite Oban, there is a good fishing lake called Killy-heeran. Its trout are like those of Loch Leven, fat and red. It has no communication with the sea.”

At the foot of the Euchar and the Oude are salmon-fishings—the former pays about forty pounds of rent, the latter thirty pounds.

In the neighbourhood of Kilmun, is the Eachaig, issuing from Loch Eck, and emptying itself, after a course of four miles, into the Holy Loch. This river, from the facility with which it is approached, is much fished. The grilse and sea-trout that ascend it are pretty numerous. Small gaudy flies, like those used on the west coast of Ireland, seem the favourites. Loch Eck is about seven miles in length, and among other fishes, contains the gwyniad or *salmo lavaretus*, termed there the *powan* or fresh-water herring. It also possesses a fish, said to be peculiar to itself, and supposed to have been planted by the monks of old, who held considerable possessions in that district.

The name given to it is the *goldie* ; in length it is only four or five inches, and when taken out of the water, has a rich golden colour which undergoes a succession of beautiful hues, before the fish expires. Lifted up in the hand it appears almost transparent, and its structure is peculiarly delicate. A considerable number of gold and silver fishes were, some years ago, introduced into Loch Eck by Mr. Wilson of Benmore. The fishings on the Eachaig belong to Mr. Campbell of Monzie.

In the district of Appin, are the Coe, Coinich, Duror, Laroeh, and Leven, abounding, in their season, with salmon and white-trout. The fresh-water trout of all these streams are small. Near Inverary, are the Ary and Shira waters, of the same character, but there are several lakes in the vicinity, those, for instance, on the hill of Killian, which produce good trout.

The inns in Argyleshire are numerous ; but the angler from the south must not expect the mountain mile to resemble that of the level turnpike ; and a loch or river, although reported and mapped out as situated in the vicinity of a good station, is not always, he will find, to be reached in the course of a few strides.

The LOCHY issues by a new channel cut for it, from Loch Lochy, and meets the Spean at Mucomre Bridge, a short way further on. On reaching Gearlochy, the combined streams once more return to their natural bed, and after running a course of nearly eight miles, fall into the sea above Fortwilliam ; where the Nevis river also discharges its waters. Lochy was at one time in good repute for its rod-fishings, and still, in respect to sea-trout, maintains its character ; but the cruive-dykes greatly obstruct the run of larger fish. In 1842, the fishings were rented at three hundred

and twenty pounds per annum. They belong to the Honourable Mr. Scarlett. I have, on two or three occasions, fished this with the trouting-rod, and met with excellent sport.

The Spean, its principal tributary, descends from Loch Laggan, and is augmented in its course by the Gulbin, Treig from Lochtreig and Ruiag waters. Before entering Loch Laggan, it is termed the Pattag river. There are few fresh-water trout in the lower portions of Spean, but where it leaves the lake, these are very numerous, and some of them of large size. Salmon ascend to within eight miles of Loch Laggan, and were the rock which obstructs their further progress removed, the range of spawning ground would, in all probability, become widely increased and the Pattag converted into an excellent salmon river. The trout of Loch Laggan are, many of them, large and peculiar in the external colour. I have known them to be taken there above eight pounds in weight, but it is not unlikely that some of still greater size haunt its feeding-grounds. This sheet of water is eight miles in length, and upwards of one in breadth. The fishings, I understand, are rented along with the shootings by the Marquis of Abercorn.

CHAPTER XXVII.

THE CLYDE AND STREAMS OF THE SOUTH-WEST.

ONE of the sources of the CLYDE is traceable to the same ridge of mountains which gives origin to the Tweed and Annan; but its larger source is the rivulet of Crossburn, from Queensberry-hill, which is increased by the Daer water, and afterwards joined by the Clydeburn, or little Clyde. Its after-tributaries are the Elvan, Midloch, Camps, Glengonner, Duneaton, Garff, Culter, the Medwins North and South, Douglas, Mouse Nethan, Dalsersf, Avon, and South, North, and Rotten Calders. All of these streams contain trout; some of them, such as Duneaton, Elvan, and Glengonner waters, in great abundance. In the main river, they are occasionally caught of large size. Below the fall, at Stonebyres, Clyde is frequented by salmon; but there are few or no sea-trout that ascend its current, so far up even as Hamilton. Pike and perch, however, are common; and the roach or braize is occasionally taken in the lower parts of the river. The salmon-fishings, in the parish of Govan, below Glasgow, were let, for the first time, upwards of fifty years ago, for the sum of thirty pounds. Immediately afterwards, the rent rose until it reached three hundred and twenty-six pounds annually; but since 1812, it has greatly fallen, and at present does not exceed sixty pounds per annum. It is a singular circumstance, that salmon and their fry have occa-

sionally been taken in the upper parts of Clyde, above its loftiest falls, which, being eighty feet in height, it is utterly impossible for fish of any kind to surmount. The fact is accounted for in this way. After passing Tinto-hill, from the top of which there is a splendid view of its windings, the bed of the Clyde approaches to a level with that of the Biggar-water, which is close at hand, and discharges itself into the Tweed. On the occasion of a large flood, the two streams become connected, and the Clyde actually pours a portion of its waters into one of the tributaries of Tweed, which is accessible to, and frequented in the winter season by, salmon, or rather large bull-trout, mistaken evidently for the salmon proper. There is also a similar connection betwixt the two rivers further down, at the respective sources of the Medwin and Tarth waters. The finest portions of the Clyde for the angler are situated above and below Lamington, where the banks are open and free of wood. Not only are the trout in this part of the river abundant, but their quality is very superior, and the colour of the flesh red. They have been captured here, nearly two feet in length. The Baillies' Arms Inn, in the village of Lamington, affords excellent accommodation for the angler. There are also inns at Duneaton, Biggar, Lanark, and other places throughout the county. The lochs of Lanarkshire are few, and, in point of size, insignificant. The Crane loch lies in a moorland district, in the parish of Dunsyre, and abounds with pike and perch. It is connected with one of the Medwins, which contains red trout of considerable weight, and a few pike. The White-loch, near the village of Carnwath, produces perch. There are also Lang-loch, not far from Lanark, and Bishop's-loch, Woodend, &c., in the parish of Monkland; but the

largest expanse of water in this shire is the reservoir for supplying the Forth, Clyde, and Monkland canals, which covers an expanse of three hundred acres, and contains perch and trout—the former in great abundance. Near it, also, is a small lake, termed the Lily-loch, producing trout and charr.

The average velocity of the Clyde is from one to three miles per hour. At five miles above Glasgow, its breadth is from two hundred to two hundred and fifty feet. Below this city it receives, opposite the village of Govan, the Kelvin-water and the streams of Dumbartonshire and Renfrewshire. The Kelvin-water is occasionally frequented by salmon, and contains trout, pike, perch, and roach.

The LEVEN issues from Loch Lomond, and after a course of seven or eight miles, falls into the Firth of Clyde at Dumbarton. It contains salmon, sea-trout, and several of the fresh-water species of fish. The fishings belong partly to Sir James Colquhoun, of Luss, and partly to the corporation of Dumbarton. The latter were let not long ago for two hundred and eighty-one pounds per annum.

Loch Lomond is twenty-four miles in length, and where broadest, eight in width. It contains all the fish alluded to by Smollett, in his celebrated Ode to the Leven Water, with the addition of the *gwyniad prosen*, or fresh-water herring. Its principal feeders are the Glenfalloch, Inveruglas, Douglas, Luss, Finlass, and Fruin, and on the Stirlingshire side, the Endrick, and a small stream from Loch Arklet. In all these waters, there are numbers of small trout. I have killed as many as ten or twelve dozen on a forenoon, in the Glen Falloch. Endrick contains pike, perch, and roach, or, as they are there termed, *braize*. A few sea-

trout also ascend from the lake, during floods. Besides Loch Lomond, there are several small lochs situated in the county of Dumbarton, the largest of which is Loch Sloy, near Arrochar. These or most of them contain trout.

The principal streams discharging themselves into the Clyde, in Renfrewshire, are the Carts, Black and White. The former has its sources in Castle Semple Loch, and receives, as its largest tributary, the Gryffe river, which is increased higher up by the Locher and other streams. The Black Cart contains fine pike, perch, and braize, but its trout are on the decrease. Salmon also ascend it, but not in great numbers.

The White CART rises in the moors of Eaglesham. It is supplied in its course by the Kevock-burn, the Earn-water, Auldhouse-burn, and Lavern-water. Near its sources are a number of small lakes, Lochs Goin, Brother-loch, Binnend, Black-loch, Long-loch, Knock, &c. Most of these contain excellent trout, and several of them charr. The charr (*salmo salvelinus*), I may here mention, are affirmed, in the Statistical Account of Scotland, to have been introduced from the lakes of Mearns and Eaglesham into the Avon, a tributary of the Clyde, near Hamilton, and still to exist there, under the name of the Duchess Anne trout. They are said to attain the length of twelve inches. In Castle Semple Loch are found pike and perch, also in Loch Libo and Hairlaw reservoir.

The value of the salmon-fishings in Renfrewshire is considerable. Those on the Frith belong exclusively to the burgh of Renfrew, and the average amount of rent drawn from them annually, betwixt the years 1814 and 1834, was no less than four thousand, one hundred, and ninety-nine pounds, one shilling; about

fifty years ago it averaged little more than one-fourth of the above-mentioned sum.

The GARNOCK takes its rise not far from the lochs of Kilbirnie and Castle Semple, on the confines of Renfrewshire, and after receiving accessions from the Rye, Caaf, Dusk, and Lugton waters, discharges itself into the sea near Irvine. Salmon ascend this river during close-time, and occasionally in the open season. It contained, at one time, abundance of trout, both sea and fresh-water, but these have, of late years, greatly fallen off in quantity. The Dusk was esteemed also a good angling stream. In Kilbirnie loch there are trout, pike, and perch. The Rye and Caaf burns are much poached by persons using nets and quicklime.

The IRVINE is but an indifferent fishing-stream, but one of its tributaries, the Cessnock, is in good repute, although greatly injured by poaching.

The AYR pursues a course of above thirty miles. Near its rise it is increased by the Garpel and Greenock waters, and further down, by the Lugar and Coyl. It contains yellow trout, and salmon were formerly caught there in great abundance; but the angling throughout its course is now reckoned very indifferent, in comparison at least to what it once was. Some of the lochs near which it runs contain pike and perch.

The course of the DOON, from Loch Doon, is upwards of eighteen miles. As an angling river it is superior to the Ayr-water, and is more frequented than the other by salmon and sea-trout. It also contains pike and a good number of yellow trout. Its channel, in the upper part of its course, is rugged and narrow. Below Berbeth it expands into a small lake, after which, as far down as Patna, it runs sluggishly for five or six miles, when it again assumes a bold picturesque

appearance, and preserves these features, until discharging itself into the sea, two miles to the west of Ayr.

Loch Doon, out of which this river glides, is upwards of six miles in length, and in breadth one mile. It is much frequented by anglers, and contains abundance of trout. In the parish of Straiton, where it is partly situated, there are no fewer than twenty-six lakes. Upon three of these, Lochs Braden, Dercleugh, and Finlas, boats are kept for angling.

The Doon salmon-fishings belong to the Marquis of Ailsa—those of the Ayr to Mr. Oswald, of Auchincruive. The former were lately rented for two hundred and thirty-five pounds, the latter for forty-five pounds annually. In the loch of Martnaham are found pike and perch; and in Loch Fergus, near the Burgh of Ayr, pike.

The GIRVAN rises on the hills of Barr and Straiton. In favourable seasons salmon ascend it. One of its sources, the Spalander loch, contains charr and abundance of good trout. Its extent is 'about forty-five acres. Besides it, are several other expanses of water connected with the Girvan, most of which produce trout and other fishes.

The STINCHAR is the only remaining water of note in the county of Ayr. Its sources lie among the lochs in Barr parish, and the length of its channel is about thirty miles. The salmon fisheries on this river draw a rent of about two hundred and ten pounds per annum. The principal tributaries of Stinchar are the Dusk, Muck, and Tig. There are several lakes in Colmonell parish, the largest of which are Lochs Dornal and Maberry; the latter is connected with the Bladenoch river, in Wigtonshire.

CHAPTER XXVIII.

THE RIVERS OF THE SOLWAY FIRTH.

THE NITH rises in the parish of New Cumnock, in Ayrshire, where it receives the Afton water, and shortly after enters Dumfriesshire. During its course, it is successively swelled by the Euchar, Minnick, Carron, Skarr, Duncow, and Cluden, the last-mentioned being the largest of its tributaries. Including its windings, the Nith is nearly one hundred miles in length. As an angling river, it is very inferior to any other of its size in Scotland. Neither the common trout nor salmon are at all plentiful. Compared with those in Tweed, they bear the proportion of about one to twenty. In the upper parts of the river and its several feeders, the fresh-water trout are rather more abundant, and throughout its course, at the proper season, there is a fair sprinkling of herlings.

The CLUDEN, its largest tributary, is of a very different character from the Nith and in good esteem among rod-fishers. It is ascended by salmon, grilses, sea-trout, and herlings, and contains, along with large-sized yellow trout, an occasional pike. The salmon of Cluden are of quite a distinct variety from those of the main river, being thicker and shorter in the body, and much shorter in the head. Its waters being of a mossy nature, the fish entering it quickly grow dark in the external colour. The rents of the salmon fisheries, near Dumfries amount to about five hundred pounds a-year.

The ANNAN, which has its sources in the same hill with Tweed and Clyde, is met below Moffat by the Evan and Moffat waters, at a height of about three hundred and fifty feet above the sea level.* As an angling stream, it is much superior to both the Nith and Esk rivers. The common trout of this river attain to a large size, and although the average weight is not above half-a-pound, they have been caught as heavy as five or six pounds. My friend, George Graham Bell, Esq., of Castle O'er, has frequently, with the minnow, when the streams were clear and small, taken an immense pannierful of large trout from the Annan water.

* An able and enthusiastic angler, John Trotter, Esq., Sheriff Substitute, Dumfriesshire, has favoured me with the following details respecting the Nith and Annan, and the salmon-flies most approved of for these rivers:—

“The best casts for salmon on the Nith extend from Friar’s Carse to Drumlanrig, and of these the Forest-head, the Porter’s-hole, the Red-brow, the Scour-foot, the Boat-pool, the Loch Wharry, and the Drumlanrig streams, from Thornhill-bridge upwards, may be enumerated. There are two most excellent inns at Thornhill, from which access to all these casts is easy. The following are the favourite salmon-flies:—First—Body, next the head of the hook one-eighth of an inch yellow pig’s wool; next that, a quarter of an inch light brown wool; above that, half an inch marl of peacock’s feather; head very dark brown or black wool; hackle red, black at top; tarnished (not bright) gold twist; wings, red turkey, with yellow or white tip; underwings, grey turkey or teal, or pea-hen. This is the most general and deadly fly for summer. Second—Body, same as above; wings, red gledd with under-wings of bargledd. This is also good during summer. Third—Body, same as above; wings, pea-hen and grey turkey mixed. This is the usual fly for autumn.

“ANNAN.—The fishings, except from Mount Annan downwards, are all in the hands of the proprietors. The best casts for the rod are on the estates of Jardine Hall, Halleath, Kirkwood, Murraythwaite, Castle-Milk, and Hoddam Castle. The same general character of fly is used here as on Nith. There is an excellent inn (King’s Arms) at Lockerby, from which the best casts can easily be reached.

“The Vendace in the Castle Loch, Loch Maben, are fished for once a year by the Vendace Club, an association of Dumfriesshire gentlemen.”

Rod Fishing begins in Annan in Dumfriesshire on the 10th of March and ends on the first of November; net fishing ends on the 31st.

It is ascended, during July and August, by the herling in considerable numbers, but not so freely as it would be, were the small mesh-nets completely set aside. Pike are tolerably abundant in the lower parts of the river. Moffat Water, one of the upper tributaries already mentioned, is connected by the Grey Mare's Tail burn with Loch Skene, which abounds in nice trout, averaging in weight half-a-pound. After the Moffat and Evan, Annan receives the Wamphray, Kinnel, Dryfe, Milk, and Mien waters. Not far from where the Dryfe and Kinnel discharge themselves, lie the Lochmaben lochs, nine in number. In the Castle loch, which is the largest, there are no fewer than fifteen distinct species of fish. Among these are two species, so termed, of loch trout, one weighing from twelve to fourteen pounds, and the other from two to five pounds. There are also bream, roach, chub, pike, perch, and the vendace. Pike have been caught here weighing thirty-five pounds. The two fisheries at the mouth of the Annan, belonging to Mr. Irvine of Newbie and the burgh, are let for nearly six hundred pounds per annum.

The Esk is formed by the union of the Black and White Esks, at a place called the King's Pool, below Bailliehill. These rivers have their sources in Eskdalemuir parish, and receive, during their conjoined progress to the head of the Solway Firth, numerous tributaries. The principal of these are the Meggat, the Ewes, Wauchope Burn, Tarras Water, Liddel, Glenzier, and Line rivers, the latter two belonging properly to Cumberland. The common trout of the Esk seldom exceed half-a-pound in weight, and are by no means abundant, below the junction of the two branches. A few salmon ascend it, along with a sprinkling of sea-trout and herlings. Of its tributaries, the Liddel is in good esteem

with the angler, but the trout found there do not excel in size. There are a few chub, called *skellies*, in the Esk; the river trout obtain the name of *eldrins*, and the herlings, during close-time, are termed *bills*. Lord Minto's Act may possibly, if carried into effect, benefit this river, which was much poached, both with the pout-net, when flooded, and with the small mesh hand-nets, employing two or three individuals, when in a low state. One of the most enthusiastic and able anglers in Eskdale is George Graham Bell, Esq., advocate, under whose skilful control many a salmon has been forced to bite the sod. The course of the Esk, from its sources in Eskdale Moor to the Solway Firth, extends thirty-eight miles.

The DEE, or DEVA of the Romans, rises from Loch Dee, in the parish of Minnigaff, in Kircudbright, and after running a course of twenty-two miles, joins the Ken, a larger stream than itself. The name of Dee, however, is still retained, and the combined waters proceed in the same channel, passing through the lower part of Loch Ken, to the Solway Firth, a further course of nearly twenty miles. The Dee contains salmon, sea-trout, river-trout, pike, and perch. Its salmon fishings belong to Mr. Murray of Broughton, and are considered valuable, the rental not long ago exceeding seven hundred pounds. The cruive, or what is locally termed the doach system of capturing salmon, is there pursued, much, of course, to the detriment of the upper holders of fishings. In some parts of the river, salmon are taken in great numbers by what is termed the shoulder-net, a contrivance similar to the pout-net of Tweed, only on a larger scale. A few years ago thirty-five salmon were brought out at a single draught by this means, and in July, 1836, according to a statement made by the Rev. Mr. Williamson, in the New Statistical Account, the same individual

who achieved the above feat, took in the course of an afternoon, no fewer than three hundred and fifteen grilises. The report drawn out by Mr. Williamson regarding the parish of Tongland, in the Stewarty of Kirkcudbright, will be found highly interesting to the angler. I take the liberty of making the following extract, touching the flies used on the Dee:—"Of these there is a considerable variety in point of size and colour, both being determined by the state of the river. When it is swollen, the fly most commonly adopted is a large one, either red (dun?) or spreckled wings, taken from the feathers either of the common turkey, or of the fish-tailed or Huntingdon kite. The latter bird is not a native of Scotland. It is found in the central or southern counties of England, and used to be so highly esteemed by our anglers that I have known half-a-crown given for a single feather. Of late it has fallen rather out of repute, and given place to the more flexible but less brilliant feathers of the red turkey. When the river is low, small trout flies are used with the finest tackle. To my taste this is by far the best amusement. Large yellow trout rise freely, and the sportsman is certain of an occasional struggle with a salmon. As an illustration of the excellent diversion sometimes had on the Dee, I may mention that some years ago, I took with a small trout fly a finely-grown newly-run salmon, which weighed fourteen and three-quarter pounds. My line consisted of three horse hairs and a single gut. The fly was composed of the red part of the partridge tail feather, a red hackle, and a black worsted body, without tinsel of any kind. On the same day, the same fly was taken by another salmon, which escaped. This, I am inclined to think, is the greatest piscatory exploit ever performed on the Dee. The enthusiastic angler will

applaud the feat, and the good-natured reader will excuse my vanity.”

The bull-trout is common on the Dee, where it attains the weight sometimes of twenty pounds.

The KEN takes its rise in the northern part of the Stewarty, and joins the Deugh on entering Kells parish. Several miles further down, below New Galloway, it expands into a lake upwards of five miles in length, and from one-half to three-quarters of a mile in breadth. In this sheet of water the largest pike known to have been killed in Scotland was captured, with rod and fly, by John Murray, gamekeeper to the grandfather of the present Viscount Kenmure. The head of this fish, which weighed seventy-two pounds, may still be seen in Kenmure Castle, and contrasted with one of more common, but still large dimensions, which is placed near it, bears striking evidence as to the prodigiousness of the monster it belonged to. Near Loch Ken, in the parishes of Balmaghie and Cross-michael, are several lochs, Grannoch, Dornal, Lochinbreck, Glentoo, Roan, &c. All these, with the exception of Lochinbreck, which abounds in trout, produce pike and perch. In the parish of Girthon there is another loch of the name of Grannoch or Greanoch, which contains charr in abundance. These, it appears, are only to be taken with the net, and in the spawning season when they frequent the shallows. The lochs of Balnaclellan, several of which are connected by small runs with the Ken and Loch Ken, are in good repute among anglers. The one producing the largest and finest trout is Loch Brack, where, in 1840, two were caught, weighing respectively five and seven pounds. Besides it, Barscobe, Loch Skae, and Houie, deserve to be mentioned. Bull-trout ascend the Garple burn in the spawning season.

I am indebted to the kindness of a gentleman connected with this district for the following details respecting the Cree, Fleet, Minnick, and Urr, as well as the rivers of Wigtonshire, the Luce, and Bladenoch:—

“The fishings of the river Cree belong principally to the Earl of Galloway. In the neighbourhood of Newton Stewart, they are of considerable value, about six hundred pounds per annum, including stake nets in the æstuary. Higher up, the river belongs entirely to his lordship, and nets are not allowed to be used; consequently the Cree is occasionally a first-rate stream for salmon or rather grilse fishing; but a great deal depends upon its being frequently flooded at the proper season, that is, from the middle of June until the month of August. The best part of the river for angling lies about ten miles above Newton Stewart, at or near the junction of the Cree and Minnick, the latter of which is much the larger stream, and affords the better fly-fishing. Few sea-trout ascend the Cree beyond Newton Stewart, and salmon are the only fish it contains worth mentioning, the yellow trout being generally of small size, and, except near the sources of the river, not very numerous. The smelt or sperling, a very delicate little fish, is taken in the brackish water at the mouth. The only fly I have found suitable for the Cree, is formed of the brown feather on the back of the mallard’s wing, brown hackle over orange dubbing, with a little blue ditto, at the shoulder forming the legs, the tail tuft being of lemon-colour worsted along with a couple of fibres from same feather as the wing. The size of the hook is of course regulated by the size and colour of the river.

“The FLEET is an insignificant stream, seldom frequented by salmon, and the sea-trout, which a few years

ago were pretty abundant, have been prevented from ascending the river by a high embankment erected for the purpose of raising the water to a sufficient level for a cotton mill-wheel at Gatehouse, a village near its mouth. A few miles up among the hills, there are abundance of very small yellow trout, generally caught by worm-bait.

“The grey turkey wing is a favourite fly on the Dee, and I have succeeded on the upper parts of the river with rather a gaudy Irish fly.

“The URR is about equal to the Fleet in size, and sea-trout ascend it in considerable numbers; but in dry seasons, the quantity of water is so small as to admit of their being easily taken by poachers, whom the proprietors take little pains to keep down. In the northern and mountainous parts of the Stewarty, very fine trout are to be met with in Lochs frequented by pike; but they are, generally speaking, not numerous, and where there are no pike, the trout are very small. Loch Dee, Loch Trool, Loch Erroch, Lochinvar, and Loch Kinder are the best; but none of these at all equal the lochs in the north of Scotland. I have caught yellow trout in Lochs Dee and Trool, from four to five pounds weight, and in the former, pike above twenty pounds; but the ordinary weight is much less.

“In Wigtonshire, the LUCE and BLADENOCH are the only angling streams, and neither is entitled to the character of a good one, whether for salmon or yellow trout. The Luce is a very late river for salmon, which are seldom to be met with before August, and even then not in considerable numbers, though pretty large, sometimes from fifteen to twenty pounds weight. It is generally, however, well stocked with sea-trout, weighing

as much as three or four pounds each. These afford good sport to the angler, and ascend the river about eight miles, as far up as Darnegap, where there is a waterfall that obstructs their further progress. The fishings of the Luce belong exclusively to Sir James Dalrymple Hay, Bart., of Park Place, and are generally reserved for fly-fishing, and rented by Sir John M'Taggart, M.P., and a gentleman named Telford. We cannot boast of good loch fishing in Wigtonshire, where the lochs generally contain nothing but pike, and in some instances perch and roach. Good trout are sometimes caught in Loch Eldrig in Mochrum, of about one or two pounds, but they are not plentiful."

The salmon of the DEE are held in high estimation. Besides Mr. Murray of Broughton, the Earl of Selkirk and burgh of Kirkcudbright possess fishings in this river; these are rented for about two hundred and thirty pounds. The pearl-mussel is very plentiful in the Dee.

I may mention that the angling in many of the rivers and lochs of Galloway is held in reservation, and that permission is required from the proprietors of the lands and fishings, in order to wield the rod over them. Inns are situated in various parts of the Stewarty and its neighbouring shire, but chiefly in or near to small towns or villages: such as New Galloway on the Ken, Castle Douglas near the Dee, and Newton Stewart on the Cree.

FINIS.

Angling Rivers in the North,	
Thun, in Futherland	1
Cykal ^{more (24 in a day)} numerous but not so large	2
Alne sp.	3
Conan	3
Bearty at Cruise pool	4
Neys	5
	6
Erick & Coittee, ^{Bay of} Glen Argubach	7
Garry not numerous but large	7
Shield	8
Loch Conan & river Cwe	9
Swamps Bonier.	

The tail of a common Hen,
Pheasant; all these mixed &
blended together form an irresist-
ible wing. Round the shoulder
of the wing a turn of the blue and
black feather of a jays wing. For
the head, a small portion of
that substance called pigs wool,
so mysterious to the uninitiated,
pigs not being the usual animals
from which wool is supposed to be
derived; then finished off with
a few turns of black ostrich
feather; not forgetting that
finish to the whole, two horns
of red and blue macaw's feather.
Now, all this makes a fly, either
of the dragon, or some other
species, which no salmon who
is in a taking mood (one can
hardly suppose he swallows it
out of hunger) can resist.

See the gallant fish, as he rises suddenly
up from the dark depths of the pool, hoisted
himself for a moment, as the fly hovers
before him, in the twinkling eddy, then
darts forward, seizes the gaudy bait, and
retreats again, apparently well satisfied
with his skill in fly catching, till he

and held fast by the unex-
-ed strength of the insect, I
suspect that a Salmon
after a quarter of an hour
struggle on a line, would
scarcely call the Fisherman
at the end "a fool"

Fly fishing in Lakes, I have
always, when at a top, had re-
-surre to a red white or black
Palmer, the size should depend
on the roughness &c of the water
on a dark day & windy I have
found a white Palmer succeed
when nothing else would; on a
bright calm day a small black
Palmer should be tried. If you fish
at night in a lake, a large Black
Fly is best, drawn very slowly,
a small fly which I have found
always a favorite with trout,
made as follows. Body yellow floss
silk, Landrail wing a turn or
two of red hackle near head, in
most waters this succeeds, if the Palmer
do not succeed; I try a small fly with
with black or blue body a turn or two of
silver twist, no hackle; but black under
wings, which looks like black-bird or some