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ART OF ANGLING, Rock and SEA-FISHING:

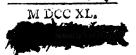
With the Natural History of

RIVER, POND, and SEA-FISH. Richard Brocket Illustrated with 133 CUTTS.



^{MC}LONDON:

Printed by and for JOHNWATTS at the Printing-Office in Wild-Court near, Lingoln's-Inn Fields.



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то

RICHARD HEATH, Of Hatchlands in the County of Surrey, E/q;

SIR,



H E Remembrance of the Pleafure I once enjoy'd when I had the Honour of your Conversation in the Country,

makes me now defirous of prefixing your Name to this finall Treatife, merely A 2 as

DEDICATION.

as a Testimony of Respect and Gratitude for Favours already receiv'd.

Though I am confcious how little fuch a Trifle deferves your Notice, yet I am too well acquainted with your Difposition to favour every thing that is defign'd for Information and Improvement, to defpair of its meeting with a candid Reception. Befides, the Study of Nature always has been and always will be efteem'd by the wifeft-Men an Entertainment worthy of the most rational Mind, and confequently no way unfuitable to the higheft Rank or the fevereft Profeffion; which I the rather take notice of, left it should be thought that I offer you a difagreeable Prefent, or that I have employ'd my Time ill in bufying myself about Enquiries of this Sort.

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It

DEDICATION.

It is not my Purpose to offend your Modefty by going into the ufual Style of Dedications, however I may just mention what will not lay me under the least Imputation of Flattery, That You are the Delight of all Companies where you happen to be, and are poffess'd of every Quality that conftitutes a Complete Gentleman. This naturally puts me in mind of the many agreeable Moments which I have loft by my Removal from your Neighbourhood, and which I cannot yet think of without Regret, especially fince I learnt from you how to relifh the ferener Pleafures of Life, and to enjoy all the Advantages of a rural Retirement.

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But I forget that I am talking to the Publick as well as to You; I fhall therefore add nothing elfe, but my fin-A 3 cereft DEDICATION.

cereft Wishes for the Happiness and Prosperity of Yourself and Family, defiring that you would always believe me to be

SIR,

Your most obliged

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And most obedient

humble Servant,

R. BROOKES,



ТНЕ

PREFACE.



T is not worth while to trouble the Publick in what manner I came to be engag'd in writing the following Treatife; it is fufficient to

fay that I undertook it the more readily becaufe there is nothing that I know of in the Englife Language whole Defign is fo extensive as this. Treatifes of Angling are indeed numerous enough, but they fcarce meddle with the Defcription even of Fresh-water Fish; on the contrary feveral of this Class are not fo much as mention'd by Name in them.

To take notice of every Fifh that inhabits the Profundity of the Ocean would be a Task next to impoffible; however I have taken care to omit none which are brought to our Market, caught on our Coaft, or in any manner ufually come to our Knowledge. To perform this it was neceflary that I fhould have recourfe to feveral Authors; but the Book I have been most oblig'd to is Willoughby's Hiftoria Pifcium, as augmented by Mr. Ray, and publish'd at the Expence of the Royal Society.

As to the Drawings I have little to fay, becaufe they were all, except one or two, done by myfelf: I can A 4 only only affure the Reader, that the Shape and Proportion of the Fifh are all carefully preferved, and that the Original Prints were done immediately from the Life.

In the Angling Part I had the Affiftance of Mr. Chetwood, who is allow'd by all to have great Skill in that innocent Diversion, and therefore most of the Egotifms in the First Part, or where the Sentence is usher'd in with I, have him for their Author, as well as fome other things which are here and there interspers'd among the Directions for Angling. This I thought the more necessfary to take notice of, because they contain the Refult of his own Experience, which is that of a great number of Years.

As to the Treatile in general, I have endeavour'd to make it in fome Senfe ufeful to all, but efpecially to the younger Sort, who may by this means come to be acquainted with the great Variety of Watry Inhabitants with little Trouble or Expence. Nor can this be thought a vain or an unprofitable Amufement, fince the more Knowledge we have of the Nature of things, the more we must admire the Wifdom of the Divine Architect.

As it is usual in Books of *Angling* to infert Poetical Amufements, two of my Friends who are well known to the Publick on account of their ingenious Performances, have been at the pains to compose the following Lines for that purpose.



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The

PREFACE.

CALLARDER CALLARDER CALLARDER

The ANGLER'S LIFE.

Tune, The Banks of Indermay.

I.

W HEN vernal Airs perfume the Fields, And pleafing Views the Landskip yields: The limpid Stream, the fealy Breed, Invite the Angler's waving Reed. The musing Swain what Pleafures feize! The talking Brook, the fighing Breeze, The active Insect's buzzing Wing, And Birds that tuneful Ditties fing.

II.

At lateft Eve, at early Dawn, The Angler quests the scented Lawn, And roams, to snare the Finny Brood, The Margin of the slow'ry Flood. Now at some Osier's swatry Root The Chub beguiles, or painted Trout; No Cares nor Noise his Senses drown, His Pastime, Ease and Silence crown.

III.

Adieu, ye Sports of Noife and Toil That Crowds in fenfelefs Strife embroil; The Jockey's Mirth, the Huntfman's Train, Debauch of Health, and wafte of Gain. More mild Delights my Life employ, The Angler's unexpenfive Joy. Here I can fweeten Fortune's Frowns, Nor emvy Kings the Blifs of Crowns.

M. B.

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The

PREFACE.

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CHILL CONTRACTOR CONTRACTOR

The Pleasures of Angling.

Tune, All in the Downs, &c.

I.

A LL in the fragrant Prime of Day, E'er Phœbus fpreads around his Beams, The early Angler takes his Way To verdant Banks of crystal Streams. If Health, Content, and thoughtful Musing charm, What Sport like Angling can our Cares difarm?

п.

There every Senfe Delight enjoys, Zephyr with Odours loads his Wing; Flora difplays ten thou/and Dyes, And waried Notes the Warblers fing. If Health, Content, &c.

III.

On the foft Margin calmly plac'd, Pleas'd he beholds the Finny Brood Thro' the transparent Fluid hafte, Darting along in quest of Food. If Health, Content, &c.

IV.

The skilful Angler ope's his Store, (Pafte, Worms, or Flies his Hook fuftains,) And quickly spreads the grass Shore With shining Spoils that crown his Pains. If Health, Content, &c.

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V. If

PREFACE.

v.

If fome fierce Show'r in Floods defcends, A gloomy Grove's thick Shade is near; Whofe grateful Umbrage fafe defends 'Till more inviting Skies appear. If Health, Content, &c.

VI.

There blifsful Thoughts his Mind engage, To crowded neify Scenes unknown; Wak'd by fome Bard's inftructive Page, Or calm Reflexions all his own. If Health, Content, &c.

VII.

Thus whether Groves or Meads he roams, Or by the Stream his Angle tends; Pleafure in fweet Succeffion comes, And the fweet Rapture never ends. If Health, Content, and thoughtful Mufing charm, What Sport like Angling can our Cares difarm?

J. D



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THE



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ART OF ANGLING. PART the FIRST.

СНАР. І.

Of FISH in general.



S I defign in this Treatife to give a particular Account of all the Fifh which are either brought to our Markets, or caught in our Rivers, I thought I could not begin more properly than by giving a Defcription of fuch things as most of them

have in common, because this will greatly contribute to make all that shall be faid of them besides easily underflood.

The first thing that occurs is their Shape or Figure, which always tapers a little at the Head, and qualifies them to traverse the Fluid which they inhabit. The Tail is extremely flexible, and is furnish'd with great Strength and Agility, bending itself either to the right or the left, by which means it repels the Water behind it, and advances the Head and all the reft of the Body. I know it is commonly thought that the Fins are the chief Instruments of Motion, but this is a vulgar Error, for the B chief chief use of the Fins is to posse the Body and to keep it steady, as also to stop it when it is in motion. Borelli, by cutting off the Belly Fins of a Fish, found that it reel'd to and fro, and was unable to keep itself in an upright Posture. When a Fish would turn to the left it moves the Fins on the right stop when to the right it plays those on the left; but the Tail is the grand Instrument of progreffive Motion.

Most of their Bodies are cloath'd and guarded with borny Scales, fuitable to the Dangers they are expos'd to, and the Business they are to perform : These Scales we find moisten'd with a flimy Liquor, and under them lies, all over the Body, an oily Substance, which by its Antipathy to Water supplies the Fish with Warmth and Vigour.

Fifh are enabled to rife or fink in the Water by means of a *Bladder of Air* that is included in their Bodies; when this is contracted they fink to the Bottom, but when it is dilated they rife to the Top. That this is the true use of this *Bladder* appears from an Experiment made upon a Carp. This Creature was put into an Air-Pump, and when the Air was pump'd out of the Vessel, that which was in the *Bladder* of the Fish expanded itself to fuch a degree, that the Carp swell'd in an extraordinary manner, and his Eyes started out of his Head, 'till at last the *Bladder* burst in his Body. The Fish did not die, but was thrown immediately into the Water, where he continued to live a Month longer : However he never rose any more, but crawl'd along the Bottom like a Serpent.

The Gills ferve this Animal for Refpiration, and are a kind of Lungs which he opens for the Reception of the Air: Their Mechanism is so contrivid as to admit this Element without any mixture of Water. Through these Passages the Air evidently flows into the Bladder, and then the Fish ascends: But in order to fink he is obliged to contract this Bag; the Air then rises to the Gills, and is ejected, and the Fish descends with a Rapidity

dity proportionable to the Quantity of ejected Air. This Motion may likewife be affifted by the Action of the Muscles, not to fay that it is the most usual Expedient: When these are expanded the Air in the Bladder dilates itfelf by its natural Spring, and when these are contracted the Air is compress'd, and the Bladder will confequently shrink. Besides Air is necessary to preferve the Lives of Fish, for by what means soever the Air is excluded from the Water, it foon proves fatal to the Fifh that are contain'd therein.

A great number of Fish are furnish'd with Teeth, which are not defign'd for Eating or Chewing, but to retain their Prey. These Teeth are differently placed, according to the different manner of this Animal's Feeding; in fome they are placed in the Jaws, Palate and Tongue; in others in their Throat; these last are call'd Leathermouth'd Fifh.

The Eyes of these Animals are flat, which is most fuitable to the Element in which they live, for a protuberant Eye would have hinder'd their Motion in fo denfe a Medium, or by brushing through it their Eyes would have been apt to wear, to the Prejudice of their Sight. To make amends for this the crystalline Humour is fpherical in Fishes, which is also a Remedy against the Refraction of the Water, which is different from that of the Air, and Animals that live in the Air have the Cryftalline lenticular, and more flat.

All Fish have a Line from the upper Corner of the Gills to the middle of the Tail on each fide : In Sea-Fifh it inclines more towards the Back, but in those of the River towards the Belly. This Line is composid of a great number of small Points, which Willoughby has been fo curious as to number in fome Fifhes.

Of all the Observations relating to the Inhabitants of the Water, that of their Generation is not the least curious. Some are viviparous, and thefe are of the cetaceous Kind. Others produce large Eggs after the manner of Birds, with a Yolk and a White, which are hatch'd in

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The ART of ANGLING.

in their Bodies before they are excluded, and this is proper to the cartilaginous Kind. Others are Oviparous, or bring forth a great quantity of Spawn, which, being a kind of little Eggs, are hatch'd by the natural Warmth of the Water. These last are distinguish'd by the Name of Spinous, that is, they are provided with fmall fharp Bones to fupport and ftrengthen their Muscles; whereas the Cartilaginous, such as the Scate and Thornback, have only a kind of Griftle, which is fo foft that it is generally eaten.

The Spinous fort generate without Coition; inflead of that the Females dig Holes wherein they deposite their Spawn, upon which the Male immediately after emits his impregnating Fluid in order to render the Spawn prolifick.

The Encrease of this fort of Animals is fo prodigious that it is almost incredible; Lewenbook computed no less than 0344000 Eggs in a fingle Cod. Hence it ceases to be a Wonder that every Species is preferv'd, notwithflanding they are conftantly preying upon and devouring each other. It is the Bufinels of Soals, and most flat Fifh, to conceal themfelves in the Mud, which they refemble in colour, 'till the Spawning of other Fish is over, and then they feize the Eggs, feeding in those delicious Morfels without Moderation or P ; and they were not deftroy'd **W** this manner would scarce be sufficien > contain the

Moft Fish are prove the Carp, have none flefby Palate, which among Perfons w use a Tongue fince it cannot. are entirely Food in the it affift th thing with Organ (

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The ART of ANGLING.

those of the Cetaceous Kind, and therefore does not seem adapted to perform an Office of so exquisite a Nature, unless in an obscure manner, which, perhaps, may re sufficient for their purpose.

Some Fish have no *Throat*, their *Manu* or *Stronge* being placed next to their Mouths; but fuch whole Bolles are long and flender, as the *Ecl* Kind, have a *Threat*, tho' they are without *Lungs*.

The the Stomach of Fifth is endowed with no fertilier Heat, yet it has a wonderful Faculty of Digetheat, more in these of the more voracious Kind, it not end of folves great numbers of other Fifth, but ever forme *Crabs* and *Lobfters*, which are covered with more endow Shells.

Below the Stomach in most Fish, and about the I. rus, there are feveral Appendages or blue Car. Do to what purpose they ferve is a Secret Education with the fome how or other affift Digestion, as La tobal

The Hearts of fuch Fifh as refpire through the bar have only one Ventricle and one Aurith. But the unit is very large in proportion to the Heart a 20 m wife the Veins in general to the America. The bar of the Heart is triangular.

Many Writers on Fifs have affirm c that me a the cept those / cetaceous Kind have enter Line ? moft ut this proves a Meiman ir . Urinary .ters a ir there are any without the - di hard to n that not are moving and are o fmall howev iam oblerves, there water in mer-:. The and. or divided into the Later are are it to the att, from wiene as Jam and .out much Wy Blader, The at 2 years gin at the downward Staraight Gat are cades i and s ber itung The Line ch letting the ERE BERE B Judrych, ad he lene nie. re is a Bite it e Point of t a is now university of the the Line Iho matatul 10 matiles how

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fome Places are flock'd with Fifh, especially if we may believe the Relations of fome Authors of the greateft credit. *Rondeletius* tells us of a Place between three Mountains which had no Communication with any Spring, River, Pond or Lake; however it happen'd to be fill'd with Rain-water that proceeded from plentiful Showers which had fallen fome Days before he visited the Place, and in that fhort time the Lake was flock'd with Fifh, among which there appear'd *Carp* in great abundance.

The most usual Food of Fish are Worms, Flies, and other Infects; and yet there does not want Inftances of fome who not only live, but grow to a large Size by Water only. The Wife of Rondeletius kept one of these Animals in a Glass Vessel for three Years together on nothing but Water, and might have kept it longer if it had not grown too big for the Vessel. Hence it appears how much the Nature of the Water may contribute to the Goodness of the Fish. Others live upon Spawn, particularly the Flat-Fifh, as was mention'd before, for as foon as the Eggs are excluded they feed upon them with the utmost. Greediness. This would contribute greatly to depopulate the Waters, if the Quantity of Spawn was not fo exceeding great. Others devour the fmall Fry almost as foon as hatch'd: others when they are grown larger. Some live upon Small Fish, fuch as the Minnow, Bleak, Gudgeon, Roach, Dace. and the like; others devour Shell-Fifh, as Shrimps, Prawns, and fmall Crabs; others again, as the Pike, are fo exceeding voracious as to prey upon their own Kind. Some few will feed upon Crumbs of Bread. Sea-Weeds, and the like, and it is well known to Sailors that feveral Kinds of Sea-Fifh will follow the Ships hundreds of Leagues, on purpole to fwallow all the Naftiness that falls from them.

As to the Age of Fifh nothing certain can be pronounced, except that they are not fo fhort-lived as the Ancients imagin'd; for inflance a Salmon is fix Years in

grow-

The ART of ANGLING.

growing before he is thought worthy of that Title in York/bire, notwithstanding fome have affirm'd that he came to his full growth in a Year. On the other hand it has been related that a Carp will live a hundred Years, but how truly must be left to the Reader's own Judgment to determine.

CHAP. II.

Of ANGLING in general.

A S there are different forts of Angling, which we find that have frequent occasion to mention hereafter, S there are different forts of Angling, which we it was judg'd neceffary to explain what they are before we proceed to the particular Fish. Of these the most common fort is

FLOAT-ANGLING: In this the Line should be longer than the Rod by two or three Foot, and let the Lead that is put upon it be neither fo heavy as to fink the Cork or Float, nor fo light as to hinder the fmalleft Touch from pulling it under Water, because that is the only Sign you have of a Bite. In Rivers it will be most proper to make use of a Cork, but in Standing-Waters a Quill may ferve well enough.

RUNNING-LINE ANGLING is with one or two fmall Pellets of Lead to your Line without a Float. The Lead should be just fo much as will fink the Bait to the bottom, and let the Stream carry it down without much flopping or jogging. It is neceffary to begin at the Head of the Stream, and let the Bait drive downward as far as the Rod and Line will permit. The Line must be kept as strait as is confistent with letting the Lead drag on the Ground, and when there is a Bite it will eafily be felt, as well as feen by the Point of the Rod and Line. When the Fifh bites the Line Ihould be The ART of ANGLING.

be flacken'd a little that he may more eafily fwallow the Bait, and then you fhould firike gently and directly upwards. When your Lead is rub'd bright you ought to cover it thinly with Shoemakers Wax, or change it.

TOP-ANGLING with a Worm requires a Line without Float or Lead. The Bait must be drawn up and down the Stream on the Top of the Water. This Method should only be used when the Weather is fine and the Water clear; it is sometimes successful in fishing for *Trout* and *Salmon-Smelts*.

LEDGER-BAIT ANGLING is when the Bait always refts in one fixt and certain Place: To perform this the Line must be leaded as usual, and the Float taken off. Within half a Yard of the top of the Line must be wrapp'd a thin Plate of Lead about an Inch and a half long, and an Inch broad; this will ferve to discover by its Motion when you have a Bite. You may either hold the Rod firmly in your Hands, or stick the thick End of it into the fide of a Bank.

DIBBING or FLY-ANGLING; this is generally perform'd on the very Surface or Top of the Water, with a Line about half the length of the Rod if the Day be calm, or with one almost as long as the Rod if the Wind is fo ftrong as to carry it from you. The Fly must always be in motion as near the Bank-fide on which you. are as may be thought convenient, unlefs you fee a Fish rife within your reach, and then it will be best to guide it over him, and if you can keep out of fight by kneeling or otherwife, you may be almost fure to take him. Sometimes the Bait is fuffer'd to fink two or three Inches into the Water, but this is but feldom. You must always dib in a clear Water without either Lead or Float to your Line. The best Place is a still Deep on a hot calm Day,, or in the Evening of a hot Day. If you dib in a Stream, it is best when the Water is clearing after a Flood, in which cafe the Hor/e-Fly is the propereft Bait.

TROWLING; this Method is principally used in fishing for a Pike. This requires strong Tackle, and no very flender Top with a Ring fix'd to it for the Line to run through. When I have feen a Pike lying in wait for his Prey, I have put three or four Rings, one bigger than another, made in this Form Oo upon a Gudgeon-Rod; and then have put my Trowling-Line thro' the Loops of the Rings, and have found it fucceed very well. Your Line must be of Silk, at least two Yards next the Hook, and thirty Yards long; there must likewife be a Reel to wind it upon. The Hook must be leaded, that the Head of the Fish which is your Bait may hang downward; there must be likewise two Links of Wire fasten'd to it. And because it is not very easy to thrust the Wire through the Body of the Fifh, it will be proper to have a Fifh-Needle, which paffing through first the Wire will readily follow it. Let the Point of your Hook stand near the Eye of your Bait, and then few up its Mouth to keep it firm. The Fin of the Tail should be cut off, and the Tail itself fasten'd to the top of the Wire, otherwife the Bait will not lie fmooth and even upon the Hook. It will be likewife proper to fasten the Bait at the Gills with the help of a Needle and Thread. This done, make a Loop at the end of your Line and fasten a Swivel to it, then put it through the Loop of your Ring, and hang your Bait on the Swivel. When you throw your Bait into the Water take care to avoid Stumps and Weeds, for they will do your Bait as much Damage as the Bite of a Pike. When this Fish takes the Bait at first it is cross his Mouth, for he feldom ornever fwallows it 'till he gets to his Harbour. Therefore as foon as you perceive you have a Bite, take care not to check him, but give him Line enough, otherwife you will labour to no purpose.

TROWLING in PONDS is perform'd with a long Line. which will reach from one fide of it to the other: It should have as many arm'd Hooks and Baits, about three Yards

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Yards afunder, as the length of the Line will allow. This Method requires an Afliftant, who must hold one end of it, and help you to keep it in a gentle Motion 'till you find you have a Bite, and then strike with a Jerk the contrary way to the Motion of the Fish.

TRIMMER-ANGLING is very useful in a Meer, Canal or Pond, and even in the ftill Part of a River. This requires a round Cork fix Inches in Diameter, with a Groove on which to wind up your Line, except fo much of it next the Hook as will allow the Bait to hang about Mid water, and likewife fo much of the other end as will reach to the Bank or a Bufh, where it is to be faften'd. In this Position you may leave it to take its Chance, while you are Angling elfewhere. As foon as the Pike takes the Bait, and runs away with it, the Line unwinds itself off the Trimmer without giving him the least Check. However, when you come to take up your Line, give it a Jerk as in other Fishing, and then your Prey will be more fecure. This is a good Method of Fishing in the Night.

SNAP-ANGLING is with two large Hooks tyed back to back, and one fmaller to fix your Bait on. Your Tackle muft be very firong, and your Line not quite fo long as your Rod, with a large Cork-Float leaded enough to make it fwim upright. Your Bait muft not be above four Inches long. As foon as ever you perceive the COMM to be drawn under Water, firike very firongly without giving the Fifth time, otherwife he will throw the Bait out of his Mouth. When you find he is hook'd, mafter him as foon as you can, and with your Landing-Net under him get him out of the Water. Some prefer a double-fpring Hook, and put the Bait on by thrufting the Wire into the middle of its fide and through its Mouth, fewing up the Mouth afterwards.

BLADDER-ANGLING; this is as much for Diversion any thing elfe. It is usually practised in large Ponds

Ponds with an Ox's Bladder, and a Bait fix'd on an armed Hook, or a Snap-Hook. The quick rifing of the Bladder after it has been pull'd under Water, never fails to strike the Fish as effectually as a Rod; and let him struggle as much as ever he will, the Bladder always gets the Victory at last. These four last Methods are used only for Pike or large Pearch.

In all Kinds of Angling there are fome GENERAL RULES to be observed, which will conduce greatly to the Angler's Diversion; as not to Angle in cold Weather when the East or North Winds blow, for it is a common Observation, That the South-Wind is most favourable to Anglers, and next to that the West. Likewife in great Droughts in the middle of a hot Day, or in ftormy tempestuous Weather, the Angler can expect but fmall Succefs. Soon after any Fifh have fpawned it will be to no purpose to expect them to bite, for then they are weak and fickly, and have little Inclination to feed. The usual Months for Angling are from the beginning of May to the beginning of September; when you Angle before or after these times, the warmest Part of the Day is always best. On a hot Summer's Day early in the Morning, and late in the Evening will be most feafonable, and likewife dark, cloudy, gloomy Weather; nor will a Gale of Wind hurt your Sport, if it does not blufter too much. In all forts of Angling it will be best to keep out of the Fishes Sight, and as far from the River's Bank as posfible, unless the Water be muddy, and then you may come as near as you pleafe. For the fame Reafon the Angler's Clothes should be of a grave dark colour, and not bright and glaring, for that would fright a-way the Fifh. To invite the Fifh to the *Place of Ang*ling, it will be proper to cast in fuitable Food, fuch as boild Corn, Worms and Garbage; but to keep them together it will be useful to throw in the Grains of Ground Malt. But for Salmon and Trout, a Composition of fine Clay, Blood and Ground Malt will be best. If

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If you are in doubt at any time about a proper Bait, it will be a good way when you have taken a Fifh to flit his Gills, and take out his Stomach, and observe carefully what he last fed upon.

CHAP. III.

Of BAITS, and where to find them.

THE procuring of good likely BAITS is not the leaft Part of the Angler's Skill: These are either Natural or Artificial; but we shall only speak of the former, because the latter are best had ready made at the Shops where Fishing-Tackle is fold. Of Natural Baits the Worm is not the least considerable; there are several forts of them as follow, but the largest is

The LOB-WORM or DEW-WORM; this is a proper Bait for Salmon, Trout, Chub, Barbel and Eels of the largeft Size. It is to be found in Gardens or Churchyards, by the help of a Lanthorn late on a Summer's Evening. In great Droughts, when they do not appear, pour the Juice of Walnut-tree Leaves mixt with a little Water and Salt into their Holes, and it will drive them out of the Ground.

The BRANDLING, GILT-TAIL and RED-WORM, are all to be found in old Dunghills, or the rotten Earth near them, but the beft are found in Tanners Yards, under the heaps of Bark which they throw out after they have done with it: The *Brandling* is most readily met with in Hogs-Dung. These are good Baits for *Trout*, *Grayling*, *Salmon-Smelts*, *Gudgeons*, *Pearch*, *Tencb* and *Bream*.

The MARSH-WORM is got out of Mar/h Ground on the Banks of Rivers, and is of a bluifh colour. It is a likely Bait for Salmon-Smelts, Gudgeon, Grayling, Trout, Pearch, Bream and Flounder, in March, April and September, tho' they use it from Candlemas 'till Michaelmas preferable to any other.

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The TAG-TAIL is of a pale Fleih-colour, with a *yellow Tag* on his Tail almost half an Inch long; they are found in *Marled Land*, or *Meadows* after a Shower of Rain, and are a good Bait for a *Troat* if you Angle for them after the Water is discolour'd with Rain.

And here you must observe, that all *Worms* should be well foour'd in *Mofs*, that has been well wash'd and cleansed from all Dirt and Filth; after it is wrung very dry, both the Moss and Worms should be put into an earthen Pot close shop'd, that they may not crawl out. This Pot should stand cool in Summer, and the Moss should be changed every fourth Day; but in Winter it should stand warm, and if you change the Moss once a Week it will be sufficient.

Befides these Worms that are to be found in the Earth, there are others which breed upon different Herbs and Trees which afterward become Flies. The principal of these are the Palmer-worm, the Oak-worm, the Crabtree-worm and the Caterpillar. These are to be kept in little Boxes with Holes to let in the Air, and they must be fed with Leaves of the fame Tree on which they were found. These are good Baits for Trout, Chub, Grayling, Roach and Dace.

The EARTH-BOB OF WHITE-GRUB is a Worm with a red Head as big as two Maggots, and is foft and full of whitifh Guts; it is found in a fandy light Soil, and may be gather'd after the Plough, when the Land is first broke up from grazing. You may know in what Ground to find them by the Crows, for they will follow the Plough very close where these Animals are to be met with. This is chiefly a Winter Bait, from the beginning of November to the middle of April, and is proper for Chub, Roach, Dace, Bream, Tench, Carp, Trout and Salmon-Smelts. They are to be kept in a Velfel close ftopt, with a fufficient quantity of the Earth they were bred in, and they will be ready for use all the Winter.

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The CLAF-BAIT is found under Cow-dung, and is like a *Gentle*, but bigger. You must feek for it only on fuch Land as is light and fandy, for it is much of the fame nature with the *Eartb-Bob*, and may be kept in wet Moss for two or three Days. It is an excellent Bait for a *Trout*, but almost every other Fish will take it.

The COD-BAIT, Cadis-worm and Straw-worm are only different Names for the fame Bait. They are found in Pits, Ponds, Brooks and Ditches, and are cover'd with Husks of Sticks, Straws or Rushes. They are very good Baits for Trout, Grayling, Carp, Tench, Bream, Chub, Roach, Dace, Salmon-Smelts and Bleak. The green fort are found in March, the yellow in May, and a third fort in August.

The FLAG-WORM or Dock-worm are found in the Roots of Flags that grow on the brink of an old Pond. When you have pull'd up the Root, you will find among the Fibres of it reddifh or yellowifh Cafes; thefe you must open with a Pin, and you will find a fmall Worm longer and flenderer than a Gentle, with a red Head, a palifh Body, and Rows of Feet all down the Belly. This is an exceeding good Bait for Grayling, Tench, Bream, Carp, Roach and Dace.

The ASH-GRUB is a milk-white Worm with a red Head, and may be had at any time from *Michaelmas* 'till June. It is to be found under the Bark of an Oak, *Afb*, *Alder* or *Birch*, if they lie a Year after they have been cut down. You may likewife find it in the Body of a rotten *Alder*, if you break it with an Ax; as also under the Bark of a decay'd Stump of a Tree. It is a good Bait for a Grayling, Chub, Roach, and Dace.

GENTLÉS OF Maggets are known to every one; they may be kept in a Horn with Holes in it to let in the Air; or in a Box with Gum-Iwy. They are very good Baits for Roach, Dace, Chub, Carp, Tench, Barbel, Bream, and Bleak.

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The ANT-FLY is to be met with from the end of June to September: They are to be kept in a large Glafs Bottle, with a Handful of the Earth, and another of the Roots of Grafs from the *Ant-Hills* where they were bred. They are an excellent Bait for *Roach*, *Dace* and *Chub*, if you Angle with them under the Water about a Hand's breadth from the bottom.

The YOUNG-BROOD of Wa/ps, Hornets and Humble-Bees are used by fome after gentle baking in an Oven. They are reckon'd tempting Baits for Roach, Dace, Chub, Bream, Flounder and Eels. But the danger in taking these prevents their frequent use.

SALMON-SPAWN is efteem'd a good Bait for a *Chub*, after it has been boil'd; but there are enough for this Fish without it.

SHEEP's-BLOOD dry'd upon a Board 'till it is hard, and cut into pieces of a fize fit for the Hook, is a good Bait for a *Chub*, *Roach* and *Dace*.

The WHITE SNAIL, and likewife the BLACK one with his Belly flit that the White may appear, are good Baits for the *Chub* early in the Morning, and likewife good *Night-Baits* for the *Trout* and *Eel*.

The GRASHOFFER in the end of June, all July and August, is a Bait much effecemed for a Trout, Grayling and Chub. The Legs and upper Wings must be cut off, likewise the Shank of the Hook must be stenderly leaded, and the Bait must be kept in continual Motion.

The WATER-CRICKET, Water-Loufe or Creeper is found under Stones that lie hollow in the Water, and turns into a Stone-Fly about May-Day. If you dib with them in the middle of a Sunfhiny Day in April, it is efteem'd a fatal Bait for a Trout. Others fifth with them within half a Foot of the bottom, and others let them drag on the Ground.

The MINNOW, Loach and Bull-Head are proper Baits for Pike, Pearch, Chub, Eel and large Trout. The Trout in March, April and September, will take Baits a Foot

Foot within the Water in the Day-time, if the Wind blows pretty briskly from the South, South-Weft or Weft. In the Summer-Months, if the Day be dark and the Wind high and bluftering, he will take it at the bottom, otherwife he will not meddle with it but in the Night. The Pike, Pearch and Chub will take them either by Day or Night. They fhould be put on Night-Hooks for the Eel, becaufe in the Day he does not bite fo readily.

The LAMPREY is a good Bait for *Chubs* and *Eels* either by *Day* or *Night*, as is the *Roach*, *Gudgeon* and fmall *Dace* for the *Pike*.

SMALL-FROCS of a brightish Yellow, that are found in green Meadows in June and July, are good Baits for Chubs, Pikes and Pearches.

PERIWINKLES taken out of the Shell are good Baits for *Roach* in the River *Thames*, as are likewife *Shrimps uncafed* for the *Pike* and *Chub*.

PASTES are varioufly compounded, almoft according to the Angler's own Fancy; but there fhould always be a little Cotton-Wool, fbaved Lint, or fine Flax, to keep the Parts of it together that it may not fall off the Hook. White Bread and Honey will make a proper Pafte for Carp and Tench. Fine white Bread alone with a little Water will ferve for Roach and Dace; and Mutton Suet and foft New-Cheefe for a Barbel. Strong Cheefe with a little Butter, and colour'd yellow with Saffron, will make a good Winter-Pafte for a Chub. When you Angle with Pafte you fhould chufe a fill Place, and ufe a Quill-Float, a fmall Hook, a quick Eye, a nimble Rcd and Hand. The fame Rule holds with regard to all tender Baits.

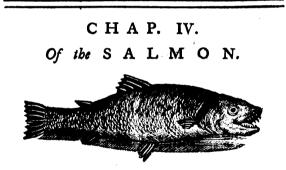
NATURAL FLIES for Angling are of various Kinds, the principal of which, according to their Seafons, are as follow.

In JANUARY the Dun-Gnat. FEBRUARY, the Brown Palmer, the Dun-Fly, and the Blue Dun. MARCH, the Whirling Dun, the Thorn-tree Fly and the Black Gnat. APRIL, the Stene-Fly, the Yellow-Dun, the Violet-Fly, and

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and the Horfe-Flefb-Fly. MAX, the May-Fly, the Green Drake, and the Grey Drake. JUNE, the May-Fly, the Black Ant-Fly, and all the Palmers. JULY, the Orange-Fly, the Wa/p-Fly, and the Shell-Fly. AUGUST, the Drake-Fly, the late Ant-Fly, and the Fern-Fly. SEPTEM-BER, the Camel Brown-Fly and the late Badger-Fly. OCTOBER, the fame Flies as in March. NOVEMBER, the fame as February. DECEMBER, the fame as Jamuary.

I could have been much larger and more particular in the Catalogue of *Natural Flies*, if the *Artificial* had not been more in ufe, as being always at hand and attended with lefs trouble: Befides thefe latter are to be had ready made, and much more neat than an unexperienced Perfon could be fuppofed to make them from any Directions I could give.



A SALMON, called in Latin Salmo, has different Names, according to its different Ages: Those that are taken in the River Ribble in York/hire, in the first Year are called Smelts, in the fecond Sprods, the third Morts, the fourth Fork-Tails, the fifth Half-Fi/b and in the fixth, when they have attain'd their proper Growth, they are thought worthy of the Name of Salmons.

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Their greatest Magnitude is much the fame in most Parts of Europe, and when they are largest they weigh from 36 to near 40 Pounds.

The Salmon is a beautiful Fifh, and has fo many excellent Properties, that it is every where in high Efteem. It has a longifh Body cover'd with fmall thin Scales, a fmall Head, a fharp Snout, and a forked Tail. The Colour on the Back is bluifh, on other Parts white, generally intermix'd with blackifh or reddifh Spots in a very agreeable manner. The Female is diftinguifh'd from the Male by a longer and more hooked Nofe, its Scales are not fo bright, and its Body is fpeckled over with darkbrown Spots, its Belly is flatter, its Flefh more dry and not fo red, nor yet is the Tafte fo delicious.

The Excression which grows out of the lower Jaw of the Male, which is a boney Griftle like a Hawk's Beak, is not a Sign of his being fickly as *Walton* and others have thought, but is a Defence provided by Nature against such Fish as would devour the Spawn. It grows to the length of about two Inches, and falls off when he returns to the Sea.

Its Teeth are but fmall in proportion to the Body; its Gills are quadruple, with a broad Cover full of red Spots in the fame manner as the Sides, for towards the Back they are dusky.

The *Flefk* is pale, but when boiled or falted becomes red; it is fweet, tender, flaky and luscious, for which reason it fatisfies the sooner: Tho' the Taste of it is generally prefer'd to that of all other Fish, yet it sooner offends the Stomach by its Viscidity, and confequently is apter to create a *Nausea* and cause a Surfeit. About the time of Spawning it grows more infipid, and loses its lively Colour. Some begin to be out of Season foon after the Summer-Solstice, and others soon after, which may be known by their falling away, their losing their beautiful Spots, and by their Colour, infomuch that when they are quite out of Season they look like a Fish of a different Species.

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The Salmon-Fry, or Scegger, call'd in fome Countries a Salmon-Smelt, is by most thought to be the Offspring of a fickly Salmon, which has been forcibly detain'd from visiting the Salt-water: But however that be, tho' its Beauty is agreeable enough to the Eye, its Taste is very ordinary and infipid.

The Salmon chufes the Rivers for his Abode about fix Months in the Year; they enter the Frefh-Water about February or March, where they continue 'till the Autumnal Seafon, at which time they caft their Spawn, and foon after return to the Sea. But directly the contrary of this is reported of the River Ex in Devonfbire, and the Rivers Wye and Usk in Monmouthfbire, where the Salmon are faid to be in Seafon during the other fix Months; and what is ftill more remarkable, if true, is that they never frequent the Wye and Usk in the fame Year, for if they are found in one of those Rivers they are fure to be wanting in the other. But however this be, it is certain that the Salt-Water best promotes their Growth, and the Fresh chiefly contributes to make them fat.

When Spawning-time comes the Female feeks a proper Place in a gravely Bottom, where fhe has been obferved to work with her Head, Tail, Belly and Sides, 'till fhe has form'd a kind of *Nidus* of the fame Dimenfions with herfelf, which done fhe difcharges her Spawn and retires; then the Male or *Milter* advances, and covers the Spawn with his Belly, emitting at the fame time a whitifh fluid like Milk: This is no fooner over but the Female returns to the Male, when they ufe their joint Endeavours to cover their Brood with the Gravel, in which they work with their Nofes like Hogs: After this they return to the Deeps to recover their Strength, which they do in about twenty Days.

There is nothing, relating to this Fifh, which has been more talk'd of than its Agility in leaping over the Obfacles which oppose its Paffage either to or from the Sea; for they are frequently seen to throw themselves

up Cataracts and Precipices many Yards high. Some have thought this has been done by bending their Bodies round like a Hoop, and then taking their Tail in their Mouths; but this feems to me to be altogether impossible. I have beheld them myself, both in England and Ireland, make feveral Effays before they could gain their Point, and when they have done it, it has been often to their own Deftruction, for they have leapt into Baskets plac'd on purpose to catch them.

There is a remarkable Cataract on the River Tivy in Pembrokesbire, where People often stand wondering at their Strength and Slight which they use to get out of the Sea into the River; on which account it is known in those Parts by the Name of the Salmon-Leap. On the River Wear, near the City of Durbam, there is another of this kind, which is accounted the best in England. Likewife at Old Aberdeen in Scotland there is another, where fuch great plenty of Salmon has been caught that they have been accounted the chief Trade of the Place; and there is an obfolete Law which obliged them to fell none to the English but for gold Coin.

Whenever their Paffage to the Sea is intercepted by Weirs, or any other Contrivance, they foon grow fickly, lean and languid, lofing their beautiful Spots; and if they are caught in that condition, when they come to the Table they prove taitelefs and infipid: In the fecond Year they pine away and die.

It is worth Observation, that the Salmon not only is defirous of returning back to the Rivers, but to that very River where it was fpawn'd, as is evident by an Experiment made by Fishermen and others, who have caught them when very fmall, and have run a fmall Ribband, Tape or Thread thro' the Tail-Fin : By this Mark they have been certain that they have retaken the fame Fish at the same Place as they return'd from the Sea: By this means they have likewife difcover'd that the Salmon is of a very quick growth, and much more fo than any other Fifh.

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The chief Rivers in England that yield this excellent Fish are the Thames, Severn, Trent, Medway, Dee, Ex, Usk, Wye, Lon, Tyne, Werkington, Weaver, Lone, &c. However our London Markets are supply'd soonest from the North, where they are not only more plentiful, but are in Season before those in the Southern Rivers.

The River Lone, which glides through Lanca/bire, is fo over-flock'd with Salmon, that the Servants make an Agreement that they will not eat it above twice a Week; the fame thing is reported of fome Parts of Scotland. However this is certain, that they are fo plentiful in the Tyne, that near Biwell Caftle in Northumberland I have bought one which weigh'd twenty Pounds alive out of the Weirs for two Shillings. But this is ftill exceeded by Lougb-Erne in Fermanagh a Province in Ireland, for this Water abounds fo much in Salmon, that the only Fear the Fishermen have is of too great a Draught, by which their Nets are often broken.

Thus having given a general Account of the Nature of this noble Fifh, I fhall now proceed to the Method of taking him with the Angle.

But first it must be noted that the Salmon does not lie long in a Place, but seems desirous of getting still nearer to the Head of the Spring. He does not lie near the Bank-side or under the Roots of Trees, but swims in the deep and broad parts of the Water, generally in the middle and near the Ground. But the Salmon-Smelts commonly lie in the rough and upper part of a gentle Stream, and usually pretty near the middle.

The most alluring Bait for the Salmon, in the Western Islands of Scotland, is a raw Cockle taken out of the Shell, with this they fish at the bottom, using a running Bullet. This Method I have try'd in the River Medway in Kent with Success : My Practice was to let the Cockle fall into a Shallow, from which there was a gradual Defcent into a deep Hole. The fame Day a Brother-Angler caught a Salmon with a Prawn, without to much as using a fingle Shot to his Line; instead of that

that he drew his Bait gently over the Hole on the Verge of the Shallow, and at the the fame time kept out of fight. In most of the Salmon Rivers of France, as I have been inform'd, they use Muscles taken out of the Shell, but I have never made the Experiment myself.

I fcarce need to caution the young Practitioner against Angling for Salmon from September to March, because, as I observed before, during that time they usually exchange the Fresh for Salt-Water.

The most usual Baits are a large gaudy Artificial Fly, Lobworms, fmall Dace, Gudgeons, Bleaks and Minnows ; which should be often varied in order to fuit the Humour of this fickle Fifh. for what he likes one Day he will defpife the next. Tho' it must be own'd it is a very difagreeable Circumstance to an Angler, and which he often meets with to exercise his Patience, to fee the Fish sporting on the Surface of the Water, and not be able to tempt him with any of his Baits. However he generally bites best about three in the Afternoon, in May, June, July, and August, especially if the Water happens to be clear, and there is a little Breeze of Wind ftirring; but there will be ftill greater Likelihood of Success if the Wind and Stream let contrary ways. It must likewife be observed that this Fish feldom stays long in a Place, but is continually shifting to be as near the Spring-head as poffible, and fwimming generally in the deepeft and broadeft part of the River near the Ground.

When you make use of the Fly let your Hook be ftrong and large; but I should rather advise two wellscour'd Lob-worms, for I have been most fuccessful in fishing at the Bottom with them. In this Case let your Hook be large and arm'd with Gimp, for tho' the Salmon, when struck, feldom or never attempts to bite the Line, yet as you will be oblig'd to play the Fish for fome time, the Line must rake against his Teeth, and you will be in great danger of losing your Prize without this Precaution. Next to Gimp I would recommend

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commend the Briftles of a *Weftphalia* Hog doubled, which yet are only preferable to ours on account of the length. If, therefore, you cannot eafily procure the former you may make use of our own, which I have often lap'd into the length of half a Yard, which have been Proof against the Teeth of a Jack when I have troll'd for that Fish.

Wherever you observe a Salmon leap out of the Water you may fafely conclude there is a deep Hole not far off, and if the River is too broad for you to throw a Fly, or if a contrary Wind hinders you, then lay your Ledger-Bait as near the Hole as you can, and you will have great probability of Success, for he always chuses fuch Places for Retirement. If you Bait with a Dace, Gudgeon, &c. then put on your Swivel and Reel, and make use of a large Cork-Float, with your Live-bait about Mid-water.

For the Salmon-Fry or Scegger the propereft Baits are Ant-Flies; you may use three or four Hooks to one Line tyed to fingle Hairs. They are also frequently caught with the Red-worm in fishing for Gudgeons. The Places where they are generally found are the Scowers near the Deeps.

The chief Salmon Fisheries in Europe are along the Coafts of England, Scotland and Ircland; the Fifthing usually begins about the first of January, and ends by the last of September. It is perform'd with Nets in the Places where the Rivers empty themfelves into the Sea, and along the Sea-Coafts thereabout; because these Fish are seen to crowd thither from all Parts in fearch of Freih-water. They also fish for them higher up in the Rivers, fometimes with Nets, and fome. times with Locks or Weirs made for that purpofe with Iron Gates : These Gates are fo contrived that the Fish in passing up the River can open them with their Heads, but they are no fooner enter'd than the Gates clap too and prevent their return. Thus the Salmon are inclosed as in a Refervoir, where it is eafy to

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to take them. It is the Practice of fome Fifhermen, when they have caught a Salmon, and fulpect he belongs to more of the fame Species, to tie a fmall Cord to his Tail, and at the other end a large Cork; which done they turn him into the River again, when the terrify'd Animal makes the beft of his way to the reft of the Company, and of confequence the floating of the Cork difcovers where they lie: By this means they not only retake their former Captive, but find their trouble amply rewarded by the extraordinary Succefs of the Draught.

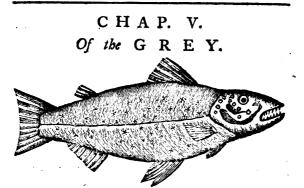
In fome Places they fifh for Salmon in the Nighttime by the Light of Torches or kindled Straw, which the Fifh miftaking for the Day-light make towards, and are ftruck with the Spear, or taken with the Net, which they lift up with a fudden Jerk from the bottom, having laid it the Evening before oppofite to the Place where the Fire is kindled. In fome Parts of Scotland it is faid they ride a fifting up the Rivers, and when they efpy them in the Shallows they fhoot them with Fire-Arms.

When the Fifh are caught they open them, take out the Guts and Gills, and falt them in large Tubs made for that purpose, out of which they are taken before October, and are pack'd up in Casks from 300, to 450 Pound weight.



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CHAP.



HE Grey I take to be the fame kind of Fifh which in Scotland they call the Grey-Lord. In Magnitude it differs but little from the Salmon, but the Shape is very unlike, being confiderably broader and thicker; the Tail is indeed as large but not forked. The Body is every where ftain'd with Grey or Alb-colour'd Spots, from whence it derives its Name. The Flesh is more delicious than that of the Salmon itfelf, and fells for almost double the Price. He makes his Progress from the Sea into the Rivers with extraordinary Swiftnefs. and is poffels'd of very great Strength and Agility, furmounting almost all Obstacles with the greatest Ease. He is feldom taken, and is therefore known but to few. He never advances into the Rivers before the beginning of August in order to Spawn, and then commonly takes the Advantage of a Flood; whereas the Salmon comes into the Fresh-water in every part of the Spring.

It would be to no purpole to give Directions how to take this Fifh with the Angle, for he defpifes all kinds of Baits, and in this he refembles the *Fordich-Trout*, which I almost suffect to be of the fame Species, but for want of a more particular Description of the latter cannot certainly determine.

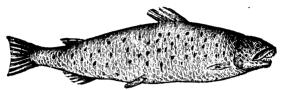
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CHAP.

CHAP. VI.

Of the Scurf, Bull-Trout, Salmon-Trout or Salmon-Peale.



THESE are all different Names for the fame Fifh, which in Latin is called Salar. In fome Places it grows to the length of twenty Inches, in others it feldom exceeds fixteen. It differs in fhape from a Salmon in not having a forked Tail; its Head likewife is more fhort and thick than that of a Grey, and its Body is adorn'd with variety of Spots. The Flefh of those taken in Yorkfbire is not red, as in the Salmon, and its Tafte is more ftrong and rank than that of the Grey.

They are found in York/bire, Dorset/bire and Devonthire, and enter the Rivers the beginning of May.

They delight to lie in deep Holes, and commonly fhelter themfelves under the Root of a Tree. When they watch for their Prey, they generally chuse that fide of the Hole that is towards the Stream, that they may more readily catch whatever Food the Stream brings down.

They will rife at an Artificial-Fly like a Salmon: But the beft Bait for them is a well-four'd Brandling, efpecially those that breed in a Tanner's Yard.

You may Angle for them any time in the Morning, and in the Afternoon from Five 'till Night. They are in-Seafon all the Summer.

When you try to catch them remember to keep out of fight, and let your Line fall into the Stream, with-

out

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out any Lead, except one fingle Shot, and then it will be carried gradually into the Hole. When you have a Bite you ought not to strike too eagerly. They bite freely enough, and struggle hard for their Lives.

It is worth while to observe that some give the Name of Salmon-Trout to a young Salmon, which has occasion'd feveral to run into Errors in treating of this Fish. They have likewise in France a kind of Pond-Tront, which they call a Salmon-Trout, that grows to fuch a Magnitude as to weigh above thirty Pounds, and in the Leman Lake near Geneva there are some of this kind that weigh fifty Pounds.

CHAP. VII. Of the SAMLET, BRANLIN, or FINGERIN.

SAMLET or Branlin, in Latin Salmulus, never exceeds fix or feven Inches in length, and has Teeth not only in the Jaws but the Palate and Tongue. The Body is cover'd with fmall Scales like a Trout. The Back is full of black Spots, and on the Sides there are five or fix Impressions of such a Form as tho' they had been made with Fingers; hence fome give them the Title of Fingerins; in every one of these Pits there is generally a red Spot. Their Bellies are white, and their Tail is forked like a Salmon. But what is most remarkable in this Fifh, and which is exceeding strange, is, that they are all Males.

It is found in those Places only where Salmons frequent; but whether they wander into the Sea or not is a doubt, for they may be taken at all times of the C z Year.

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Year. They delight in the most fwift and rapid Streams, where no other Fish is able to abide. They are thought to preferve their Breed by impregnating the Spawn of a Salmon, because they are seen to hover over it sometimes, as soon as it has been deposited by the Female Salmon.

They may be Angled for in the fame manner as the Salmon-Scegger, mentioned in the Chapter of the Salmon.



T H E Trout, in Latin Trutta, is of a longifh Make, and refembles a Salmon more than any other Fifh. His Head is fhort and roundifh, his Nofe blunt, his Body thick, and his Tail broad; his Mouth is wide, and he has Teeth not only in his Jaws but in his Palate and Tongue. His Eyes are large with a reddifh Circle round the Pupil, but the reft of the Iris is of a filver colour. His Scales are fmall, and his Skin eafily falls into Wrinkles and feparates from the Flefh. In the larger Treut the Back is of a dusky Hue, and full of black Spots, but in fome mix'd with red. The Sides are painted with Spots of a Purple or Vermilion Dye, but on the Belly they have a yellowifh Caft.

On the Back they have two Fins, that in the middle of it is full of black Spots, and the Edges of that near the Tail is of a Vermilion colour; on the Belly, as in most other Fish, there are two pair, which are always either red or yellow.

Trout generally delight in the cooler and fmaller Risers, which defeend from Hills and rocky Mountains; and

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and they feem to take a Pleafure in ftriving againft the Stream. It is really wonderful to fee with what Force and Agility they will furmount all Difficulties in travelling towards the Source of Rivers, let their Defcent be never fo rapid. And feveral Authors tell us that they are found among the *Alps* in Waters fo very cold that no other Fifh can live therein.

Their time of Spawning is in November or December, when they dig Holes in gravelly or ftony Places and depointe their Spawn therein. But, contrary to the Nature of other Fifh, they are not thought to be in high Seafon when they are fulleft of Spawn, for they are fatteft and have the most delicious Tafte in the Months of July and August. The Flefh is a little dryer, and not quite fo tender as that of a Salmon, but yet it is accounted the most agreeable of all Fifh that have their constant Abode in Fresh-water.

There are feveral Kinds of this Fifh which are all valuable, but the beft are the Red and the Yellow *Trout*; and of these the Female is preferable, which is known by a less Head and a deeper Body.

The Fordich Trout, which is fo much talk'd of, feems to be of a different Sort from the reft, becaufe it is almost as big as a Salmon, and lives nine Months in the Sea; befides it is feldom or never caught with the Angle, being fuppos'd not to feed at all in Fresh-water; and there feems to be a probable ground for this Opinion, for when they are open'd there is nothing found in their Maw. Yet their Return to the River is fo very conftant and punctual, that the Fishermen know almost to a Day when to expect them. When this Fish is in full Season the Flesh of it cuts white.

The Trout begins to be in Seafon in March, but, as I faid before, they are in higheft Seafon in $\mathcal{J}uly$ and Auguft. However they are fooner fo in fome Rivers than others; in the River Wandle they are more forward than in any other about London, and there is near a Month difference between that and Hertford River. What the C 3 Reafon

• Reafon fhould be is hard to guels, for there are variety of fmall Fifh in the other Rivers for them to feed on; whereas in that part of the Wandle frequented by the Trout there are none but Eels, Flounders, and Prickle-Backs.

In the Winter-time the Trout is fick, lean and unwholefome, breeding a kind of Worm with a big Head not unlike a Clove for shape; this Creature sticks close to him, and in a manner deprives him of all Nourishment, for there is nothing thrives about him but his Head, which at this time is of a larger fize than ordinary: He is now without those beautiful Spots which before were his chiefest Ornament, and the vivid Colour of his Belly becomes dusky and difagreeable. But as foon as the Sun approaches the Vernal Equinox, and with his genial Warmth and Influence begins to invigorate the Earth, he then makes a Shew of fome Spirit, and roufing as it were from a kind of Lethargy, forfakes the deep still Waters for the more rapid Streams, where against the gravelly Bottoms he rubs off his inbred Foes, and foon after recovers his former Strength and Beauty.

The usual Baits for a Trout are the Worm, Minnow and Fly either Natural or Artificial. The proper Worms are the Branling, Lob-worm, Earth-worm, Dung-worm and Maggot, but effectially the two first; and indeed, for my own part, in fifting at the bottom I prefer the Lob-worm. nor have I often used any other.

This Fifh, as I observ'd before, delights in the fwifteft Streams, and confequently you must Angle for them near fuch Places: When they watch for their Prey they generally shelter themselves under a Bank, or a large Stone, or in the Weeds, where I have often feen them lurking entirely cover'd all but their Heads. When I have discover'd them in this Situation, I have gone a little up the Stream, with great Care and Caution, and mudded the Water, putting in my Bait immediately in the very Place which I had troubled; then keeping my felf

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felf as far from the Bank as I could, in order to be out of fight, I followed my Float, and have often been fucceisful.

Trout may be taken in this manner either with a Minnow or two well-fcour'd Lob-worms. When I use two Worms I put the first on the Hook with the Head foremost, and then slipping it a little up the Line to make room, I put on the other with the Tail foremost. after which I draw the first down to it fo close that they may feem to be knotting or engendring ; for they often perform this naturally on the Banks of Rivers, and fometimes fall into the Water, where they become a Prey to the hungry Fifh.

This is likewife a good Bait when you Angle in the Morning-Twilight, or in the Dusk of the Evening, or even in the Night when it is dark. In this cafe you must put no Lead on your Line, but throw your Bait as gently as you can across the Stream, and draw it foftly to you on the Top of the Water. This is the best Method of catching the oldest and the largest Trout, for they are very fearful and fly in the Day-time, but in the Night they are bold and undaunted, and generally lie near the top of the Water in expectation of meeting with Food; for if they fee any thing in motion, let it be what it will, they will certainly follow it if it glides gently along.

It is the Practice of fome to fifh at the Bottom in the Dark with a little Silver Bell fix'd to the top of the Rod, in fuch a manner that when the Trout takes the Bait the Sound of the Bell may give notice of the Bite; but I think this Method is very precarious, becaufe the least Weed that touches your Line as it comes down the Stream will deceive you. The fureft way in my Opinion is to hold your Rod in your Hand, for as the Trout is a bold Biter, you will eafily perceive when he takes the Bait : As foon as you have ftruck it give it the But of your Rod, for if you hold it the least upon a level you run a great rifque not only of C. 4

of lofing your Line and Hook, but even fome part of your Rod.

When you Angle with a Fly let your Rod be rufhtaper'd, with a very flender Top, that you may throw your Fly with greater Certainty and Eafe, for if the Top is too ftiff the Fly will foon be whip'd off. Your Line fhould be three times the length of your Rod, and if you put on two Flies at a time, the one two Foot above the other, you will ftand the better chance.

In this kind of Angling you fhould place yourfelf fo that the Wind may be upon your Back, or at leaft you muft chufe fuch a Time or Place, that the Wind may blow down the Stream, and then it will affift you in laying your Fly upon the Water, before your Line touches it; for if your Line touch the Water first it will caufe a Rippling that will fright the Fifh away.

It is the ulual Practice to Angle for a *Trout* with a Fly on the top of the Water, and yet the largeft are taken by letting it fink five or fix Inches under it.

You need not be very cautious in the choice of your Flies, for a *Trout* is not difficult, nor yet very curious about the Seafon, for I have Angled fuccefsfully with an Artificial May-Fly in August.

The Time of the *Trout*'s Biting is from Sun-rifing 'till near Eleven in the Morning, and from Two in the Afternoon 'till Sun-fet; and yet the most certain times are Nine in the Morning and Three in the Afternoon, especially if the Wind be at South, for when it blows from that Point it is most favourable to the Angler. A cold Easterly Wind is always unpropitious to this Sport.

It would be only loft Labour to give Directions for the making Artificial Flies, fince they may be bought ready made, and much neater than an unexperienc'd Perfon can be fuppos'd to make them. And for the like Reafon, fince a *Trout* will rife at an Artificial Fly as well as a Natural one, it would only be fuperfluous trouble to hunt after the latter, when the former are always at hand. And

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And as the *Trout* may be deceiv'd almost by any Fly at the top, so he feldom refuses any Worm at the bottom, or small Fish in the middle; for which Reason I have sometime caught them when I have been trolling for *Jack*, and little expected any such matter.

You may likewife dib for *Trout* in the fame manner as you do for *Chub*, with a ftrong Rod, and a fhort ftrong Line; but you muft be fure to keep out of fight, for the Shadow of your Rod, or the Flight of a Bird over the River, will make them fly almost as fwift as the Bird, and it will be fome Minutes before they will fhew themfelves again. You need not make many Trials in a Place, for if they will not rife after half a dozen Throws, either there is none there, or they do not like your Bait.

There is a Method of taking *Trous* in fome Parts of *England* by tickling them, I knew one who was very expert in that Art; he would grope for them in their -lurking Places, and gently tickle their Sides, which they feem to be delighted with, 'till at length approaching their Gills he held them faft, and made them Prifoners; and we learn from the *Philofophical Tranfactions* that *Carp* are fometimes taken the fame way.

CHAP. IX.

Of the GRAYLING or UMBER.



T H E Grayling, call'd in Latin Thymallus, is in proportion neither fo broad nor fo thick as a Trout, and in fize feldom exceeds eighteen Inches; they weigh C 5 about.

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about half a Pound, but in fome Places they are faid to be three times as heavy: Its Back is of a dusky Green inclining to a Blue; the Sides are grey, feeming to glitter with Spangles of Gold. From the Head to the Tail, in the Places where the Scales meet, there feems to be drawn fo many obscure parallel Lines; the Lateral Lines, common to all Fifh. are nearer the Back than the Belly; The Sides, except towards the Tail, are irregularly fpotted with Black. The top of the Back-Fin is painted with Red, but the lower-part is of a bluish Purple; the Fins of the Belly are likewife of the fame colour, that is, of a bluish Purple, and spotted with Black. It has a little Head with protuberant Eyes, the Iris of which is of a filver colour with yellow dusky Spots; the Mouth is of a mean fize, the upper Jaw of which is longer than the lower; instead of Teeth the Lips are rough like a File; the Tongue is fmooth, and the Gills quadruple.

They delight in Rivers that glide through mountainous Places, and are to be met with in the cleareft and fwifteft Parts of those Streams, particularly they are bred in the Hodder, Dove, Trent, Derwen, Wye and Lug.

This Fifh may be eaten all the Year; but its principal Seafon is in December, at which time his Head, Gills, and the Lift that runs down his Back are all black.

The Time of its Spawning is in May.

The Flesh is accounted by fome to have the most agreeable Taste of all Diver-Fish; it is firm, white, cleaves like Salmon, and is judged to be very wholefome.

It is a brisk forightly Fish when in the Water, and fwims as fwift as an Arrow out of a Bow; but when he feels the Hook he is dead-hearted, and yields rather too foon for the Angler's Diversion.

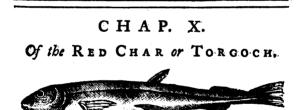
He feeds upon Grashoppers, Flies, Worms, and fuchlike Infects, and therefore fuch fort of Baits must be us'd in order to take him; but at the Bottom I prefer a large well-fcour'd Red Worm before any other.

The

The fame Rules that have been laid down for taking the *Trout* will also ferve for the *Grayling*, only let your Tackle be fomething finer. Some Anglers, when they make use of a Fly, fasten their Hook to two Hairs, but because they are apt to tangle in the Weeds, I would recommend the Silk-worm Gut, which should be well wax'd with Virgin's Wax, to hinder it from fraying.

The Grayling has fo quick an Eye, that he has difcover'd and taken my Bait fix Inches out of the Water, when I have been Angling for him ftanding upon a Bridge.

You may observe likewife, that he is a much simpler and bolder Fish than a *Trout*, for if you miss him twenty times, he will still continue to rise at your Fly. And as this is his peculiar Property, that he is more apt to rise than descend, your Bait should never drag on the Ground, but be six or nine Inches from the Bottom. And for the same Reason it will be more proper to use a Float than a Running-Line.



THE Red Char is the Umbla Minor of Gefner and other Authors, and is known in Wales by the Name of Torgoch. The Body of this Fifh is of a longer and more flender Make than that of a Trout, for oneof about eight Inches long was no more than an Inchand an half broad. The Back is of a greenifh Olivefpotted with White. The Belly, about the breadth of half an Inch, is painted with Red, in fome of a morelively.

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lively, in others of a paler colour, and in fome, effecially the Female, it is quite white. The Scales are fmall, and the Lateral Lines ftraight. The Mouth is wide, the Jaws pretty equal, unlefs the lower be a little fharper and more protuberant than the upper; the lower Part of the Fins are of a Vermilion Dye. The Gills are quadruple, and it has Teeth both in the Jaws and on the Tongue; in the upper Jaw there is a double Row of them. The Swimming-Bladder is like that of a Trout; the Liver is not divided into Lobes, the Gall-Bladder is large, the Spleen fmall and blackifh, the Heart triangular, and the Eggs of the Spawn large and round.

The *Flefb* is more foft and tender than that of a *Trout*, and when boiled can fearcely be allow'd to be red. It is in the higheft Efteem where known, and in *Wales* is accounted the chief Difh at the Tables of People of Fashion.

The only Place in England where this Fifh is taken is Winander-Meer; but in Wales it is to be had in five different Places, namely, Llanberris, Llin-Umber, Feftiniog and Bettus in Carnar vonfhire, and near Cafageddor in Merioneth/hire. In this laft County they are fmaller than in the former, and are taken in Ostober; but in Carnar vonfhire, in one of the Lakes they are caught in November, in another in December, and in the third in January, and when the Fifhing in one ends they begin in another.

They fixin together in Shoals, and tho' they appear on the Surface of the Water in the Summer-time, yet they will not fuffer themfelves to be taken either with the Angle or with Nets. Therefore the only Seafon for Fifthing is when they refort to the fhallow Parts of the Lake in order to Spawn. At thefe times they fet Trammel Nets baited, and leave them for whole Days and Nights, into which the Fifth enter of their own accord.

Some have doubted whether the Welf and Englift Fifh are of the fame kind or not, but Mr. Ray thinks there is no room to make it a doubt. The Welf Name Torgoch

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Torgoch fignifies a red Belly, which diffinguishes the Red Char properly enough. The Gilt Char is, indeed, a quite different Species, and is above twice as fmall as the Red. The Belly of the former is of a Silver Colour, the Fleich is red, and the Back is spotted with black : whereas the Belly of the other is red, the Flesh white, and the Spots on the Back white likewife. And tho' fome Fishermen fay they only differ in Sex, and would have the Red to be Males and the White Females, yet it is as plain as can be that they are of a diffinct Species; and notwithstanding the Red are fo large, the White are more valuable, and the Flesh is more delicate. These of this Meer are only taken in the Winter-time as well as those in Wales, for in the Summer they will get over the Tops of the Nets, and make their Escape. Dr. Leigh affirms that the Char is found in Coningston-Meer in Lancafbire, which from what he fays of the Size muft be the Red Char.



THE Latin Writers call this Carpio Lacús Benacio becaufe they imagin'd it was only to be met with in that particular Lake; but it has fince appear'd to be the fame Fifh with our Gilt-Char, which is bred in Winander-Meer in the County of Weftmoreland. It is proportionably broader than a Trout, and the Belly is more prominent, but its length, when greateft, never exceeds twelve

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twelve Inches. The Scales are fmall, the Colour of the Back is more lively than in a Trout, and is beautify'd with black Spots; the Belly and Sides beneath the Lateral Line are of a bright Silver Colour; the Scull is transparent, and the Snout bluish. It has Teeth in the lower Jaw, on the Palate and the Tongue; the Swimming-Bladder is extended the whole length of the Back, and the Gall-Bladder is large.

The Flesh of the Gilt Char is red, and is accounted fo very delicious among the *Italians*, that they fay it excells all other Pond or Sea-Fish whatever, and they efteem the Nature of it to be so wholsome, that they allow fick Persons to eat it.

Winander-Meer, as was before obferved, is the only Place in England where the Gilt Char is found; it is a Lake, according to Camden, ten Miles in length, and in fome Places exceeding deep, therefore they are only taken in the Winter-time when they go into the Shallows to Spawn.



G UIN IAD is a Welf Name for a Fifth that is bred in Pemble-Meer in Merioneth/hire, and is the fame with the Forra of Rondeletius. The Shape is not very much unlike that of a Salmon, and the usual length is about twelve or thirteen Inches; the Back is of a dusky colour, but the Belly is white. The Scales are of

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of a middle Size, the upper Jaw is fomewhat more prominent than the lower, and the Mouth is much like that of a Herring. It has no Teeth neither in the Jaws nor Throat, and the Belly does not terminate fharp like a Wedge; but is about three quarters of an Inch broad. The Top of the Head is of a faint bluish colour with obscure Spots; the Eyes are large, but have no Pellicle to cover them as fome Fish have. The Lateral Line runs directly from the corner of the Gills to the Tail, which is forked.

The Brain is divided into feven Lobes, but the Liwer has none: The Gall is yellow, the Scull is fearcely transparent, the Borders of the Eye on each fide feem to be wrinkled, the Air-Bladder runs the whole length of the Back, as in Trouts; the Spleen is very long and foft, like coagulated Blood.

The Place which this Fifh is bred in the Wel/b call Llin-Tegid, and the Englifb, Pemble-Meer; it lies near Bala a Bailiff-Town in Merioneth/bire, and the chief in that Mountainous Tract. It generally lies at the bottom of the Lake among Water-Gladiol, a Plant peculiar to these Mountains: It is call'd Guiniad from the Whiteness of its Body, the Word fignifying much the fame as Wbiting in Englifb. There is one thing worthy of Remark, which is, That tho' the River Dee runs through this Lake, yet they are never found in its Streams; and on the contrary, tho' Salmon are caught in the River they never enter the Lake; fo strictly do these Animals keep to the Haunts that Nature has provided for them.

They are in Seafon in the Summer: The Flefh is white, and yet the Tafte is not much unlike that of a *Tront*: It is in the higher efteem becaufe it is a kind of a Rarity. This Fifh is likewife an Inhabitant of Lake-Leman near Geneva, among the Alps.

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CHAP.



THE Schelley is bred in a Lake in Cumberland called Hulfe-Water, or Ulles-Water, and is of the fame Species with that which the Latin Writers name Lavaretus. The Size of this Fifh is not very large, for it feldom or never exceeds two Pounds in weight. In Shape it is more like a Herring than a Trout, and feems to be a Species partaking of the Nature of both. The Head is fpeckled with Black, the Scull is transparent, the Back is almost black, but the Belly and Sides are of a Silver colour. The Back Fin next the Tail is without any Radii, and feems to be only a Lump of Fat. The Lateral Line runs directly from the upper Corner of the Gills to the Tail, which is forked. In every thing elfe it is like the Guiniad.

The Flesh is white, tender, fweet, not viscid; of good Juice, and moderately nourishing.

They find in Shoals, and are caught with Nets in the Months of *March* and *April*. As foon as they are taken out of the Water they die, like a Herring. They are taken in the Lake *Acronius* among the *Alps* in great quantities, and after they are falted they are fent to *Bafil* and other neighbouring Towns.



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CHAP.

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THE Pearch, called in Latin Perca, and in Cumberland, Barle, is generally, when full grown, about twelve or fourteen Inches long; fometimes, tho' but feldom, they attain to fifteen, which is an extraordinary Size.

This Fifh is Hog-back'd, and rather broad than otherwife. The Colour inclines a little to a dusky Yellow, with five or fix blackifh Places like Girdles proceeding from the Back towards the Belly. The Tail is forked. The Lateral Lines are nearer the Back in this than any other Fifh, which, proceeding from the upper Corner of the Gills, run parallel to the Back 'till they reach the fartheft part of the fecond Back-Fin, and then they divide the Tail into two equal Parts.

The Scales are fmall, thick, hard and rough, drying much fooner than those of any other River-Fish. The Iris of the Eye is of a yellow or gold Colour. The Mouth is wide, and the Jaws very rough, with small Teeth. On fome Parts of the principal Back-Fin there are black Spots, but the whole Fin next the Tail is yellow, and the Tail itself is reddish. The Belly-Fins have fometimes, but not always, a mixture of Red and White. The Gills, as in almost all River-Fifh, are quadruple.

The Liver is oblong and undivided; the Spleen blackifh, the Gall-Bladder full of yellow Gall, and in the

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the Brain there are two fmall Bones. Inflead of a Swimming-Bladder this Fifth has a transverse Membrane in his *Abdomen*, which runs all the length of his Back.

The *Flefb* of this Fifh is firm and of an agreeable Tafte, of easy Digeftion and very wholfome; but the *Liver* is usually thrown away, because it is apt to be meafly.

They Spawn but once a Year, and that is the latter end of *February*. Some think the Male is to be diflinguish'd from the Female by the Fins being of a deeper Red.

The most natural Places for this Fish are Rivers, and yet he will live and thrive well enough when shut up in a Pond. In the Day-time he does not seem to be fond of any particular Haunt, because he is almost continually roving about in quest of Food, being a very voracious Fish: And yet they are more likely to be found under the Hollow of a Bank, the Piles of Bridges, Stumps of Trees, or in a gentle Stream of a middling Depth. In the Night, indeed, they retire to a Place of Repose, which if you are so lucky as to discover early in the Morning you have a fair chance to take them all, for they bite very boldly, and generally herd together, and the taking of one does not discourage the rest from falling into the fame Danger.

It will be to no purpole to Angle for this Fifh before the Mulberry-tree begins to bud, that is before the Spring is fo far advanc'd as to put the Fruit out of danger of being kill'd by nipping Frofts; and for the fame Reafon he always bites beft in warm Weather; yet in the very midft of Summer he is fooneft taken in cool, cloudy and windy Weather, and you may Angle for him any time of the Day, but you will be more likely to fucceed from Seven to Ten in the Morning, and from Two 'till Sunfet in the Afternoon, or later.

The most likely Baits are Worms, Minnows, and fmall Frogs. For my own part I prefer a Brandling-Worm well fcour'd in Moss, unless it be in the Mole, and

and fome other Rivers that run into the *Thames*, where *Minnows* are fcarce. But they are not very nice in the choice of their Feed, for I have even caught them with a *Fly* in fifting for *Trout*: I have likewife taken a Brace at a time when I have been Angling for Gudgeons with two Hooks baited with *Red Worms*.

They take the Bait best within a Foot of the Ground, and swallow it instantly, because they have the largest Mouth, in proportion to their Size, of any other Fish. However when you Fish with a *Minnow* or *Frog*, they should have a little more time before you strike, than when you bait with a Worm.

The *Pearch* is a Fifh that flruggles hard for his Life, and confequently yields the Angler much Diverfion: If you find that you have a Bite from a large one, give him a little time to gorge the Bait, but if it is a fmall one you may firike inftantly, especially if your Bait be a *Brandling*.

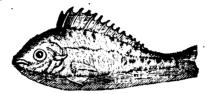
I have often fifth'd for him with two Hooks and a live *Minnow* with good Succefs. The Hooks have been ty'd to Silk, one of which I have put thro' the upper Jaw, and the other thro' the middle of the Back.

When you Bait with a *Frog* thruft the Hook through its Leg near the Thigh, and when you throw it into the Water keep it from the Shore as much as possible, for it will be for making thither unless prevented.

As the *Pearch* generally fwallows the Bait, and as it is difficult to get the Hook out of his Entrails without breaking the Line, it will be neceffary to carry an Inftrument in your Pocket which I call a *Gorge*. It may be made of Iron or Wood, about fix Inches long and half an Inch thick, with a Hollow at the Extremity. This hollow End you are to thruft down the Throat of the Fifh 'till you feel the Hook, at the fame time keeping your Line ftraight left the Hook fhould catch again ; when you have difengaged it with this Inftrument, you may draw them both out carefully together.

CHAP. XV.

Of the RUFF or POPE.



THIS Fifh is called by fome Afpredo, from the Roughnefs of its Body, and by others Perca fuviatilis minor, from its. Likenefs to a Pearch. When largeft it feldom exceeds fix Inches, and is cover'd with rough prickly Scales. The Fins are prickly alfo, which, like a Pearch, he brittles up fliff when he is angry. His Back is of a brown dusky colour, but his Side's are of a pale Yellow, his Belly white, and the Covering of the Gills are of the colour of Gold. His Back, along which there runs a Line, is fpotted with Black, as are alfo moft of the Fins. The upper part of the Eyes are brown, the lower yellow, and the Pupil black. The Jaws are rough like a File, but the Palate and Tongue imooth; the Tail is forked.

The Stomach is round, and one that was diffected had fome watry Infects in it with fix Feet. The Gut has but one Fold, the *Liver* is of a flefh colour, the Air-Bladder is undivided, runs the whole length of the Belly, and is faften'd to the Back.

The time of Spawning is in *April*. The Flefn is fecond to none for the Delicacy of its Tafte.

It is found in moft of the large Rivers in England, particularly the Yare in Norfolk, the Cam in Cambridgfhire, the Ifis near Oxford, the Sow near Stafford, the Tame that runs into the Trent, the Mole in Surrey, Scc. The

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The most likely Place to meet with him is in the Sandy and Gravelly Parts of these Rivers, where the Water is deep, and glides gently along. And if you meet with one you may conclude there is more, for they generally herd together in Shoals.

He will take almost any *Bait*, and bites at the fame time as the *Pearch*. However I prefer a *Red-Worm* or fmall *Brandling*, finding it to be a Bait they generally covet: Yet I have taken them with a *Minnow* almost as big as themfelves, when I have been Angling for *Trout*.

The best way, before you begin, will be to bait the Ground with two or three Handfuls of Earth, and then you will be fure of Diversion if there is any Ruffs in the Hole, and will stand a fair chance to take them all. I have fometimes used a Pater-noster Line with five or fix Hooks, according to the Depth of the Water, for when it has been a little troubled they will take the Bait from the Top of the Stream to the Bottom.



THE Carp, in Latin Cyprimus, according to Rondeletius, grows fometimes to the length of a Yard and a half, and a proportionable Thicknefs; but the largeft I ever faw was caught in the Thames near Hampim-Court, and weigh'd thirteen Pounds. The Colour of this Fifh, especially when full grown, is yellowish; the

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the Scales are large, the Head flort and like that of a Tench; the Mouth is of a middle Size; the Lips fat, flefhy and yellow. It is without Teeth, but there is a triangular Bone in the Palate, and two other Bones in the Throat, which ferve for the fame purpofe. On the upper Lip, near the corner of the Mouth, are two yellow Appendages, which may be call'd Mussical form their Situation. The Fins are large; the Tail is broad, a little forked, and of a reddifh Black. The Lateral Line is straight, and passes through the middle of each Side.

It has no *Tongue*, but in the room thereof Nature has provided a flefhy Palate, which being taken out of the Mouth looks like a Tongue, and fome Perfons pretend to be positive it is one.

All the Inteffines pais through the very Substance of the Liver, and are joined to it, infomuch that they feem to make one Mais; and not only the Gall-Bladder and Spleen, but the Stomach itself is confounded among the reft. The Air-Bladder is double, and is connected to the Back. The other internal Parts have nothing fingular.

They Spawn feveral times in a Year, but the principal are in May and August, in which Months they are lean and infipid, and confequently out of Seafon. The Females drop their Spawn as they fivin along, and are generally follow'd by thirteen or fourteen Males, who impregnate it as it falls, yet a great deal of it perishes. They are in highest request in April. Willoughby affirms the largest weigh about twenty Pounds.

Some Authors of note have affirm'd that *Carp* have been often found in Ponds wherein they were never known to be put: But in *England* we have not been fo lucky as to find it true, for there were none of this kind of Fifh in all the Ifland before they were brought into it by *Leonard Mafcal*, about a hundred and fixty Years ago, as he himfelf tells us in his Treatife of Fifhing.

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One thing observable in a *Carp* is, that it lives the longest out of the Water of any other Fish; and Mr. *Derham* affures us that in *Holland* they hang them up in a Cellar, or other cool Place, in a small Net full of wet Moss, with only their Heads out, and feed them with white Bread soak'd in Milk for many Days.

The *Fle/b* of the River-Carp is much better than that of the Pond, and in general it is more or lefs wholefome, according to the Nature of the Water in which they are bred, and confequently muddy flinking Ponds produce the worft Fifh. It is foft, infipid, and not altogether free from Viscidity. But your curious Eaters value it chiefly for the *Palate* or *Tongue*, as they call it.

The *River-Carp* is not fond of a rapid Stream, but delights in a ftill deep Water with a Marly or Clayey Bottom, especially if there be green Weeds, which he loves exceedingly.

A Carp exercises the Angler's Patience as much as any Fish, for he is very fly and wary. They feldom bite in cold Weather, and in hot a Man cannot be too early or too late for them. Yet when they do bite there is no fear of their Hold.

Proper Baits are the Red-worm in March, the Cadew in June, and the Grashopper in July, August and September. But I lately discover'd a green Pea to be a Bait inferior to none, if not the best of all; and that I may never be at a loss for one, I cause a sufficient quantity to be half boil'd, and cover'd with melted Butter.

As I observed before this Fish is very cautious, and therefore your Float must be small, and you must be fure to keep out of fight. And because, when hook'd, he struggles in a violent manner, you must take care that your Tackle be very good and strong, otherwise he will break from you.

When you have found a Place which you think a likely Harbour for *Carp*, you fhould plumb your Ground over Night in order to find the Depth of the Water. **4**8

Water. Likewife at the fame time bait the Place with fmall Bits of congeal'd Blood, boil'd Malt, Wheat or Rye mix'd with Bran.

The next Morning early repair to the Place as gently as you can, taking care, as I faid before, to keep out of fight; when you have a Bite let the Float fail away before you firike, and then do it firongly, and the contrary way to the Motion of the Float, and there will be lefs danger of pulling the Bait out of the Fifth's Mouth. When you have hold of him, if your Tackle be good, you need not fear lofing him, for he feldom or never breaks his Hold.

When you Angle for a *Carp* you ought not to forget your Landing-Net, which is by much the fafeft way of taking him out; otherwife play the Fifh 'till you draw it to the Shallows, where you may fix your Rod upright in the Ground at a proper Diftance from the River, and, putting both your Hands under the Fifh, throw it on the Shore.

If you are defirous of Angling with a Pafte, the following is as good as any. Take fine Flower, a bit of lean raw Veal, a little Honey and Cotton-Wool fufficient to keep the Ingredients together, and beat them in a Mortar to a Pafte. When you fifh with a Grafhopper you must take off its Wings, and let it fink into the Water without Lead or Float.

What farther remains to be faid of the Carp will come in more properly when I come to treat of Fifth-Ponds.



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CHAP.

C H A P. XVII.

Of the TENCH.

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THE Tench, in Latin Tinca, are generally met with in England of about five or fix Pounds weight, yet in fome Countries they grow to twenty. It is a fhort, thick, roundifh Fifh, and is about three times as long as broad. His Snout is fhort and blunt, his Mouth round, his Tail broad but not forked, his Back is dark, his Sides green mix'd with a fhining Yellow, the Cover of the Gills is of a beautiful Yellow; the Tail, as well as the Fins of the Belly and Back, are blackish; the Scales are small, thin, and cover'd with a vi/cid Macus, which makes him very flippery; but it is supposed to have a healing Quality, and to cure the Wounds of other Fifh, especially the Pike; his Skin is thick, and he hath an Appendage at each corner of his Mouth, like the Carp, but it is inconfpicuous unless laid hold of with the Fingers; the Eyes are small, round, and a little prominent; the Iris is red; there are two Nostrils, which look like small Ears; the Palate is fleshy, like that of the Carp; his Teeth are in his Throat.

The Swimming Bladder is divided into two Lobes; the reft of the *Inteflines* have nothing fingular.

In this Fish the Sex is easily diffinguish'd, for the Fins on the Belly are much larger in the Male than in the Female.

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The Flefs is in no great Efferem for its falutary Properties; for Phyficians, with one Voice, forbid it to fick Perfons; and yet the Tafte of it is agreeable enough; but it is faid to breed noxious Humours, and not to be very eafy of Digeftion.

The Tench delights in Standing-Waters and Ponds, and the ftill Parts of Rivers, whenever they are found there, for they feem to be the Natives of Standingwater. However they are faid to breed in the Rivers Stower in Dorfetshire, and the Typer in Italy.

Their Time of Spacuning is the latter end of June, or the beginning of July; and they are in Season from the beginning of September to the end of May.

Moft Anglers declare that this Fifh bites beft in the three hot Months; and yet I have found they will bite at all times, and at all Seafons, unlefs after a Shower of Rain, but beft of all in the Night.

They will take almost any *Bait*, but I have had more Success with a *Red-worm* dipt in Tar, than any other. They bite almost in the fame manner as the *Pond-Carp*, and will run away with your Float; but when once you have hooked him, you are in no danger of losing him, if your Tackle is but ftrong enough. The Ground-Bait should be the fame as for all Pond-Fish, that is, either *Blood*, or *Blood* and *Grains* mixt.

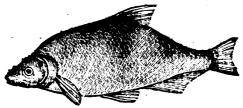
When the Weather is very warm you muft fift about Mid-water, and without a Float, gently pulling your Bait almost to the Surface, and then letting it down as flow as possible. When you Angle with a Paste, let a little Tar be mixt with it, for that is an Ingredient he is very fond of.

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CHAP. XVIII. Of the BREAM.



THE Bream is called in Latin, by fome, Cyprinus latus, the Broad Carp, and by others, Brama. It is a broad, flat Fifh, with a fmall Head and a fharp Snout. He has a fharp Hog-Back, and the Lateral Lines run from the Gills towards the Belly, making an Arch, contrary to what appears in most other Fifh. The Back is of a bluifh Black; the Sides and the Belly white, except the Fifh is full-grown and fat, for then his Sides are of a Gold-colour, and the Belly reddifh. The Scales are large, the Mouth finall and void of Teeth, but instead thereof there is a triangular Bone in the Palate; this laft is foft and fleshy, as in the Carp. He has two Moftril; the Iris of the Eye is of a Silver-colour, and the Pupil is fmall.

The Liver is long, and lies between the Stomach and the Inteffine; the Gall-Bladder is almost hid within the Liver; the Spleen is Angular, and the Air-Bladder divided into two Lobes.

The *Flefb* of the *Bream* is in no great Efteem, and yet makes no bad Difh, if well cook'd. Those who would be thought Criticks in Good-eating, prefer the *Tail* of a *Pike*, the *Head* of a *Carp*, the *Back* of a *Tencb*, and the *Middle Part* of a *Bream*.

They breed both in *Rivers* and *Ponds*, but delight D 2 chiefly

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chiefly in the latter; for which reason they are never found in swift, rapid Streams, but only in such Parts of the River as most refemble Standing-waters, with muddy or clayey Bottoms; I have found the *Mole* in Surrey, as far as my own Experience reaches, the best stock'd with this Fish of any River in *England*, but in the *Thames* there are very few. They swim in a herd as they lov'd Society, for I have seen at least fifty Brace together at Esser-Bridge.

They feldom grow to fuch a Size, according to Baknerus, as to weigh above four or five Pounds; yet Gefner tells us he faw one that was a Yard long, and two Foot broad; but however that be, I have reason to believe they fometimes weigh ten or twelve Pounds.

They Spawn in May, and are in the higheft Seafon in March and April, and I think they eat as well in September as any time. About the time of Spawning the Male is mark'd with white Spots about the Head.

They naturally feed upon Slime, Weeds and Dirt; but will take any fort of Pafte, the Brood of Bees or Wa/ps, Flies under Water, and Cod-Baits. But I always find a fhort well-fcour'd Mar/b-worm, or a large Redworm, most fuccessful.

They bite beft when there is a Breeze of Wind. When the Water is rough your Bait muft be placed within a Foot of the Bottom. The likelieft Place to meet with them is in the deepeft, and broadeft Part of a River, early in the Morning, and from Three or Four in the Afternoon 'till Sun-fet, when the Weather is warm. They bite very flow, and the larger they are, the flower. As foon as you have ftruck one he will immediately make to the Bottom, and ftay there fome time; if he ftays too long, give him a gentle Touch, and he will immediately rife, and give two or three ftrong Tugs; but when once you have turn'd him he will foon yield.

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My Method of Angling for him is this. I feek a fhallow Sandy Bottom that leads to a deep Hole: Then I throw into the fhallow Part of the Stream four or five Handfuls of *Marfb-worms* cut into Pieces, which will foon drive down into the Hole. I use a long Rod, and of good Strength, with a Line proportionable; a fmall Hook, and no Float. The Hook must be ty'd to *India Grafs*, on which put a cut Shot fix Inches from the Hook, and next to that a fmall Bullet. The use of the Shot is to keep the Bullet from flipping lower. This done, bait your Hook with a fhort well-fcour'd Marfh-Worm, throw it in the Shallow, and the Stream will drive it into the Hole. By this Method I have caught more in two Hours than I could carry away.

Sometimes, when I find a deep Hole near the Bank, I plumb the Depth over Night, and Bait it at the fame time with Grains well fqueez'd. In the Morning early I vifit the Place again, and, taking my Stand out of fight, I bait my Hook with a large Red-Worm, and then drop it gently into the Hole. With thefe Precautions I feldom mifs of Sport. But remember always, when you have occafion to Plumb the Depth of a Place the Night before, to take notice at your Return whether the Water be rifen or fallen, and make an Allowance accordingly.

It has been faid by fome, that if there be $\mathcal{J}ack$ or *Pearch* in the Hole where you Angle for this Fifh, you must catch them first, or you can expect to take no *Bream*; but this Caution is needless, for they never herd with $\mathcal{J}ack$ or *Pearch*.

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THE Rud, call'd in Latin Rutilus Latior, the Broad Roach, is broader than a Carp, and thicker than a Bream. This Fifh feems to partake of the Nature not only of the Carp, but of the Bream and Roach. Its Colour is a duskifh Yellow, and its Scales are as large as those of Carp. The Tail is of a light and the Belly-Fins of a dark Red. The Nostrils are double on both fides. The Iris of the Eyes is Yellow, speckled with Black. The Teeth and Palate are like those of a Carp. Its usual Size is from twelve to fixteen Inches long.

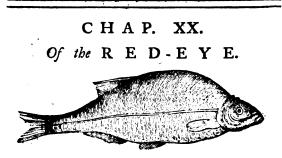
The Gall-Bladder is large, and ftreaked with White; the Liver is divided into two Lobes, the Spleen is blackifh, and the Air-Bladder double.

It is found in the *Rhine*, in the Lakes of *Holdernefs* in York/hire, in those not far from *Lincoln*, the Yare in Norfolk, and in the River Cherwell in Oxford/hire.

It is a Fifh in great Efteem, and is placed among those of the first Rank. It is always in Season, and confequently fit to eat. The Time of Spawning is in April, and then it is at the worst; the Signs of which are white Spots about the Head of the Males. At this time likewife they feel more rough, and swim in Shoals, casting their Spawn among the Weeds that grow in the Water. The greatest weigh about two Pounds.

They bite very freely, struggle hard for their Lives, and yield the Angler good Diversion. They feed near

the Top of the Water, and the principal Baits for them are Red-worms and Flies.



T H E Red-Eye, call'd in Latin Erythrophthalmus, is very much like a Bream, but thicker. His Back is very round, and high, in the manner of a Hog. The Fins are all red; and the whole Body has a reddith Caft, especially the Iris of the Eye, from whence it detives its Name. The Scales are larger than those of a Roach; when it is scaled, the Skin looks greenish. The Palate is like that of a Carp.

This Fish differs from a *Roach* in its Shape, which refembles a *Bream*, as was mention'd before; befides, it has redder Eyes, and is of a more beautiful Colour than a *Chub*. When full grown they measure ten Inches.

They Spanun in May, among the Roots of Trees, and are Angled for in the fame manner as a Rud, Roach or Dace.

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CHAP.

CHAP. XXI.

Of the CHUB or CHEVIN.



T HE Chub, in Latin Capito, is of a longer Make than a Carp, and has a larger and flatter Head than a Dare. The Back is of an obfcure Green, like an unripe Olive. The Sides and Belly are of a Silvercolour; but in a well-fed, full-grown Chub, they incline to that of Gold fpeckled with Black. The Temples are yellowifh, and the Head is of a very dark Colour. The Scales are as large as those of Carp. The Mouth is void of Teeth, and not large. The lower Jaw is fhorter than the upper. The Palate is foft, and is furnish'd with a triangular Bone. The Nosfirils are large, the Eyes middling, and the Iris feems to partake of the Colour both of Gold and Silver. The Tail is forked, and the Lateral Lines run parallel to the Bottom of the Belly.

The Stomach is long, and the Gut has only one Fold. The Liver and Swimming-Bladder are both divided into two Lobes; the latter is of a Silver-colour speckled with Black.

It is *bred* in Rivers, and delights to abfcond in Holes. and under the Stumps of Trees in a clayey or fandy Bottom. I have met with fome that have weighed eight or nine Pounds.

They Spawn in May, in fandy or gravelly Places, and in the very midft of the Stream. They are most in Seafon in the Spring, while they are full of Spawn. Walton, and his Transcribers, fay he spawns in March.

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The *Flefk* is white, foft and infipid, and is but in very little Effecem among the generality.

He commonly fixins in Mid-water, and fometimes at the Top, and therefore he is best taken by *dibbing*. From the beginning of *May* to *September* you may Angle for him, before the Sun rifes 'till Nine ; but in the Winter he lies lower, and then you may fish for him at the Bottom in the middle of the Day.

They will take almost any Bait, as the Brains of Butchers Meat dried, and cut into fmall Pieces all forts of Worms, Gentles, the Brood of Wass, Black-berries, Dew-berries, black Snails, with their Bellies slit, and all forts of Pass. In Dibbing they will take a black Ant-Fly, small Butter-flies with the great Wings cut off, Oak-worms, Ass. green Caterpillars, and the Cod-Bait; in short, there is fcarce any thing comes amils to them.

It is but a dead-hearted Fifh, and when once turn'd yields prefently. But yet you must master it as soon as you can, because when he is hook'd he does not make to the middle of the Stream, but to the Banks, which may endanger your Tackle.

When you throw your Bait into the Water they fly fwiftly from it, but return immediately to fee what it is, and, if they like it, they fwallow it without Hefitation, if you keep yourfelf out of fight.

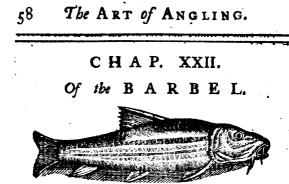
It is a good way to throw in a Ground-Bait every ten Minutes made of Bran and Flower, with a Stone in the middle to fink it.

If they lie in an Eddy, or fill Hole, you may get a forked Stick, and thruft the other end of it into the Bank; on this you may reft your Rod, by flicking the But End of it into the Ground, and letting the Middle reft upon the Fork; but you must contrive it fo, that the Bait may fink three Inches into the Water, and if there is any Wind flirring fix; then you may retire out of fight, and wait 'till a Bite requires your Affiftance.

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CHAP.

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THE Barbel, in Latin Barbus, is a beautiful, wellfhap'd Fish, with fmall Scales placed after a most exact and curious manner. The Back is of an Olive Colour, the Belly Silver. It is speckled on the Back and Sides with small black Spots. His Make is long and roundish, and his Snowt sharp. His Mouth is not large, but the upper Jaw is more prominent than the lower. He has four Barbs or Wattles, from whence he derives his Name; two near the Corners of his Mouth, and two higher, near the end of the Snout. The Eyes are small, looking downwards, with Golden Iris's spotsed with Brown. In the Summer their Bellies are red.

The Liver is pale and long, the Gall-Bladder large, and the Air-Bladder divided into two Lobes.

The Barbel cannot well endure Cold, and therefore in the Winter-time he is fick and languid, but in the Summer clean and found.

The *Flefb* is foft and flabby, and in no great Efferem. The *Sparun* is unwholefome, purging both upwards and downwards, and is thought by fome to be little better than Poifon. The Male is much better than the Female. Their principal Seafon is *September*.

Walton fays they Spawn in April; but later Writers of great Authority affirm that it is in August. They lay their Spawn in the middle of the Stream.

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Their Size is from a Foot to a Foot and a half long; the Sort which are ufually met with weigh about feven or eight Pounds; yet a Perfon of *Staines* caught one of twenty three Pounds weight; his Bait was a bit of rufty Bacon.

He is *bred* in most Rivers; and the *Thames*, in particular, abounds with them. In the Summer he haunts the fwiftest and shallowest Streams, where he lurks under the Weeds, and works and routs with his Nose in the Sand like a Hog. Yet fometimes he retires to Bridges, Flood-Gates, Locks and Weirs, where the Waters are fwift and deep.

He never feeds off the Ground, and will take any fort of *Worm*, bits of *Bacon*, old *Cheefe* or new *Cheefe*, if kept in a Linnen Rag dipt in Honey two or three Days to make it tough. The Watermen, who attend on you when you fifh in their Boats, fometimes provide *Graves*, to be had at the *Tallow-Chandlers* for a *Ground-Bait* over Night. Yet most commonly they use the fame Worm that you bait with. They are a wary, subtle, strong Fifh, and struggle hard for their Lives, and will often pick off your Baits.

often pick off your Baits. His *Time of Biting* is early in the Moraing 'till Ten o' Clock, and from Four in the Afternoon 'till Sun-fet. Their principal Months are faid to be from the latter end of *May* 'till the end of *August*; but I prefer September before any other Month, becaufe then they retire to the deep Holes. In the Summer they come to the Shallows about Sun-fet, where they may be eafily taken with a fcour'd Lob worm.

Your Rod must be very firing, with a tough Whalebone at the end. You have no occasion for a Float, but must put a large Bullet on the Line that your Bais may lie Ledger. You must have ten Hairs next the Hook, but the remaining Part of your Line must be Silk. If you make use of a Wheel, as in Trout-fishing, it will be so much the better.

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The most fumous Places near London for Barbel-Angling are Kingston-Bridge and Sheperton-Deeps; but I take Walton-Deeps, Chertsey-Bridge, Hampton-Ferry, and the Holes under Cooper's-Hill to be in no wife inferior. You may likewife meet with them at all the Locks between Maidenhead and Oxford.



THE Dare, call'd in Latin Leucifcus, is not unlike a Chub, but is proportionably lefs; his Body is more white and flatter, and his Tail more forked. The Iris of his Eyes is not fo yellow, and the Tail and Back-Fins not fo black, but they are fpotted with that Colour. The reft of the Fins are not fo red. He is not fo broad as a Roach, and is a Leather-mouth'd Fifh.

He breeds almost in all Rivers, and generally lies near the Top of the Water. He is a very brisk and lively Fish, and swims swiftly like a Dart, from whence he derives his Name.

The *Flefb* of the *Dare* is fweet, foft, and of good Nourithment, but is in no great Effeem.

They Spawn in February and March, and are fit to eat in April and May; but their highert Season is September.

They delight in Gravelly and Sandy Bottoms, and the deepest Part of the River under the Shade of *Trees*, or *Dock-Leaves*.

They are a very fimple Fifh, and will often bite when you least defire it. However, their darling Bait

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is a Gentle at the Bottom, and a *fmall Fly* at the Top. In the Summer-Months an *Ant-Fly* is beft. They will likewife take any *Pafte*, as well as all forts of *fmall Worms*.



T is a lefs Fifth than a *Bream*, and about one third. as broad as it is long. The *Back* is of a dusky colour, and fometimes bluifh; but the *Belly* pale. The *Iris* of the *Eyes*, as well as the *Tail* and *Fins*, are red; the *Lateral Lines* run parallel to the Belly, and the *Tail* is forked; about the *Gills* it is of a Gold-colour; the *Mouth* is round, but void of Teeth, it being a Leathermouth'd Fifh.

The Inteftines have nothing fingular.

They breed both in Rivers and Ponds; and though the Pond Roach are largeft, those caught in Rivers are the beft Fifh.

They Spawn about the middle of May, and recover their Strength in a Month's time.

They are to be Angled for much in the fame manner as the *Dace*, and their Haunts are the fame, and therefore the lefs needs to be faid about them.

In Winter you may fifh for him with Pafte or Gentles, in April with Worms or Cod Bait; but in very hot Weather with little white Snails, or with Flies under Water, for he feldom takes them at the Top as the Dace will; and this is the principal thing wherein they differ.

CHAP.



THE Gudgeon, in Latin Gobius fluviatilis, is generally five or fix Inches long, of a fmooth Body, with very fmall Scales. The Back of it is dark, but the Belly pale. There are about nine or ten black Spas plac'd along the Lateral Line, from the Head to the Tail; befides these there are small ones, here and there, in other Parts of the Body, without any Regularity. The Iris of the Eye is white. The Mouth is without Teeth, but on the Palate is a Triangular Bone which ferves in their stead.

The Inteffines have nothing fingular.

They are to be met with every where in Rivers, but in fome they grow to a larger Size than others. I once faw four which were taken out of *Uxbridge* River that weigh'd a Pound.

This Fifh Spawns twice in a Year; the first time about the latter end of April, and the second in November; fome fay oftner.

His Fle/b is very well tafled, of eafy Digeflion, and very nourifhing, infomuch that fome think it no way inferior to a Smelt.

He delights in fandy, gravelly Bottoms, gentle Streams, and finall Rivers. In the Summer-time he reforts to the Shallows, and in the Winter to the Deeps.

He bites all Day from the end of March 'till Michaelmas, but not 'till an Hour after Sun-rife, nor longer than an Hour before Sun-fet.

The principal Baits are the fmall Red-worm, Gilstail, Brandling, and Meadow-worm. He will likewife take a Gentle, Cod-bait, and the Broad of Wafps, but will never rife at a Fly.

When you Angle for them in the Shallows rake up the Sand or Gravel with a Rake or Pole, and it will draw your Gudgeons about your Bait; when you have no fuch Conveniency throw in fome Handfuls of Earth. Use a Float, and let your Bait always touch or drag on the Ground. Be not too hafty with them when they bite, because they will fometimes nibble a little before they take it, tho' they commonly bite pretty fure.

When you Angle for them in a Boat in the Thames, let the Waterman rake the Gravel up to draw the Gudgeons about you; then plumb the Ground, and bait your Hook with a fmall well-fcour'd Red-worm; by this Method you will feldom fail of good Sport. It will be the beft way to Angle pretty frong, left a larger Fifh fhould take your Bait, and break your Tackle; and then you may fometimes take Pearch or Front inftead of Gudgeons.

CHAP. XXVI. Of the BLEAK.

T HE Bleak, in Latin Akburnus, is a very fmall Fifh, fcarcely ever attaining to be fix Inches long. His Body is cover'd with thin Silver Scales which eafily come off. He is of a flenderer and flatter Make than a Chub, and his Head is proportionably lefs. He has large Eyes, and the lower part of the Iris is fpotted with Red. The Infide of the Mouth is like that of a Carp, and

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and provided in the fame manner. The Liver is divided into very long Lobes.

They are to be met with in great plenty in all our Rivers, and are reckon'd to be chiefly in Seafon in Autumn. It Spawns in March, and recovers its Strength in three Weeks time.

The Fle/b is fweet, nourifhing and pleafant, but litthe fought after, becaufe of the diminutive Size of the Fifh.

The best Baits for him in the cold Months are Gentles and fmall Red-worms, and in the Summer either a Natural or Artificial Ant-Fly.

As this Fifh is always changing his Situation, and feems to be ever reftless, and ever in motion, the best Method of Angling for him is with a Pater-Nofter Line; that is, a Line with half a dozen or more Hooks ty'd to the main Line, about three or four Inches one above another. He will take your Bait wherever he meets it.



"HE Loach, in Latin Cobitis fluviatilis barbatula, refembles a Gudgeon in Colour. Its Body is fmooth, foft and flippery, with no difcernable Scales. The Head, Back, Fins and Tail are fpotted with Black. In other Parts they are of a dirty Yellow, like Freckles. It has Barbs or Wattles, like the Barbel. The Nofe is long, and the upper Jaw is more pro - prominent than the lower. The Eyes are fmall, with a black *Pupil*, and a yellow *Iris*. The *Tail* is flat, and not forked.

They begin to Spawn in April among the Weeds, but as they do not all Spawn at the fame time they are always in Seafon.

Its usual Size is about four Inches. It was formerly accounted a great Delicacy, but now is most commonly fwallow'd alive, as being very reftorative.

They are generally found in fmall, fwift, clear Brooks, and lie under Stones, Pieces of Wood, and fuch like things, which they use as a Harbour.

You may Angle for him close to the Ground with a very small Hook, and a proportionable Red-worm. There is no Art in taking them, for all you have to do is to prevent them from running under such Places as will endanger your Tackle, and therefore they are to be pull'd out immediately.



THE Bull-Head, call'd in Latin Gobio fluviatilis Capitatus, is a fmall Fifh of about four or five Inches long, but never reaches to fix. It has a large deform'd Head; the Eyes are fmall, but fo placed that they look upwards. The Mouth is large, and full of fmall Teeth; the Body is without Scales; the Back is yellow, with three or four Strokes of Black.

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It is found in Brooks and gravelly Rivers, where they lie hid like a *Loach* under Stones, and fuch like Places.

They Spawn in March, and are in best Seafon when they are full of Spawn, as most other Fish are.

They are a fweet Fifh, and very agreeable to the Tafte; but their Bodies are fo fmall that few think it worth their while to Angle for them.

They may be taken with any Bait, their Mouths are fo large; but they are most fond of a *Red-worm*; and they are fuch bold Biters, that if there is never fo many in the Place where you Angle you may take them all.

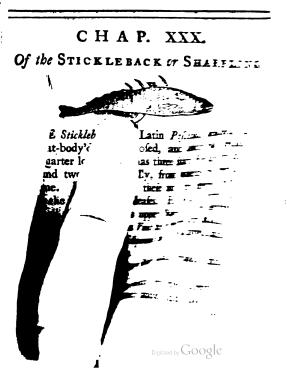


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In April they caft their Spaces in fands or gravels Fords, where the Current is fwift and from g.

This fmall Fifth is ufually caught for a Bart. II DETER to take *Pearch*, *Pike*, *True* or *Salmon*. He better it make his Appearance in *March*, and continue value til *September*, when he retires to the Mind. Wereas the Woody Places for Security. He never this is the Mind. nor in dark windy Weather, because the from at this times is ranging about for Food.

His Time of Biting on a fair Day is from an Hour after Sun-rifing 'till an Hour before Sun-in. His Last are fmall Worms of any fort; and he is caught at hour water, or at the Bottom. In Angling for him x will me proper to use a Float.



The Bait flould be a Bit of a Red-worm upon a very fmall Hook.

In the *Wandle*, where there is few or no *White* Fifth, Gudgeons or Minnows, it will ferve for a Bait for a Trout, if you cut the Prickles off, which I have experienced at *Cafhalton* and *Mitcham* more than once.

CHAP. XXXI. Of the Pike, Luce or Pickerel.

THE Pike, in Latin Lucius, is a very voracious Fifh, and often grows to an enormous Size. In a Ditch near Wallingford I faw two caught, one of which, being the Milter, weigh'd fifty-one Pound, and the Spawner fifty-feven. The Ditch runs into the Thames, and they retir'd thither in order to Spawn.

The Make of a *Pike* is long, the *Head* is flat, the *Back* fquare; the *Snout* very prominent, almoft like the Bill of a Duck, and the lower *Jaw* is longer than the upper. The *Moutb* is very wide, and the *Tail* forked. His *Body* is cover'd with fmall thick *Scalei*, moiften'd on the Edges with a kind of *Mucus*, which may be eafily wip'd off; to this *Mucus* is owing that greenifh Caft which we behold in this Fifh, and the younger he is the greener he appears. If the *Bad* and *Sides* are placed towards the Light there appears fomething of a golden Hue. The *Sides* are fpotted with Yellow, and the *Belly* with White. On the *Tail* there are dusky Spots and reddifh Lines, effecially to wards the Corners. The *Teeth* in the lower Jaw are *Latt*

hate there is a triple Row. The *Tongue* is broad, black, a little forked, and rough with Teeth. The *Eyes* are of a Gold Colour, and feem to be a little funk into the Head; and therefore the most commodious way of holding him is by putting the Fore finger into one Eye, and the Thumb into the other. The *Head* and *Gills* are fpotted with variety of fmall Holes.

The Liver is of a pale Flefh-colour. The Gall-Bladder is join'd to the upper Part of the Liver, and is empty'd into the Gut by a long Duct; the Gall infelf is of a greenish Yellow. The Spleen is of a blackish Colour, and almost triangular. The Heart is of the fame Figure. The Gut is cover'd with Fat, and is folded back three times. The Stomach is large, and wrinkled on the Infide.

The Pike will live in either Lakes, Ponds, or Rivers; and with us in England is a very common Fifth; but in Spain there are none at all. It never is met with in the Sea, nor in the Mouths of Rivers where the Water is falt; and if by any accident he is drove thither he becomes fick, lean, and good for nothing.

This Fifh is of fo voracious a Nature, that he will fwallow another Fifh almoft as big as himfelf. There are feveral Stories related by *Gefner*, and others, concerning his ravenous Difposition, but they have been transcribed fo often that they will not bear repeating. Certain it is they will not fpare their own Kind; and if the *Pearch* fares better than other Fifh, it is only on account of its prickly Fins; for they will fometimes take them crofs-wife in their Mouths, and when it is dead, and its Fins laid flat, they will fwallow it Head foremost.

The ufual *Time of Spawning* is in *March*, fometimes fooner, if the *Spring* be forward. They retire into Ditches, as is fuppoled, that other Fifh may not devour their Spawn. They are prodigious Breeders; *Baltner* reckon'd no lefs than a hundred and forty eight thoufand Eggs of Spawn in one Row. They grow faft while

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while young, for in the first Year only they grow to the length of fixteen Inches, if the Brook be clear in which they are fpawn'd. When he comes to be thirty Inches he is at a stand, and then thrives in Thicknefs. It is a very uncommon Sight to meet with one full four Foot long.

They are in Scalon all the Year except in Spawning-time, and about fix Weeks after it; therefore February, March, April and May are the worft Months, but especially March and April, for in part of the other Months, at least, they may be in pretty good Order, especially the Male.

The Flop is white, firm, dry and fweet, especially of a River Pike. Some think the larger they grow the more agreeable is their Taste. But, in my Opinion, when they weigh more than twelve Pounds they have a fort of Rankness, and under Three they are flabby and infipid.

The-Pike is fond of a quiet, fhady, unfrequented Wates, and lurks in the midft of Weeds, Flags, or Bull-Rufhes: Yet he often makes Excurfrons from thence, and ranges about in fearch of Prey. In Winter and cold Weather he lies deep, and near the Bottom, but as the Weather grows warm he frequents the Shallows; in a very hot, clear, fultry Day he may be feen lying on the Surface of the Water.

His beft Biting-time is early in the Morning, and late in the Evening, when there is a brisk Wind, and where the Water is clear. If they bite at all they will take the Bait at first, it is therefore needles to throw it often into the same Place.

He will take any fort of *Bait*, except a *Fly*; but the principal are young *Roach*, *Dace*, *Gudgeons*, *Minnows*, *Loaches* and *Bleak*; in *July*, young *Frogs* and *Salmon-Smelts* are proper. All your Baits in general fhould be fresh, fweet and clean, otherwise you may spend a great deal of time to no purpose.

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There are feveral ways of fifting for a Pike, but the principal are Trowling, Trimmer-Angling and Snap-Angling; but as these have been explain'd before, I shall now shew how they may be brought into ase in the best manner I can.

In TROWLING the Line should be made of green Silk, or Thread, and should be forty Yards long, or more, if the River be broad. Very great care should be taken that your Line may run freely out; for if it knots or tangles, and by that means checks the Motion of the Pike as he runs away with the Bait, he will let it go, and will not be prevail'd upon to take it again very foon, unless he be hungry indeed. When you have fix'd your Bait on your Hook, with as little Damage to it as poffible, caft it up and down fuch Places as you imagine the *Pthe* frequents, letting it fink a confiderable Depth before you pull it up again. When the *Pike* comes you may fometimes perceive it by a Motion in the Water, or at least you may feel him, which is the fame thing. When this happens your Bufinefs is to give him Line enough, that he may have free Scope to go where he pleafes, without the leaft Check, for the Reafon before-mention'd. When he is got into his Hold, there let him lie 'till you perceive the Line move, and then you may conclude he has pouch'd the Bait; then wind up your Line 'till you think it is almost firaight, and with a nimble Jerk, contrary to the way the Pike takes, hook, and Land him as foon as you can.

A TRIMMER is made use of in the still Part of a River, or in a Pond, Meer or Canal. Your Bait, which should be a young *Roach*, *Dace* or *Gudgeon*, may hang about Mid-water, and may be left to itself while you are sisting elsewhere. By this Artifice one Person may do as much Execution as if he had a Companion along with him, with listle or no additional trouble to himself. For farther Directions fee *Chap.* 2, aforegoing.

A SNAP

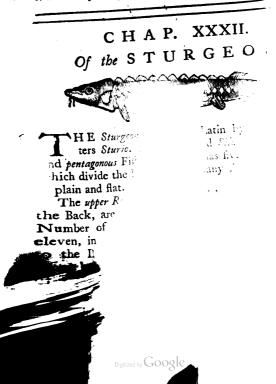
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A SNAP is generally two large Hooks pince to back, and a Pearch-Hook in the middle to Bait upon. When you make use of it take a Dace or small Roach, and fix it to the small running it under the Back-Fin; then let it f. the Current, and when you perceive the F! drawn under Water you may conclude the P! hold of it; therefore give it a smart Jerk, ar giving him time to play keep your Line always drawing him towards the Shore as foon as without breaking your Tackle, and then we Landing-Net throw him out of the Water. It ways be the most prudent Method to have Gim: Wire next your Hook.

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d visits the *Thames* and oar, that is in *March* and Months they generally adas *Mortlack*, but in the laft *Blackwall*.

Ing for them is with a Pate A Shot to fink it under Wate "'s well fcour'd, or Pafte,

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been taken from fourteen to eighteen Foot long; and *Gardan* faw one that weigh'd a hundred and eighty Pounds; in the *Elb* they fometimes amount to two hundred Pounds; a *German* Prince once took one of two hundred and fixty Pounds weight.

Of the Spawn of this Fifth there is made a fort of Edible which they call Cavear, or Kavia, and is a confiderable Merchandize among the Turks, Greeks, and Venetians. It is likewife in high Efteem throughout Molcovy, and has lately been introduced on the English Table. It is made after the following manner.

They take Sturgeon's Spawn, and free it from the little Fibres by which it is connected, and wash it in White-wine or Vinegar, afterwards spreading it upon a Table to dry; then they put it into a Vessel and falt it, breaking the Spawn with their Hands, not with a Pessel; this done they put it into a fine Canvass Bag, that the Liquor may drain from it; last of all they put it into a Tub with a Hole at the bottom, that if there be any Moissure still remaining it may run out; then they prefs it down, and cover it close for use.

The Italians fettled at Molcow drive a vaft Trade with Cavear, Sturgeons being caught in great Plenty in the Mouth of the Volga, and other Rivers that empty themfelves into the Calpian Sea.

In Holland they cut thefe Fish into fmall Pieces, and pickle them; then they put them in Cags, and fend them abroad. This is in great Efteem among us.

The common way of killing them is with a Harping-Iron, for they take no *Bait*; and when they feed they rout in the Mud with their Snout like Hogs. In fome-Places they take them with Nets.

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CHAP. XXXIII. Of the SMELT.



THE Smelt, in Latin Eperlanus, is a Fish for Shape not much unlike a Trout, only longer in proportion to its Bignefs. Its common Size is about fix Inches long; fometimes they are to be met with nine Inches.

The Back is of a dusky Colour, but the Belly and Sides thine like Silver. Those who examine them attentively will find fmall black Spots on the Head and Back. The Body is cover'd with Scales, which fall off with the leaft Touch. The Scull is fo transparent that the Lobes of the Brain may be diffinctly feen through it. The Eyes are of a Silver Colour. The lower Jaw is a little more prominent than the upper, but they are both well furnish'd with Teetb; two of which in the upper law, and as many in the Tongue, are longer than the reft.

The Flefs is foft and tender, and of a delicate Tafte: it is fo highly in Effect that they are generally fold at an extravagant Price. All Writers on this Fifh affirma that it has the Smell of a Violet; but the vulgar Opinion would have it to be that of a Cucumber.

It is a Fish of Passage, and visits the Thames and other great Rivers twice a Year, that is in March and August; in the first of these Months they generally advance up the River as high as Mortlack, but in the laft they make a Stand about Black-wall.

The best way of Angling for them is with a Patermoster Line, with a small Shot to fink it under Water: Your Baits should be Gentles well scour'd, or Paste, or the

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the Fish itself cut into small Bits sufficient to cover your Hook. It is faid they are to be caught in *Dagenbam-Breach*, but of this I can affirm nothing from my own Knowledge.



THE Shad, in Latin Alofa, is in Shape much like a Herring, but a little broader: It grows to the length of a Foot and a half, and is much of the fame Colour as a Pilchard, that is, of a bluifh Black on the Back, and the Belly and Sides of a Silver Colour. The Covers of the Gills are of a finning Yellow, fometimes inclinable to Purple; near the Gills, on both fides, are large round black Spots; befides these there are fix or feven Spots of a fmaller Size placed in a right Line towards the Tail, which appear more plain when the Scales are off. The Eyes and Mouth are large, and the upper Jaw only is furnish'd with Teeth. The Tongue is fmall, fharp and blackish.

The Stomach refembles that of a Herring; the Gut paffes directly from the Pylorus to the Vent. The Air-Bladder is long, and has a Communication with the Stomach.

The Shad enters the Severn in March and April, at which time they are fat and full of Spawn; but in May they return back to the Sea very lean, and prodigiously alter'd; in fome Rivers, as the Thames, they fay 'till June or July.

The *Flefb* is well enough tafted, but is fo full of fmall Bones that it is little valued for that Reafon; tho' the Severn Sbad are much better than those caught in the *Ibames*.

The ufual and only way of taking this Fifh is with Nets.



THE Bass, in Latin Lupus, from its Greedines fometimes grows to the length of a Yard and a half; yet, according to fome, they are thought to be of a large Size when they weigh fifteen Pounds. They are shaped pretty much like a Salmon. The Colour on the Back is of a dark dirty Blue; on the Belly Silver. When young they have black Spots on the Back and Lateral Lines, which, as they increase in Bulk, guite vanish. The Scales are of a middling Size, thick, and adhere very closely. The Mouth is large, and full of fmall Teetb. In the Palate there is a triangular Bone, and there are two more in the Throat. The Tongue is broad, flender and rough, there being a rough Bone in the middle. The Eyes are large, and of a Silver Colour, with dark cloudy Spots; a fmall Circle next the Pupil is yellow.

The Inteffines have nothing very fingular.

It is a very voracious Fift; and yet the Flefh is of a good Flavour, and very wholefome.

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They will live either in the Sea, Rivers or Ponds; but the Sea-Bass are best, and next to them are those that are taken in the Mouth of large Rivers.

The way of catching them is with Nets. Sometimes they are caught with an Angle in Fishing for Mullet.



THÉ Mullet, in Latin Mugil, is in Shape much like a Dare, and has a flat Head and a fharp Snout. He has large Scales not only on the Body, but on the Covers of the Gills and part of the Head. The Back is of a dirty Green; the Belly white; the Sides are painted with alternate Streaks of White and Black from the Head to the Tail; the Eyes are of a Silver Colour; between them and the Corner of the Mouth is a Bone befet with Prickles; there are no Teetb in the Jaws, but the Tongue is a little rough, and there are two rough Bones on each fide the Palate. The Tail is forked.

The Stomach is fmall, hard, round and Musculous, like the Gizzard of granivorous Birds. The Guts are very long, and are folded back feveral times. The Spleen is large, and the Gall yellow.

When he is largest his Size is about a Foot and a half long.

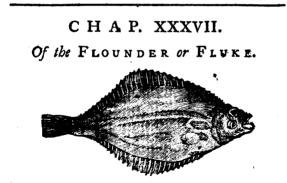
He is faid to live upon Weeds and Mud; however it is certain that he abstains from Fifh.

In the beginning of the Summer he comes into the Rivers on the South of England every Tide, and returns

turns back with it. The River Axe in Devension, and Arundel in Suffex, are famous for this Fifh.

The Italians make a Pickle with the Spawn, which they call Betargo, in the following manner. They take the whole Ross and cover them with Salt for about four or five Hours, then they prefs them between two Planks during a Day and a Night; after which they wash them, and fet them in the Sun to dry for thirteen or fourteen Days, taking them in in the Night-time. They raife the Appetite, provoke Thirft, and give a true Relift to Wine.

They are bold Feeders, and are to be caught with most *Flies* that allure the *Trout*. Within two Foot of the Bottom they will take a *Lob-worm* or a *Mar/b-worm*; but your Tackle must be strong, for they struggle hard for their Lives.



THE Flounder, in Latin Paffer fluviatilis, is in Shape much like a Plaice, only the Body is fomewhat longer, and when it is full-grown it is thicker. The Colour is of a dirty Olive. Sometimes they are beautifully fpotted, but I never met with any of thefe, except far up the River. The Scales are exceeding finall, and adhere to clofely to the Skin that there is no per-E 4 ceivable

ceivable Roughness on it. The Lateral Line is compofed of small Prickles, from whence arises that Roughnefs which may be felt along it from the Head to the The Eyes are of the right Side, and are of the Tail. fame Colour as the Body, only a little more grey. The Mouth is fmall, the Tongue narrow, and there is a Row of Teeth in both Jaws.

The Flounder is both a River and a Sea Filb ; but the former are not fo black, and are more foft than the lat-But this Difference feems to arife only from the ter. Nature of their Food.

They are in Sealon all the Year, except in June and July, which is their Time of Spawning, and then they are fick and flabby, and infefted with Worms which breed in their Backs.

The Fligh is white, foft, innocent and nourifhing; but it is always best when it is most firm. The Taste of it is much like that of the Plaice, from which it differs but little in any Respect.

It is the Nature of all flat Fifh to lie and feed at the Bottom; fome indeed are fond of Mud, but the Flounder avoids it as much as possible, delighting to lie on Sandy or Gravelly Bottoms, especially on the Declivity of a deep Hole near a Bank.

They may be Angled for either with a Float or a Running-Bullet, but I prefer the latter. The Bullet should reft at least a Foot from the Hook, that the Bait may be at liberty to be put in motion by the Water. If you use a Float let it lie flat on the Water, and when you perceive it to move along flowly, and foon after become upright, then strike, and you'll be fure of your Prey. But always remember that he is fome time in fucking the Bait into his Mouth before he gorges it.

The best Baits are Red-worms, or very small Marfoworms put on a small Hook. You should bait the Ground with a Handful of small Red-worms cut in two pieces. They may be Angled for all the Day, but early in the Morning is the likelieft Time.

CHAP.

CHAP. XXXVIII.

Of the LAMPREY or LAMPERN.

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THE Lamprey, in Latin Lampetra, is called by Dr. Plot, the Pride of the Ifis, and by others, Seven-Eyes.

It is a Fifh about five or fix Inches long; on the *Back* it is of a greyifh Black, but the *Belly* is of a lively Silver-colour. Its *Moutb* is round, and furnifh'd with fix or feven *Teetb*. On the Top of the *Head* there is a *Hole*, as in the *Cetaceous* Kind; for as the *Moutb*, when the *Lamprey* adheres to a Rock or Stone, is entirely flut, there is a Neceffity for a Hole to take in the Water, which is difcharg'd again by the *Gills*, or the *Seven Holes* placed on each Side near the Head. The *Eyes* are of a palifh Yellow, and cover'd with a Cuticle. The *Belly* rifes and falls much in the fame manner as in Animals that breathe.

The Liver is undivided, and the Capfula of the Heart almost Boney, which is purposely defign'd by Nature as a Guard or Security for it, because this Fish has no Bones, not even so much as a Back-bone.

The River-Lamprey, contrary to the manner of other Fish, procreate their Species with their Bellies join'd together, which is eafy to be observed, because at that time they get into shallow Fords, where all that passes is visible enough.

The *Flefb* is of a foft glutinous Nature, and is generally eaten Potted; and even then it is more agreeable to the Palate than healthful to the Body. Their time of *Spawning* is in *April.*

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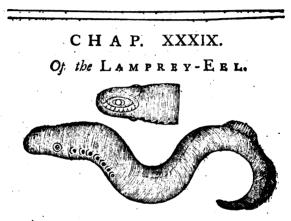
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There is another Sort of this Fifh which is call'd the Blind Lamprey, which is fmall and round, like a large Deve-worm or Lob-worm. It has no Scales, and its Body is divided into fmall Rings by transverse Lines in the manner of Worms. These Rings are about eighty four in Number. The Mouth is round, and always open, but it has neither Teeth nor Tongue. It has a Hole on the Head, and Seven on each fide instead of Gills, as in the other Species.



T HIS is of the fame Shape, but of a larger Size than the Lamprey, for it is fometimes taken in the Severn three Foot in length, and the Diameter of the Body five Inches. The Skin is of a blackifh Colour, and full of palifh argular Spots; it is tough, but yer not taken off when drefs'd, as in *Eels*. It will hold a bit of Wood or a Stone fo firmly in its Mouth, that they cannot be taken out without Difficulty. On the top of the Head there is a White Spot, and before it a finall Hole encompafs'd with a Membrane which rifes up a finall matter; "the Ufe of it is the fame as in the Lamprey. The Gills are concealed under the Seven Holes

Holes placed on each fide. The Edge of the Mouth is jagged, and adheres fo clofely to any thing, that fome have fuppoled these Inequalities to be *Teeth* cover'd with Pitch; whereas the *Teeth*, properly fo called, are placed on the Infide of the Mouth, and the more remote they are the larger. It has no *Bones*, but a *Grifile* down the Back full of Marrow, which should be taken out before it is drefs'd. In short they refemble a *Lamprey* in all things.

They live chiefly in the Sea, but come into the Rivers to Spawn, where they are found in great Plenty. They are discover'd by the Froth that rises from them.

Their bigheft Seafon is in March, when they first enter the Rivers, and are full of Spawn. In April they make Holes in a gravelly Bottom where they depofite their Spawn, and if they meet with a Stone of two Pound weight they remove it, and throw it out.

They are feldom Angled for purposely, but are fometimes caught with *Worm*: in Angling for other Fish.



THE Eel, in Latin Anguilla, has a long fmooth. Body, moiften'd all over with a viscous Liquor, which renders it very flippery. It has no Scales, but is cover'd with a Skin which is eafily taken off. The Back is of a dusky Colour, the Sides of a whitifh Blue, and the Belly fomewhat lighter. Those that inhabit clear

clear Running-water are of the brighteft finning Colour, and are ufually call'd Sikver-Eeks. The Mouth is pretty wide, and full of Teeth; the Tongue is cover'd with a foft Skin, but within it is hard and boney; the upper Jaw is a little more prominent than the lower, and is furnish'd with two fmall Briftles not eafily differenable; the Eyes are whitifh; it has four fmall Gills cover'd with the Skin, except a fmall Chink near the Fins. The Vent is nearer the Head than the Tail.

The *Liver* is large and red, and divided into two Lobes; the *Gall* is yellow, and the *Gall-Bladder* large; the *Spleen* is oblong; the *Stomach* reaches almost to the *Vent*; the *Gut* is ftraight.

He feeds upon Earth-worms, fmall Fift and Snails.

All Authors acknowledge their Ignorance as to the manner how *Eels* generate; but I have been affur'd by a Fifherman of *Mortlack*, that he had feen *Spawn* in the Belly of one flicking to the Outfide of the Guts two or three times, and that it was like the Spawn of the *Barbel*, and about the Size of a common Marble; which, if true, it is very furprifing that it fhould have efcap'd the diligent Enquiries of all Writers, ancient and modern. However he is now living, and ready to make Affidavit of the Truth of the Affertion.

There are four forts of *Eels*, the *Silver-Eel*, the *Greenifb* or *Greg-Eel*, the *Red-fin'd Eel*, and the *Blackifb Eel*: This laft has a broader, flatter and larger Head than the reft, and is counted the worft. But whether these Diffinctions are effential or accidental will admit of a Doubt. In the *Thames* the Fishermen give them particular Names; but the moft usual are, the *Silver-Eel*, and the *Greg*: This laft is thicker and fhorter than the other Sort, and of a darker Colour.

Near Gloucester and Tewhsbury there are a fort of diminutive Eels which they call Elvers, and are thought to be young Congers. These are taken in such Quantities that they make a fort of Cakes of them, which cat prettily enough when fry'd.

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Tho' *Eels* love to lurk and hide themfelves in the *Mad*, yet they are averfe to muddy Water, becaufe they we liable to be fuffocated by it: They are caught in Nots in the time of a Flood, at Mill-Dams, and fuch-like Places.

In the Day-time they skulk among Weeds, under Stones, or the Roots of Trees, or among the Planks, Piles, or Boards of Weirs, Bridges, or Mills.

The proper Baits for an Eel are fmall Gudgeons, Roach, Dare or Bleak. They are likewise fond of Lampreys, Lob-worms, fmall Frogs, raw Fleft, falted Beef, and the Guts of Forwls.

The beft Time to Angle for them is on a Windy, Rainy, or Gloomy Day, especially after Thunder. Your Rod must be strong, your Line the same as for Trowling, with an arm'd Hook; and your Bait must lie Ledger.

Another Way to take *Eels* is by laying Baited Hooks, which are to be faften'd to a Tree, or the Bank, in fuch a manner that they may not be drawn away by the *Eels*: Or a String may be thrown crofs the Stream, with feveral Hooks faften'd to it. The Line must be ty'd to a large Plummet of Lead or a Stone, which must be thrown into the Water with the Line, in fome remarkable Place, fo that it may be found readily in the Morning, and taken up with a *Drag-Hook*, or otherwife.

SNICLING OF BROCLING for *Eels* is another remarkable Method of taking them, and is only to be practifed on a warm Day when the Waters are low. This requires a ftrong Line, and a fmall Hook baited with a *Lob-worm*. Put the Line into the Cleft of a Stick, about a Foot and a half from the Bait, and then thruft it into fuch Holes and Places before-mention'd where he is fuppofed to lurk; and if there be one there it is great Ol's but he takes your Bait. Some put that part of the Line next the Hook into the Cleft; but however that be, it muft be fo contriv'd that the Line may be difengaged 86

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difengaged from the Stick, without checking the *Eil* when he takes the Bait. When he has fwallow'd it he is not to be drawn out haftily; but after he is pretty well tired with pulling, and then you will make him more fecure.

To BOBB for Eels you must provide a large Quantity of well-fcour'd Lob-worms, and then with a long Needle pafs a Thread through them from Head to Tail 'till you have firung about a Pound. 'Fve both Ends of the Thread together, and then make them up into about a dozen Links. The common way is to wrap them about a dozen times round the Hand, and then tying them all together in one Place makes the Links very readily. This done fasten them all to a small Cord, or Part of a Trowling Line, about two Yards in length. Six or eight Inches above the Worms there should be a Knot for a Lead Plummet to reft on. The Plummet fhould weigh about half a Pound, and be made in the Shape of a Pyramid, with a Hole through the Middle for the Line to pass through; the broad Part of the Plummet, or the Bafe of the Pyramid, should be towards the Worms, because that will keep it more fleady. When you have put the Plummet on your Line you must fasten it to a strong, stiff, taper Pole of about three Yards long, and then the Apparatus is finish'd.

Being thus prepared, you must Angle in muddy Water, or in the Deeps or Sides of Streams, and you will foon find the *Ecls* tug firongly and eagerly at your Baits. When you think they have fwallow'd the Worms as far as they can, draw them gently up towards the top of the Water, and then fuddealy hoift them on the Shore or in your Boat; by this means you may take three or four at a time.

Sometimes when I have been Angling for other Fifh, I have thrown a long Line into a likely Place, with feveral *Eel-Hooks* on it placed about a Yard and a half afunder, and a heavy Lead to fink it. The Hooks were baited with *Lob-worms* and fmall Fifth. I have The ART of ANGLING.

not only caught *Eels* by this Method, but also *Pike* and *Pearch*.



THE Eel Pout, in Latin Mustela fluviatilis, has a fmooth, foft, flippery Body like an Eel, especially the Belly. It has either no Scales, or they are exceeding fmall. Its Colour is blackish, refembling that of a Tench. The Head is a little flattish, and both the Jaws are well furnish'd with small Teeth. On the lower Jaw grows a Barb of about half an Inch long, and likewise a short Pair between the Nostrils and the Snout; the Tail terminates in a Circular Figure.

The black Colour is easily wip'd off, and then there appears underneath a Mixture of Yellow, White and Black.

This Fish is met with chiefly in the *Trent*, though I have been lately inform'd there are fome in the *Severn*. They Spawn in *December*, and are fo fruitful, that one *Roe* contains no lefs than 128000 Eggs. Their usual Length is about fourteen or fifteen Inches.

Their Places of Refort are the fame as the *Eels*, if within the Reach of the Tide; and the best time to take them is after a Storm of Thunder and Lightening with heavy Rain.

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The beft Bait for him is a fmall Gudgeon, Roach, or Date; your Hook should be arm'd on account of his sharp Teeth, and because he is a vigorous, strong Fish, and struggles hard for Life.

His Flefth is good and fweet, and greatly effeem'd. His ufual Size is from fourteen to twenty Inches.



THE Sea-Snail is call'd in Latin Liparis, or more properly Liparis nostras, because it differs from others of that Name that are not found on the British Coaft. When it is just taken it is brown on the Back, and white on the Belly; but in ten or twelve Hours after, it becomes of a much lighter Colour. The Head is round, the Mouth void of Teeth, but the Jaws are a little rough. The Apertures of the Gills are little Holes, fcarcely large enough to admit a Pea; they have Covers arifing from the upper Part of the adjacent Fins, which they open or flut at pleafure. The Bafis of the Fin is extended from the back Part of the Head almost to the bottom of the Throat, infomuch that it nearly joins the other that comes from the oppofite Side. These Fins are about an Inch long, and more than an Inch broad. On the bottom of the Throat there is a round Spot which exactly reprefents the Impreffion of a Seal,

The Vent is nearer the Head than the Tail; immediately below the Vent arifes a Fin which is continued to the Tail, and joins one that runs all the length of the Back. Back. infomuch that the hinder Part of the Fish very much refembles an Eel.

The whole Fish, as well the Head as the Body, is very foft and uncluous, and is eafily refolvable into an oily Liquor; whence it juftly deferves the Title of Snail. It is not taken in the Sea, but in the Mouths of Ri-

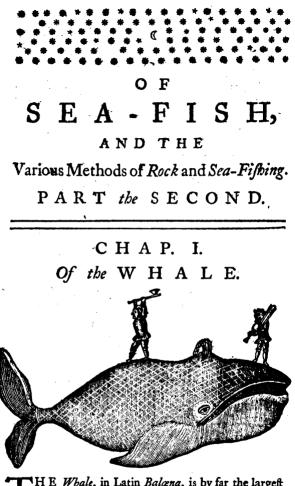
vers four or five Miles from it : however it never wanders out of the Salt-water.

It does not appear that this Fish is ever Angled for, nor indeed that it is of any great use when caught; but the Nature of our Defign would not allow us to omit it; and if it will ferve no other purpole, it may fatisfy the Curiofity of those who are defirous of being acquainted with the vaft variety of living Creatures that inhabit the Element of Water.



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THE Whale, in Latin Balana, is by far the largeft of all the Inhabitants of the Sea, and is chiefly caught in the North-Sea. Some of those taken at Spitzberg amount to two hundred Foot in length. Those Those on the Coast of *America* are about Ninety, or an Hundred; and those on the Coast of *Guienne* and in the *Mediterranean* are the smallest of all.

There are two forts of *Whales*, one of which is call'd Cachelor, whose Mouth is furnish'd with little flat Teeth; whereas the true *Whale* has none, but instead thereof has a kind of Whiskers in his Throat about a Span broad, and fisteen Foot long, ending in a fort of Fringe like Hogs Brifiles; they are set in the Palate, and do, in some measure, the Office of *Teeth*. Of these *Whiskers*, cut into a proper Breadth, is made Whale-bone, which the generality erroneously think is taken from the Fins of this monstrous Fish.

The Whale, properly fo call'd, has likewife no Fins on his Back, but has two behind his Eyes of a Bignefs proportionable to the Bulk of the Whale; they are cover'd with a thick black Skin, curioufly marbled with white Stroaks, which look like Veins in a piece of Wood. When thefe Fins are cut up, there appear Bones underneath refembling a Man's Hand; there likewife appear between them very fiff Sinews, which are fo hard that they will rebound if flung againft the Ground. Thefe are all the Fins that a Whale has, and with thefe he fleers himfelf as if a Boat was rowed with Oars.

The Tail does not ftand upright, as the Tail of almost every other Fish, but lies in a Horizontal Position, and is about fix or eight Yards broad. The *Head* is the third Part of the Length of the Fish, and on the fore-part of the upper and under Lip there are short Hairs. The *Lips* are crooked, fomewhat like an *f*, on the uppermost of which there are black Streaks mixt with brown. Their *Lips* are smooth and quite black, and when they are shut they lock one within the other.

The Whale-bone, as we term it, is, as I observed before, in his Mouth and Throat; of this the middlemost Pisces are the longest; there are about five hundred of them in all, and between every one there is room enough to put ones Hand.

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In the midft of these Pieces lies the *Tongue*, which is large and white, but on the Edges spotted with Black: It consists of a soft spongy Fat which cannot easily be cut, for which Reason they fling it away.

On the top of the Head, and before the Eyes, is placed what they call the *Howel* or *Bump*, in which are two *Spout Holes*. Out of thefe Holes he blows the Water fo very fiercely that it roars like a hollow Wind, or an Organ-Pipe: It is fo very loud that it may be heard at the diffance of a League, when the *Wbale* is not to be feen by reafon of the Foggy Air. He blows out the Water the fierceft of all when he is wounded, and then the Noife refembles the Roaring of the Sea in a great Storm.

The *Head* of the *Whale* is not round at the top, but flat, and flopes downward like the Tiling of a Houfe 'till it comes to the under Lip. In flort, the whole Fifth is fhaped like a Shoemaker's Laft, if you look on it from beneath.

His Eyes are placed near the Corner of the Mouth, and are not much bigger than those of an Ox. They have Eye-lids, and Hair upon them like the Eyes of a Man. The Crystalline Humour is not much bigger than a Pea, and is clear, white and transparent.

His Back and Sides are quite red, but underneath the Belly they are commonly white; tho' fome are of a Jet Black.

They make a beautiful Appearance in the Water when the Sun fhines, for as the Waves of the Sea rife up, and are dash'd against him, they shine like Silver. Some of them are marbled on the Back and Tail, and wherever they are wounded there always remains a white Scar.

Those Whales that are black are not fo in an equal degree; for fome are as deeply black as Velvet, others as a Coal, and others again are of the Colour of a *Tench*.

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The Skin of this Fifh is almost as flippery as that of an *Eel*, but this does not hinder a Man from standing upon him, because the Flesh being soft finks downward with his Weight, and makes a fort of a Hole. The outward or *Scarf-Skin* is as thin as Parchment, and is eafily taken off with ones Hands when the Fish is hot; but it is of little or no use.

The Penis of the Whale is of a tendinous Nature, and is of fix, feven, or eight Foot long, according to the Bignefs of the 'Fifh: It lies in a Doubling of the Skin, juft like a Knife in the Sheath when the Haft only appears. The Pudendum of the Female is fhaped like that of a Mare or Cow. On each fide of it grow two Udders with Nipples like those of a Cow; fome of these are all over white, fome are speckled with black and blue Spots like a Lapwing's Egg. When they have no young ones their Udders are small. In the Act of Coition they stand upright with their Heads out of the Water, embracing each other with their Fins.

It is fuppofed they never have more than two young ones at a time, becaufe there has never been found more than two in their Bellies when they have been cut open. How long they go with Young is altogether uncertain.

In the Year 1658 a Skeleton of a Whale was publickly fhewn at Paris. The Scull was between fixteen and feventeen Foot long, and weighed 4600 Pounds. The Jaws were ten Foot wide, and fourteen Foot long, weighing each 1100 Pounds. The Fins, which look like Hands, weighed each 600 Pounds. The Joints of the Back, from the Head to the Tail, were forty-five Foot long, the first Joints weighing 50 Pounds, and the others proportionably lefs as they came nearer the Tail.

The Figh is coarfe and hard, looking like that of a Bull, and is full of Sinews: It is very dry and lean when it is boil'd, because the Fat of a *Whale* lies only beween the Flesh and the Skin. Some Parts of it look blue and green, like powder'd Beef, especially at the joining

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joining together of the Muscles. The Tail is the tendereft Part, and is not fo dry as that of the Body. It may be eaten fafely, when there is nothing better to be got, for those that have eaten of it daily have found no had Effects from it.

The Fat lies about fixteen or twenty Inches deep under the Skin upon the Back and Belly, but upon the Fins it cuts two Foot deep : Yet in this there is fome Variation, according to the Condition the Whale is in.

It was the Opinion formerly, that the Drug calld Sperma Ceti was in reality the Sperm of the Whale, in confequence of which many Trials were made upon it to no purpose. But lately it has appeared to be in reality the Brain of the Cachelot or Male Whale, which, when it is taken out of the Scull, is melted over a gentle Fire; then it is caft into Molds, like those in which Sugar is refin'd; after it is cool'd, and drain'd from the Oil, they take it and melt it again, repeating the Operation 'till it is well purify'd, and very white. Then with a Knife, made for the purpole, they cut it into Flakes, in the fame manner as it appears when it comes to us.

Some have afferted that a Whale is no Fish of Prey, but Experience evinces the contrary, for there have been found great Quantities of Cod, Herrings, and other Fish in his Maw.

The chief Place where Whales are caught is on the Western Coast of Spitzberg, from the Latitude of 76° 40' to 80 Degrees; the Establishment at Greenland not fucceeding to Satisfaction.

The Dutch have upwards of three hundred Years had the Whale-Fishery almost to themselves, and it is now esteem'd one of the principal Branches of their extenfive Trade. The chief Merchants of their flourishing Provinces affociate themfelves into a Body for the carrying it on, and fend every Year a Fleet of Veffels to the North Seas for that purpole.

In the Year 1728 the South-Sea Company began to fare with them, in which they met with pretty good Success at first; but it has fince dwindled away to nothing, 'till this present Year 1740, when the Parliament has thought fit to give farther Encouragements to proceed in it, which it is hoped will be a means of retrieving to gainful a Branch of Trade.

And that the Reader may be a Judge of the Importance of this Trade, we shall here subjoin the Difcipline observed in the Whale-Fifbery, the Method of Fifbing, the Cargo and Equipage of a Vessel, and the Produce thereof.

The Difcipline is adjusted by standing Regulations, the principal of which are as follow:

That in cafe a Veffel be Shipwreck'd, and the Crew faved, the next Veffel they meet with shall take them in. and the fecond Veffel half of them from the first; but no Ship is obliged to take in any of the Cargo of the Shipwreck'd Veffel: But if any Goods taken out of fuch a Veffel are absolutely relinquish'd, and another Ship finds them, and takes them up, the Captain shall be accountable to the Owners of the shipwreck'd Vessel for one Half clear of all Expences. If the Crew defert a shipwreck'd Vessel, they shall have no Claim to any of the Effects faved, but the whole shall go to the Proprietor; but if they be prefent when the Effects are faved, and affift therein, they shall have one Fourth thereof: That if a Perfon kill a Fifh on the Ice, it shall be reputed his own fo long as he leaves any Perfon with it; but the Minute he leaves it, it becomes the Due of the first Captain that comes that way. But yet if the Fish be fasten'd to an Anchor, or a Rope fasten'd to the Shore, it shall remain to its first Proprietor, tho' he leave it alone : That if any Perfon be wounded or maimed in the Service, the Commissioners of the Fiftery are to procure him a reasonable Satisfaction, to which the whole Fleet shall contribute.

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They likewife agree to attend Prayers Morning and Evening on pain of a Forfeit at the Difcretion of the Captain; not to get drunk, or draw their Knives, on forfeiture of half their Wages; nor fight on forfeiture of the whole. They are not to lay Wagers on the good or ill Succefs of the Fifhing, nor buy or fell with the Condition of taking one or more Fifh, on the Penalty of twenty-five Florins. They are likewife to reft fatisfy'd with the Provisions allow'd them; and they are never to light Candle, Fire or Match, without the Captain's Leave, on the like Penalty.

After the reading this Regulation the Crew are all call'd over, who receive the cuftomary Gratuity before their fetting out, with an Affurance of another at their Return, in proportion to the Success of the Voyage.

The Captain on this occasion receives from an hundred to an hundred and fifty Florins: The Pilot from forty to fixty: Each Harpineer from forty to fifty: The other Officers from twenty-fix to thirty-fix Florins: The old Sailors twenty, and the young ones twelve.

The Fleet, which confifts chiefly of Veffels from two to three hundred Tuns, and from thirty-five Men to fortyone, ufually fets fail about the beginning of *April*, and takes its courfe by the Islands of *Iceland* from 60 to 61 Degrees of Latitude; after which leaving them to the Weft, it sters Northward thro' 73, 74 and 75 Degrees of Latitude, where they begin to find the Ice.

It is through these prodigious Heaps of Ice, which abound in those Parts, that they first begin to spy the *Whales*, and there most of the Vessels make a Stop in order for Fishing. But as the Fish are larger and fatter the further they go *North*, for that Reason some Vefels will venture as far as eighty or eighty-two Degrees.

Each Veffel of three hundred Tuns has Six Shaloopi, each Shaloop is allow'd a Harpineer, and five Sailors to row it; in each Shaloop there are feven Lines of three Inches Circumference, five of them in the fore-part of the

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the Vessel, and two behind. The five Lines together make fix hundred Fathom, and with the addition of the other two, the whole amounts to eight hundred and fifty Fathom. If the *Whale* dives deeper, or runs farther under the Ice, the Line must be cut to prevent the Loss of the Boat.

The Inftrument wherewith the Execution is done is a *Harping-Iron* or *Javelin* five or fix Foot long, pointed with Steel in a triangular Shape, like the Barb of an Arrow.

The Harpineer, standing at one end of the Sloop, as foon as he is at a proper diftance from the Whale flings the Harping-Iron, with all the Force he is Master of, against the Whale's Back, and if he is so lucky as to penetrate thro' the Skin and Fat into the Flefh, he let's go a String fasten'd to the Harping-Iron, at the End whereof is a dry Gourd, which fwimming on the Water discovers whereabout the Whale is, who, as foon as he is struck, plunges to the Bottom. The Gourd is made use of when they have not Line enough to purfue the Whale in its Career. However great care is taken that they may have Line enough, and if the Cargo of one Shaloop is not fufficient they throw the End of the Cord to another, and from thence to another if there should be occasion. The Cord in running out to fwiftly would. often take Fire, if it was not kept wetting with a Mop or a Swab.

As foon as the Whale rifes again for Breath the Harpineer gives him a fresh Wound with a Lance, and so do the rest of the Crew as they have an Opportunity; for when he begins to faint with Loss of Blood they can approach near him, and then they plunge their Lances into various Parts of his Body, which soon dispatch him. When the Carcass begins to float they cut off the Fins and Tail, and tow it to the Ship, where they fasten Ropes to keep it from finking, and when it is cold they begin to cut it up.

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In order to this three or four Men go down upon the Whale with Irons upon their Boots to keep them from flipping. They begin to open him on the Side, and proceed downwards towards the Belly, cutting off all the Fat into Pieces of three Foot broad, and eight long: Befides the Fat on the Sides they frequently cut off that on the Throat and the under Lip, leaving the Lean behind. They next proceed to the Whale-bone, which they cut off, with a Hatchet made for that purpole, from the upper Jaw of the Fifh. The Fat and Bone thus procured they leave the Carcaís for the Bears who are very fond of it.

As fast as the large Pieces of Fat are cut off the reft of the Crew are employ'd in flicing them fmaller, and picking out the Lean.

When this is prepared they flow it under Deck 'till the Fat of all the Whale is on board; then cutting it ftill fmaller, they put it up in Tubs in the Hold or Bottom of the Veffel, cramming them very full and clofe; this done they fail homewards, where the Fat is to be boiled, and melted down into *Train Oil*.

As to the *Produce* of this Fishery it is different in different Years. In 1697, the most fortunate Year that ever was known, 197 Vessels took 1968 *Whales*. Whereas in 1725 there were 226 Vessels which only took 349. Of these Vessels 12 were *English*, which caught to their Share 25 *Whales* and a half; the Produce of these were 1000 Puncheons of *Blubber*, and 20 Tun of *Whalebone*.

Now supposing a Puncheon of Blubber to be worth 21. 155. as it was to the Dutch in 1697; and an hundred weight of Whale-bone to be worth 41. 45. the Amount of both Articles will be 35901. for the whole Year's Produce; and the Value of the Produce to the whole number of Ships was 3467441. 105.

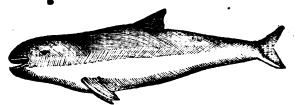
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CHAP. II. Of the PORPUSS.



THE Porpuls, in Latin Phocana or Porcus Marinus, is a Fish usually about fix Foot long, and is feen very frequently leaping in and out of the Water, especially before a Storm, making an uncouth kind of a Noife like Snorting.

The Shape is long and round, but towards the Tail it is fmall, tapering like a Cone, and at the very Root of the Tail it is flat. The Snout is long and fharp, furnifh'd with ftrong Muscles to enable them to dig up fmall Fish out of the Sand. The Skin is thin, fmooth, and deflitute of Scales. The Back is of a very dark Blue, inclining to Black. About the middle of the Sides it begins to grow whitish; the black Spots and Streaks, wherewith it is beautifully painted, at the Meeting of the Colours gradually changing into a perfect Whitenefs.

He has no Gills, nor Holes where the Gills fhould be, but on the Top of the Head there is a wide Pipe which opens like a Half-Moon; and inwardly it is divided by a Boney Subfrance, as it were, into two Noftrils. These afterwards unite into one, and open with a fingle Hole into the Mouth near the Gullet: The End of this Aperture is provided with a firong Sphincter, whereby it may be open'd or flut at pleafure. The upper Part of the F a Noftrils Nofirils are cover'd with a firong Skin in the manner of an *Epiglottis*, to hinder any Liquor from entering contrary to the Inclination of the Fish.

The Eyes are finall in proportion to the Magnitude of the Fifh, at leaft as to outward Appearance, for when the Eyelids are cut off they feem to be larger. The Mouth is not large, but furnish'd with forty-eight Teeth in a well-disposed Order, there being Spaces left between the Teeth of the lower Jaw to receive those of the upper. They are all sharp, and feem to be a little loose in their Sockets. The Tangue is flat, smooth, and connected thro' the whole Length to the bottom of the Mouth, and for that Reason is immoveable.

He has only three *Fins* befides his Tail, one on the Back, and two near the Parts where the Gills are placed in other Fifh. The *Tail* is placed Horizontally, like the *Whale's*, which Pofition is neceffary, he being oblig'd to rife fo often to take Breath.

The Belly and all other Parts of the Body is cover'd with Fat, which tends to preferve the Equilibrium between the Fifh and the Water, otherwife it would be difficult for him to rife. The Fat likewife is a great Defence against the Cold, which would otherwife extinguish the Natural Heat; for it ferves for the fame purpofe as good warm Clothes in the Winter-time. The Fleft is red, and looks very much like Pork.

He has a pretty large *Caul*, which does not lie upon the Inteffines, but hangs loofe, and is placed between the Stomach and the Guts. He has a *Triple-Stomach*, or at leaft divided into three Bags. The Stomach of one that was diffected was found full of *Sand-Eels*; and in that of another were Bones of Fish, Shell-Fish and Prawns mixt with a little Sand.

The Guts of a young Porpuls that was but three Foot and a half long measur'd no lefs than forty-eight. There was no Diffinction into Great and Small, nor fo much as a Cæcum, or any Appendage whatfoever. The Pancreas is large, and adheres closely to the third or lowermost

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bowermost Stomach. The Liver has neither Lobes nor Gall-Bladder. The Spleen is small, and compos'd of feveral distinct Lobes. The Kidneys are broad, flat and oblong, adhering to the Back. The Urinary-Bladder is small. The Penis is long, and lies conceal'd in a fort of a Sheath, the Chink of which only appears externally. The Testicles are placed at the Bottom of the Abdomen, and are of an oval Form, the internal Sub-fance being like that of Quadrupedes, as are the rest of the Vasa Præparantia. A little above the Bladder the Seminal Vessel.

The Diaphragm is entirely Muscular, without any Tendinous Membrane in the middle. The Heart is large, and placed in an ample Pericardium; in other Respects it resembles the Heart of Quadrupedes, unless in the Largeness of the Auricles. The Lungs likewise are like those of four-footed Animals, except that they are larger and more dense.

The Brain and Cerebellum do not differ from those of Quadrupedes, unless in their being more compact; but there are no Olfactory Nerves, nor Mamillary Processes.

He has thirteen *Ribs*, fix flort and feven long. The *Breaft-bone* is flort, the *Shoulder-bones* broad and flat, and furnish'd with two remarkable Processes.

This Fifh is feldom caught but by chance, it being of little Value but for the Fat, the *Flefh* not being fit to eat. In fome Parts of the *Eaft-Indies*, indeed, there are Fifhermen who make it their Bufinefs to take them, but they ferve for no other purpole but to make Oil of their Fat; fometimes, for the fake of Diversion, they are shot with a Musket.

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CHAP. III.

Of the SHARK.



THE Sbark, in Latin Canis Carcharias, fometimes grows to fo large a Bulk, that when he is laid upon a Cart two Horfes are fcarce able to draw him. Some Authors mention Inflances of their weighing 2000, others 4000 Pounds, and that there has not been only whole Men, but once a Man in Armour found in their Bellics: But this laft is almost incredible.

That this is a voracious Animal many of our Sailors have found to their Coft, having often loft Legs, Arms, and even a great part of their Thighs in the Jaws of these monstrous Creatures.

It appears from hence that a Shark muft have a *Mouth* of a very extraordinary Size, and likewife a proportionable *Head*. The *Mouth* is not plac'd, as in other Fifh, at the end of the Snout, but under the Eyes, at fome diftance from it, which obliges him when he takes his Prey to turn on his Back. He has fix Rows of *Teeth* which are extremely hard and fharp, and of a triangular Figure; there are feventy-two in each Jaw, which make 144 in the whole. However fome think that the Number of Teeth is uncertain, varying according to the Age of the Fifh, and that the older they grow the greater Number of Teeth they have.

The Fins are larger in Proportion than in other Fifh. The *Jail* is forked, and the upper Part is confiderably longer than the lower. The *Vent* is between the Fins • on the Belly. The Skin is rough. The Eyes large and round, and furnish'd with Muscles by which they may be turn'd to look any way whatever: But instead of Optick Nerves, which the Eyes of all other Creatures are endow'd with, there is a Gristly Substance which has not the least Softness in it. It has a most monstrous Stomach, and an extremely wide Throat. The Liver is very fat, and divided into two large Lobes.

The *Flefb* of a *Shark* is white, and has no very difcernable Ranknefs in the Tafte. Some Phyficians, particularly *Galen*, condemns it; and yet our Sailors often venture to feed upon it, and find no ill Confequences attend it. The Method of the *Buccaneers* was first to boil them, then to fqueeze them dry, and afterwards to flew them with Vinegar and Pepper.

The Method of taking them, when they are feen to hanker about a Ship, is to firike them with a barbed Infirument call'd a *Fizgig*, which takes fuch faft hold in their Bodies that they draw them on board therewith; and then they cut off their Tails with an Ax to prevent their Flouncing; for they are an exceeding firong Fifth. Sometimes they Bait a large Iron Hook, made faft to a thick Rope, with a piece of Salt Beef, which he will fwallow very greedily, and then they drag him on Board.

He is to be found not only in the *Mediterranean* Sea, but in all Parts of the Ocean, and is extremely fond of Human Flefh when any Perfon is fo unhappy as to come within his Reach.

If Ships in the Guinea Trade happen to throw a dead Slave over board, there is feldom wanting three or four Sharks to tear him to pieces in an Inftant.

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CHAP. IV. Of the PILOT-FISH.



THIS Fifh is an Attendant upon the Shark, and is never feen but in his Company, generally fwimming before him as though he was his Pilot; whence our Sailors have beftow'd the Title of *Pilot-Fifh* upon him.

That there is fome natural Friendship between these two Fish is pretty certain, for they always are seen in each other's Company, but upon what account is very hard to determine, tho' they are faid to go before to direct the *Shark* to his Prey. They are about the Size of a middling *Whiting*, and make a very beautiful Appearance in the Water, playing about the *Shark*, who will not meddle with them tho' he is ever so hungry.

When he is taken he appears to be of a deep Blue on the *Back*, but of a lighter Colour on the *Belly* and *Sides*. His *Scales* are thin and fmooth like those of a *Tench*.

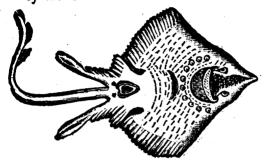
They are most commonly struck with a *Fizgig* when they are taken, and are accounted a very delicate Morfel; but they are very scarce, and hard to come at.

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CHAP. V.

Of the SCATE or FLARE.



THE Skate, in Latin Raia levis undulata, is 2 griftly Fifh, with a flat fmooth, and very broad Body. It grows to a very large Size, for fome have been taken that have weigh'd above 100 Pounds: But what is ftill more extraordinary, there was one fold by a Fifhmonger at Cambridge to St. John's College, which weigh'd 200 Pounds, and dined 120 Perfons. It was carefully measur'd, and the Length was 42 Inches, the Breadth 31.

The Colour on the upper Part is a pale Afh, very much fpotted with Black. The under Part is white;. and fpeckled pretty thick likewife with fmall black Spots. The Snout is fhort and fharp. The Sidei terminate in Fins. The Males are diffinguish'd by fmall Prickles on both fides the broad Part of the Fins, which are wanting in the Females.

The Liver is of a dirty Yellow, marbled with Lines of a dark Colour; it is divided into three Lobes, in the Right of which the Gall-Bladder is fituated. The Spleen is large, reddifh, and adheres to the Stomach. The F. 5, Pan**Pancreas** is placed at the Angle, where the Gut bends downward. The Inteflines are very large, and have but one Fold. The Female has a capacious Uterus, very large Cornua and Ovaria. The Male has Seminal Veffels on each fide of the Belly, turgid with Sperm; at the Extremities of which are placed oblong Glandulous Bodie's, which we take to be the Tefficles.

The Great Artery, foon after it leaves the Heart, is divided into two Branches, and then into three others which pass to the three lowermost Gills, from whence other Veffels bring the Blood back; for as in Quadrupedes all the Blood passes thro' the Lungs, fo in Fish it all passes thro' the Gills: Hence it is very evident why the lively red Colour of the Gills is a certain Sign of the Freshness of any Fish; for as foon as the Blood begins to admit any Degree of Putrefaction the Brightness of its Colour vanishes, which is most evident in the Gills because they are most turgid with Blood.

Steno, in his Anatomy of a Skate, has difcover'd the Spots on this Fifh to be conglomerate Glands, which fecrete the Liquor that renders their Bodies fo flippery; and likewife supposes the Spots in other Fifh may be for the fame purpose

All Fish of this Sort, when first taken, have a rankish Taste, which by keeping a little vanishes. They are most in Season in the Winter, for then they do not smell so strong, and their Taste is more pleasant.

They delight to feed in muddy Places not far from the Shore. They are found in great Plenty near Scarborough in York/hire, and are very common on all the Sea-Coaft of Great Britain.

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CHAP.



THIS Fifh does not at all differ from the former but in Age, for a *Maid* is nothing elfe but a young *Skate*. But as this is a Circumflance not known to the generality, we chofe rather to infert a fuperfluous Article, than be fuppofed guilty of omitting a Fifh which is feen every Day. We have therefore nothing to add to what has been faid of the *Skate*, but that the *Maid* is more fweet, tender, and fitter for the Table than the *Skate*, which Qualities are owing to its Youth alone. However by this means we have an Opportunity of giving you the Figure of the Back or Upper-part of this Fifh, as we had done before of the Belly or Lower-part.

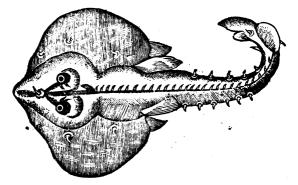
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CHAP.



CHAP. VII. Of the THORNBACK.



HE Thornback, in Latin Raia Clavata, is in Shape almost square, and yet a transverse Line drawn from Corner to Corner is longer than one from the Head to the Root of the Tail; fo that, in a Senfe, this Fifh is broader than it is long : For Inftance, one of fixteen Inches and a half broad was twelve long, except the Tail.

This Fifh has no Scales, but is cover'd with a vifcous Liquor which renders it very flippery. Its upper Part is of a dusky Colour, but pretty full of round white Spots; the under Part is entirely white. In the middle of the Back, to the very end of the Tail, is a Row of thirty Prickles or Thorns, from whence it has gain'd the Name of *Thornback*. The lower Part of the Tail is fmooth, but on each fide are two other Rows of Prickles, the former Part of which are placed obliquely, and the latter horizontally.

The

The Eyes are placed on the upper Side, and are very protuberant; having no Bone, nor any thing elfe to defend them; only on the inner Side there are fmall Prickles. The *Pupils* do not look downwards, but fide-ways. It is well worth Obfervation, that the *Pupils* have round jagged Covers underneath the *Horny-Coat*, which are let down from the upper Part of the Eye. Near the Eyes are two Holes, which we imagine ferve inftead of *Ears*, if Fifh do hear at all; for it is difputed by fome whether they hear or no.

When the Thornback is laid with its Belly uppermost the Nofirils appear in fight, being contiguous to the Mouth. This last is void of Teeth, but the Jaw-Bones are rough like a File. The Gills, as in other Fish of this Kind, are five Holes placed in a parabolick Form. On the Belly appear two Semi-circles, one of which encompasses the Thorax, the other the Abdomen; where these Circles touch there is a Bone which divides the upper from the lower Belly. A little above the Tail are two Cartilaginous Processes, the back-part of which is divided, as it were, into Teeth; to these are joined two Fins which reach to the Tail; they arise from a Griftle a little above the Vent, which answers to the Os pubis in Quadrupedes. To these Fins are joined two Appendages in the Male Fish, which are supposed to perform the Office of a Penis.

The Orifice of the *Stomach* opens immediately into the Mouth. The inner Surface of the Stomach is cover'd with a *Cruft* which feems to be of a Glandulous Subftance; this Covering is extended over the Infide of the Gut, but does not feem fo thick as in the Stomach. The *Liver* is of a pale Yellow, and is divided into three Lobes like fo many Tongues. The *Spleen* is of a deep Red and placed under the middle Lobe of the Liver, between the two Orifices of the Stomach. The *Pancreas* is fituate at the Bending of the Gut near the *Pylorus*, and is furnish'd with a Duct a Duct as in other Animals. The Shape of the Heart refembles the Figure of the Body. The Blood-Veffels are in their Ramifications much like those of a Shate.

Tho' the Prickles of this Fifh are often difpoled in the manner above described, yet we have often seen them in a much greater Number, or placed after a quite different manner; nay, fome have had Thorns upon the Belly. For this Reason *Rondeletius* gives us the Figures of above a Dozen *Thornbacks*, which fcarcely differ in any thing else but the different Position of the Prickles.

They are found in the like Places as the Skate, and their Flefs is much of the fame Tafte, but is fomewhat more hard of Digeftion. The Liver is accounted a great Dainty among fome.



THE Monk-Fift, in Latin Squatina, is of a middle Nature between a Shark and a Skate. It grows to a large Size, often weighing fixty Pounds. Rondeletius affirms they fometimes grow to the Bignefs of a Man, and that he faw one which weighed a hundred and fixty Pounds.

The Skin of this Fifh is very rough, and cover'd all over with a filthy Slime. It is very much used to polifh lish Wood and Ivory with, and goes by the general Name of Fi/p. Skin. Its Colour upon the Back and Sides is of a dusky Ash; but on the Belly it is white.

The Head is roundifh at the Extremity, where the Mouth is placed, quite different from thole Fifh to which it feems to be ally'd. It has three Rows of *Teetb* in each Jaw, each Row confifting of eighteen, fo that the whole Number amounts to 108; but there is fome Variation in this. The *Tongue* is broad, and fharp at the End. The Noffrils, placed on the upper Lip are wide, and fill'd with a flimy Mucus. The Eyes are of a middling Size, placed not far from the Mouth, and do not look directly upwards, but fideways. Inftead of Gills it has five Holes like the Thornback.

The foremost Pair of Fins have a great Refemblance of Wings, whence it is call'd the Angel-Fi/b, because Angels are always painted with Wings. On the Extremities of these Fins, near the Corners, are placed thort sharp and crooked Prickles. Likewise the lowermost Fins placed near the Vent have the same. Below the Vent there are two Fins on the Back. The Tail is forked.

The Liver is divided into three Lobes, to the middlemost of which the Gall-Bladder adheres. The Gut is large, and joined to the Me/entery.

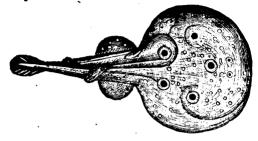
The *Flifb* of this Fifh is in no Repute, being defpifed even by the Country-People on account of its Ranknefs and difagreeable Tafte. The *Skin* is in great Requeft for making Sheaths, Cafes, and fuch like things. Jovius affirms that this is the Skin of which the *Turks* make Shagreen.

The Monk Fift is to be met with in all Parts of the Ocean, and is frequently taken on the Coaft of Corn-wall.

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CHAP.

CHAP. IX. Of the CRAMP-FISH.



T HE Cramp Fifb, in Latin Torpedo, is of a circular Figure, all but the Tail which is long and flender. It is faid to grow to no extraordinary Size; and yet one caught by F. Redi weighed fixteen Pounds. Its Colour is of a dirty Yellow refembling Sand or Gravel. Its Eyes are fmall and almost cover'd with Skin, behind which are two Holes in the Shape of Half-Moons, which are fupposed to be the Organs of Hearing. On the upper part of the Body are five remarkable black Spots placed in the fame Form as in the Cut, and are a little bluish in the middle.

The *Head* of this Fifh is broad and joined to the Body, for which Reafon it feems to have no Head at all. The Extremities of the Body end in Fins. A little above the Vent two *Fins* arife, which have two *Appendages* that ferve for a *Penis*, as in the reft of the *Gartilaginous Kind*. Below thefe in the middle of the *Back* or *Tail*, for it is hard to fay which Term is most proper, two others appear one a little below the other. The upper Corner of the *Tail* is longer than the lower, fomewhat in the manner of a *Shark*, and other Fish of the fame Kind.

The

The Mouth of a Cramp-Fifb is like that of a Skate, and is furnish'd with small sharp Teetb. The Nostrils are placed near the Mouth. Instead of Gills it has five Holes like a Thornback. There are no Prickles in any Part of the Body, it being smooth and soft to the Touch. There are a great many small Holes, especially about the Head, thro' which a Liquor is secreted to lubricate the Body, and defend it from the Sharpness of the Salt-Water.

The Liver is divided into two Lobes placed on both Sides, and only connected by a fmall String. The Stomach is large as well as the Gut, which last proceeds directly to the Vent.

Some of these Kinds of Fish are without Spots, others have White ones, besides the Black before mentioned.

The most remarkable Quality of this Fish is to numb the Hand of the Person that touches it, and it performs this to such a Degree that it seems affected with the Cramp; from whence it derives the Name of *Cramp-Fish*.

The famous *Redi* order'd one to be caught purpolely, that he might make a Trial of the Nature of this benumbing Quality. As foon as he touch'd the Fifh he found a Tingling of his Hand, Arm and Shoulder, attended with a Trembling, and fo acute a Pain in his Elbow that he was obliged to take his Hand away. The fame troublefome Symptoms were renew'd as often as he repeated the Trial. However they grew weaker and weaker 'till the Creature died, which was in about three Hours. After it was dead the benumbing Quality quite ceafed, for though it was handled never fo much it produc'd no Effect.

According to Borelli the Stupefactive Quality of the Cramp-Fi/b does not proceed from any Poifonous Steam because if he be touch'd when he is intirely at reft no Effect is produced at all: Besides, if the Fingers compress the Extremities of the Sides ever so strongly **II4**

ftrongly the Hand receives no Damage; but if the Hand lies upon the flefhy Part near the Back-bone, the violent Vibrations of the Fifh will flupify it, and affect it with a fort of a Cramp.

Borelli likewife obferved a very remarkable Difference in the manner of touching the Fifh, for if his Fingers were quite extended, and he touch'd the Fifh lightly with them, he received no Damage, but if they were bent, and the Joints were laid upon him, efpecially that of the Thumb, then the ftrong Vibrations of the Fifh produced a Cramp. From thence he concluded that the Tendons and Nervous Ligaments of the Joints being exquifitely fenfible, were very much affected with the violent and repeated Strokes of the Fifh, which produced a Cramp in the fame manner as a Blow upon the Elbow.

Mr. Reaumur affirms he could never perceive any fuch Trembling or Vibration of the Fifh as Borelli fpeaks of; and that on the contrary the Numbnefs is not caufed by repeated Strokes, but by the Velocity of one fingle Stroke, which is equal to that of a Ball out of a Musket; and accordingly the Perfon who begins to feel it imagines that his Fingers have been violently ftruck. As a Proof of this the Fifh before he flrikes makes his Back quite flat, when he has ftruck it is round and protuberant.

The Flesh of the Cramp-Fi/b is feldom or never brought upon the Table, as being unwholefome; for it is moift, foft, fungous, and of an ill Tafte, and is therefore justly rejected.

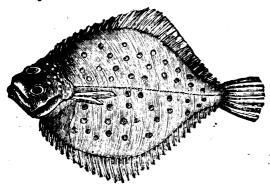
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CHAP. X.

Of the TURBOT OF BRET.



THIS Fifh in the Southern Parts of England is call'd a Turbot, but in the Northern a Bret. The Latin Writers term it Rhombus maximus after non fquamofus, to diffinguish it from others of the same Figure, it being the larges of the Kind, and rough, but without Scales.

The Size of this Fifh feldom exceeds a Yard in length, nor two Foot and a half in breadth. Tho' he has no Scales, he has a rough granulated Skin full of exceeding fmall Prickles, placed without Order on the upper Part. The Colour of the fame Part is Afh, diverfify'd with a great Number of black Spots, fome of which are large, others fmall. The lower Part is white.

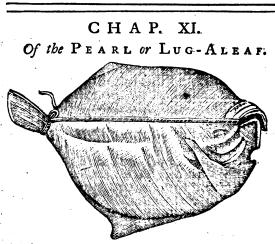
The Mouth of a *Turbot* is proportionably wider than that of a *Plaice*, it has likewife a greater Number of *Teeth* both in the Jaws and in the Palate. The *Nofirils* are not placed in the fame Line with the *Back-Fin*, but below it... The *Eyes* are placed on the left Side; or, to fpeak more intelligibly, on the right Side of the Mouth; there

there is likewife more Diftance between them, and they are farther from the Back than in others of the fame Kind.

The Liver of this Fish is pale, the Spleen red, and the Gut has but one Fold. The Stomach is very large, the Kidneys long, and the Urinary Bladder pretty capacious.

It is taken very frequently in the Britif and German Ocean, and is the largest of all this kind of Fish except the Halybut. The Flefs is white, firm, delicate and wholefome, far excelling the Plaice, and all other Fifh that refemble it in Shape. Nay it is fo highly effected by fome, as to be preferr'd before all the Inhabitants of the Water.

It is a Fish of Prey and lives upon others, particularly Crabs which it is a great Enemy to; for which Reafon it lies near the Mouths of Creeks and great Rivers.



HE Pearl, in Latin Rhombus non aculeatus squamosus, differs from a Plaice much in the fame manner as a Turbot, that is, in not having any rough Lines Lines at the Root of the Fins which furround it; in having the Eyes placed on the left Side, to the right of the Mouth, and farther diftant from each other; likewife in having the Back-Fin take its Rife nearer the Mouth.

This Fifh is cover'd with *Scales*, but they are very fmall; and this diftinguifhes him from others of the fame Kind. The *Body* is of an Afh-colour, and neither rough nor prickly. The *Tail* is round. In other things he refembles a *Turbot*.



THE Plaice, in Latin Paffer, is a Fifn extremely flat; fometimes we meet with them of the length of a Foot, and feven Inches broad. The upper Part is of a dirty Olive, painted with round Spots of a Vermilion Dye; the lower Part is white. This is a Scaly Fifn, but the Scales are fmall, and are in a manner concealed in hollow Cavities, infomuch that it requires no little Trouble to feparate them. At the upper Edge of the Coverings of the Gills are placed feven boney Tubercles, the fifth from the Eyes being the higheft and largeft. There is no Afperity in the Lateral Line, nor in the Circumference of the Body at the Roots of the furrounding Fins. There is one Row of Teeth in both laws, 118 SEA-FISH.

Jaws, and a Cluster of Teeth on the Palate. The Eyes are prominent, very near together, and placed on the right Side to the left of the Mouth. One of the Noftrils is fituate on the upper Side near the Eyes, and the other on the lower Side under the Eyes. The Tail is long and roundifh at the End.

As for the Internal Parts the Liver is long, undivided and red; the Gall-Bladder large, and the Splan blackifh. There are three Kidneys, which are joined to a large Urinary Bladder by a long Duct.

This Fifh is every where to be met with. The Flaß is foft, fweet, pleafant and wholefome, and by fome thought of equal goodnefs with a Sole; but these things depend much upon Fancy.



THE Dab, in Latin Paffer after five fquamofus, is a little thicker than a Plaice, but much about the fame Size. He is a Scaly Fifh, and the Seales are large for one of this Kind. He feels pretty rough if you draw your Fingers from the Tail upwards, but he has no Prickles neither on the middle of the Sides, nor at the Root of the furrounding Fins. The Situation of the Eyes are like a Plaice. The Colour of the upper Part is of a dirty Olive with a reddifh Caft, and fpeckled fpeckled with Spots of a dusky Yellow. The Mouth is of a middle Size, and there is one Row of Teeth in both Jaws.

It differs from a *Plaice* in being thicker, in having larger *Scales*, in having no *Tubercles* near the Head, in wanting the *Vermilion Spots*; though fome have yellow ones.

This Fifh is frequently met with in all Parts of the Sea that furround our Coaft. The *Flefh* is firmer, and is thought to be better relifh'd than that of a *Plaice*.

CHAP. XIV. Of the HALYBUT.

THE Halybut, in Latin Hyppogloffus, is the largeft of all flat Fish that we are acquainted with. It exceeds the Turbot greatly, and is of a longer Make. One of these Fish of a Yard long is about half a Yard broad. The upper Part of the Body is of a dusky Green, almost black. The Scales are small, and there is no Roughness on the upper Part, nor Prickles at the Root of the Fins. The Eyes are placed on the right Side, or to the left of the Mouth. The Fins are at a greater Distance from the Head than in other flat Fish.

It is found in the German and British Ocean, and likewife in the Irish Sea. It is thought to be nearly as good as a Turbot for the Fineness of its Taste.

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CHAP.

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North Participation

SEA-FISH.



HE Sole, in Latin Solea, is a flat longish Fish, in Shape much like the Soal of a Shoe, from whence it derives its Name. It is often feen of the length of a Foot, and fometimes a little longer. The upper Part is of a dark Afh-colour, and the lower white. The Scales are very small. The Lateral Line passes directly from the Head to the Tail through the middle of both Sides. The Corners of the Mouth are rough with a fort of fmall Briftles or Hairs. The Body is furrounded with fhort Fins, which on the upper Edge begin near the Eyes and are continued to the Tail; on the lower Edge it proceeds from the Tail to the Vent, which is placed near the Head. The Eyes are fitmate in the left fide of the Head, and are fmall, round, and cover'd with a loofe Skin. The Pupils are fmall and of a fining Green. The Tail is round.

The *Flefk* is more firm and folid than that of a *Plaice*; and for Sweetnefs of Tafte, the Plenty of Nourifhment it affords, and the Goodnefs of its Juice, far excels its for which Reason, in fome Countries, they file it the *Sea-Partridge*.



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CHAP-

CHAP. XVI.

Of the CONGER or SEA-EEL.



THE Conger has the fame Name both in Latin and English, and is a very long Fifh, being fometimes two Yards, or two Yards and a half in length, and of the Thicknefs of a Man's Thigh. It is made much like an *Eel*, but is *larger*, of a *lighter Colour*, has bigger Eyes of a Silver Hue; as alfo rowo white Lines on each Side compos'd of a double Row of Points, and a Membranous Fin running all the length of the Back to the very Tail.

At the very End of his Snout the Conger has two fmall Horns or Tubes, from whence a Mucous Liquor may be express'd; and the like has been observed in some kinds of *Eels*. In other Respects it resembles an *Eel*.

The *Flefb* is very white and fweet, but not eafy of Digeftion. It was greatly efteem'd by the Ancients, and does not want its Advocates among the Moderns, especially when it is fryed.

The young Fry of this Fifh are call'd *Elvers* in *Glaucefler/bire*, where they are taken in great Plenty out of the *Sovern* in dark Nights. They herd together in fuch Swarms, that they are eafily caught with a kind

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of Net made for that purpole. They are fuppoled to travel as far as *Gloucefter* and *Tewksbury* out of the Sea, for they are chiefly taken near those Places. They are fo fmall that they are made into Cakes, and are fold very common in that Form. Their Size does not exceed a fmall Needle, which makes it very furprifing how they fhould come fo far in fuch Shoals.



T HE Sand-Eel, in Latin Animalytes, is long and roundifu, and has fome Affinity with an Eel, as the Englife Name intimates. It feldom exceeds a Foot in length, and is of the fame Shape and Figure as the Gar-Fife, that is, the Back is Blue and the Sides and Belly Silver. The Lateral Line runs directly from the Head to the Tail. The Back is terminated on each fide by another Line, and on the Belly there are three others which reach as far as the Vent. It has no Scales; the Nofe is fharp, the Mouth wide and without Teeth; the Tongue is long and fharp, and the Tail is forked.

The Liver is pale, the Stomach long and conick. This Fifth is defititute of a Swimming-Bladder.

The *Flefb* has a delicate Taste, and is a very agreeable Bait for other Fish.

The Males are flort and thick, the Females long and flender; the former being more turgid with the Milt than the other with Spawn

They generally lie half a Foot under the Sand, and when the Tide is out the Fishermen dig them up with a fort of a Hook made for that Purpole.

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There

There feems to be two forts of Sand-Eels, one of which has but one Fin on the Back, and likewife wants the Belly-Fins. The Fins of the other are placed as in the Cut.



T H IS Fifh fometimes attains the Length of fix Inches, but never exceeds an Inch in Breadth. The Colour varies, fometimes it is reddifh, fometimes of a dark Olive, fometimes grean and white like a variable Silk. At the Root of the Back-Fin, on both fides, are tee or twelve beautiful, round, black Spots, encircled with a white Border. They are placed through the whole length of the Back at equal Diftances from the Head to the Tail; by these this Fifh is diffinguish'd from all others.

The Head is little, the Snewt short, the Mouth large, with one Row of Teeth; the Eyes small, of a reddilla Yellow, and cover'd with a Cuticle. The Body is caled with exceeding small Scales. The Tail is roundish.

This Fish is taken frequently on the Cornif Coaft; but of what Use it is does not appear.

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CHAP

CHAP. XIX.

Of the SEA-LARK or BULCARD.



THE Sea-Lark, in Latin Alauda non criftata, is call'd in Cornewall the Mulgranoc and Bulcard. The Colour on the Back is in fome of a dark Green or Olive; others are prettily painted with Streaks of a light Blue, and the Spaces between are Murray or Fillemot. But the Colour in most greatly varies. The Top of the Head rifes almost to an Edge; the Eyes are fmall and white, with a reddilh Cast, being cover'd with a Skin; the Mouth is not large; the Fore-Teeth are long, fmooth, and placed like the Teeth of a Comb; the Tongue is round, foft and fleshy; the Tail, when it is expanded, is circular.

The Liver is pale, the Spleen red, and the Air-Bladder adheres to the Back.

He lurks in the Holes and Cavities of Rocks, and often bites the Fishermens' Hands, but without any bad Confequence. He is to be met with every where in Rocky Places near the Shore.

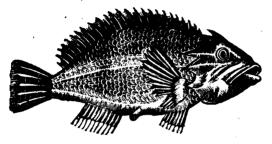


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CHAP.

CHAP. XX.

Of the FATHER-LASHER.



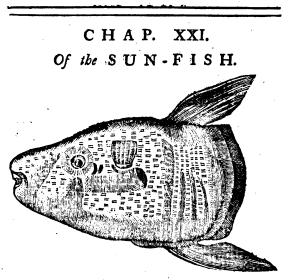
HIS Fish is call'd in Latin Scorpana, and when full-grown does not exceed nine Inches in length. It has fome Refemblance of a Miller's Thumb, the forepart being much larger in proportion than that towards the Tail. It has no Scales. The Belly is broad and flat; the Sides are divided in the middle by a rough Line; the Top of the Head is black, and there are three or four black Patches on the Back, but the Spaces between them are pale; the Sides beneath the Line are vellow; the Belly is white. There are feveral Prickles about the Head, and the Covers of the Gills uniting together underneath the Body cover the fore-part of it like a Mantle.

The Nostrils are small; the Mouth large, armed with feveral Rows of fmall Teetb; the Tongue is broad, large and fmooth; the Eyes are cover'd with a loofe transparent Membrane; the Pupils are fmall and encompais'd with a red Circle. When the Tail is foread it is fomewhat roundifh.

He feeds upon Shrimps, fmall Fifb, and Sea-Infects, as appears from opening the Stomach. He will live a long while-G3

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while out of the Water. He gain'd the Name of Father." Lafter from the Boys of Cornwall.



THE Sun-Fife, in Latin Mola, has a broad flort Body, the hind-part of which is cover'd with a Circular Fin, which ferves inflead of a Tail; fo that it feems to be the Head of a Fifh, or at most the Half of one with the Tail-part cut off. It fometimes weighs near a hundred Pounds. The ordinary Size is above two Foot long. He has no Scales, but his Skin is hard, thick and rough; he is blackish on the Back, and of a Silver Colour on the Belly; both the Belly and Back terminate in a sharp Ridge. The Mouth is very small for the Bigness of the Fish, and when open'd is roundish; the Jaws are hard, rough and sharp, as it were with feveral Rows of small Teetb; there are four Holes in the Head besides the Nosfirils, which last are placed between the the Eyes and the Mouth. The Eyes are finall, and of a Silver Colour near the Pupil, the other Part is of a dusky Yellow; it has no Tail, but has a Semicircular Fin in the room of it; near to which it feems to be bound with a Fillet, as in the Figure; in which the Situation of the Fine may also be feen.

The Liver and Gall-Bladder are large, and the Spleen fmall, foft and blackifh; the Urinary Paffage does not terminate in the Vent, but has a Paffage proper to itfelf beneath it; the Guts refemble those of Quadrupedes.

The *Fleft* is exceeding foft; the *Bones* are griftly, and foft likewife; the *Skin* adheres fo clofe to the Fleft that it is not to be feparated from it but with Difficulty.

It is call'd the Sun-Fife from the Roundness of its Body, or because it will fine in the Night: However this Quality does not belong to this Fifh alone, but to feveral others.

This Fish is taken both in the Mediterranean and in the Ocean; fometimes likewise near Penzance in Cornawall.



THE Hake, in Latin Merlucius, is a Fifh about half a Yard long, and fometimes more. It is fhaped fomething like a *Pike*, from whence it derives its Name, for Merlucius or Maris Lucius fignifies a Sea Pike.

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Willoughby

Willoughby compares it to a Whiting, a Fifh very well known, which it is most like both in Shape and Colour. The Back is of a light Colour; the Belly of a dirty White; the Scales are fmall, the Head broad and flat; the Mouth is large like a Pike's, and full of fharp Teeth; the Tongue is fmooth; the Ejes large, of a Gold Colour, and cover'd with a Membrane; the Tail is not forked, but terminates in a right Line.

The Liver is large, white, and undivided; the Stomach is long; the Gut has only one Fold; the Heart is included in a ftrong Pericardium; and the Ribs are remarkably broad, fhort and griftly.

He lives upon other Fifh. His Fleft is foft and tender.

They are caught in great Plenty about *Penzance*, a Maritime Town in the remoteft Part of *Cornwall*, and almost every where in the *Britifb* and *German* Oceans. The proper Time of Fishing for *Hake* at *Fifcard*, and other Places between *Wales* and *Ireland*, is from *Whitfontide* to St. James's-tide.



T HE Ling, in Latin Afellus longus, has a Body in Shape long and round, cover'd with fmall Scales that flick close to it. The Back and Sides of fome are Olive, of others Afb-colour'd or Grey. In flort this Fifh is very like a Hake in all things except in its being of a larger Size, of a longer Make, in having a round Tail, in the length of the Back-Fins, and in having a Barb on the lower Jaw; likewise the upper Jaw is longer longer than the under, the contrary of which takes place in a Hake.

The Flefh of a Ling when just caught is very delicious, and when falted and dried is justly prefer'd before all other Salt-Fifh.

It is frequently taken near *Penzance*, and may be fish'd for among the Islands of *Scotland* all the Year. On the North-East of *England* it may be taken from *Easter* 'till *Midjummer*, and on the North-East of *Ireland* from *Christmas* to *Michaelmas*.



THE Tunny, in Latin Thunnus, is a large heavy Fifh, fometimes weighing upwards of a hundred Pounds. His Body is round, long and thick, but towards the Tail remarkably finall; the Back is of a very dark Colour, and appears to have either a blue or a greenifh Caft, according to the Light it is plac'd in. The Scales are exceeding finall, the Snout fharp, the Jaws equal and furnifh'd only with one Row of Teeth; the Mouth is large, the Tongue broad, and on the Palate there is a Tubercle of finall Teeth; the Eyes are pretty large, and of a Silver Colour.

The Stomach is round and long, reaching almost to the Vent; the Liver is divided into three Lobes; the Spleen is red, large and long; the Heart is triangular.

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The

The Tunny is a Fifh of Paffage, that is, rambles from one Part of the Sea to another at a confiderable diffance. In the Months of September and October they leave the Ocean, and pais through the Straights of Gibraltar into the Mediterranean Sea towards the Levant; they fwim in Shoals, and are often taken on the Coaft of Cornwall with their Stomachs full of Pilcbards.

Both the Ancients and the Moderns feem to think that their Place of Spawning is in the *Euxine Sea*, and that they traverse the *Mediterranean* for that purpose.

The Time of Fifhing begins in September; they are caught by a Contrivance made of fmath Cane, which the French call Madrague; fome of these are faid to be a Mile in compass. They are divided into feveral Partitions, and the Fifh having enter'd the large ones; are drove from thence into the fmaller; for they are like Sheep, if one leads the way all the reft will follow. The inmost Partition of all is of a closer Contexture than the reft, and it is floor'd as it were with a Net: When they take out the Fifh they draw it fo near the Shore that the Bottom may be within five Foot of the Surface of the Water, and then the Fifhermen leap into it as into a Fifh-Pond; they lay hold of the Fifhby the fmall Part of their Tails and throw them into the Boats, where they immediately die.

When they are brought to Land they hang them up in the Air; then they cut off their Heads, take out their Entrails, and having cut their Bodies to Pieces they broil them on large Gridirons, and fry them with Oil-Olive: After this they feafon them with Salt, Pepper and Cloves, and a few Bay-Leaves; then they put them into Barrels with fresh Oil-Olive and a little Vinegar; and in this manner they are transported, ready to eat, into different Parts of *Europe* by the Name of *Sea-Tunny*.

The *Flefb* of this Fifh is not very delicate, but very useful: When it is cook'd in the foregoing manner, and done

done with good Oil, it is as firm and white as Veal, and eats pretty much like it: In the Opinion of many it has an excellent Tafte, and yields a good Juice.



THE Albicore is about four or five Foot in length, fometimes more, and when largeft weighs about 150 Pounds: It has large yellow Eyes, a broad forked Tail of a greenish Yellow; the Belly-Fins are likewise yellow; the Belly is white, and when just taken finines like Silver.

This Fifh will follow Ships for many hundred Leagues, and often proves a very feafonable Relief to the Crews when Provisions are flort. It is either caught with a Hook or flruck with a *Fizgig*. It is a flrong Fifh when in the Water. They live chiefly upon. Flying-Fife.

It is a very flefhy Fifh, having few or no Bones except the Back-bone, and is accounted a very good Fiffn by Sea-faring Men. All agree that it is well-tafted, and not unwholefome.

The Albicore generally keeps company with another call'd a Bonettoe, but not the fame Bonettoe which in Cornwall is term'd the Scad, of which we fhall treat hereafter. It is about three Foot long, and two in Circumference. It has a fharp Head; a fmall Mouth, large-Gills.

Gills, a full Silver Eye, and a Tail like a Half-Moon. It has no Scales except on the middle of the Sides, where there is a Line of a Gold Colour which runs from the Head to the Tail; on this Line are placed a double Row of Scales which are fmooth two thirds of the Length of it, and then begin to be rough 'till they reach the Tail. The Colour of the Bonettae is greenish on the Back and Sides, but on the Belly it fhines like Silver. It has feven Fins, two on the Back, two at the Gills, a Pair on the Belly just below the Gills, and one in the middle of the Belly opposite to the largest on the Back. From the last on the Back, proceeds a small narrow one which reaches to the Tail, and another reaches from the last on the Belly to the Tail in like manner. These, by fome unskilful Navigators have been divided into ten or twelve Fins each.

Roth these Fish are well known to all Sailors who have cross'd the Equinoctial Line; and they refemble each other in their Shape, Colour, and in the Number of their Fins. But the Bonettoe is thought to be the finest Eating by much: It is taken in the same manner as the Albicore.



T H E Mackrel, in Latin Scomber, is generally a Foot, and fometimes a Foot and a half long. The Body is long, round, thick and flefty, but towards the Tail very flender and fmall. It is not entirely void of Scales, but they are very thin and little. Underneath the

the Lines that divide the Sides in the middle it is of a bright Silver Colour, and above them of a bluifh Green; from the Back towards the Sides proceed feveral dark Streaks, which by diverfifying the Colour contribute greatly to the Beauty of the Fifh. The Tail is fo very forked that it feems almost to be parted into two diffinct Fins. The Jaws are equal in length, and furnish'd with small Teeth. The Eyes are large, the Tongue sharp, and the Nostrils small and round.

The Heart is triangular, the Spleen blackifh, and the Liver red and undivided. It has no Swimming-Bladder.

It is a Fish of Prey, and exceeding voracious; there are often found small Fish in its Belly.

Mackrel are found in large Shoals in divers Parts of the Ocean, but efpecially on the Coafts of France and England. They enter the English Channel in April, and take their Courfe thro' the Straights of Dover, infomuch that in June they advance as far as Cornnvall, Suffex, Normandy and Picardy.

They are taken either with the Angle or with Nets. When they are Angled for it must be out of a Boat, Smack, or Ship that lies at Anchor. The beft Bait for them is a Bit of a Herring put upon a ftrong Hook; but when this is wanting, a Shrimp, or a Bit of any other Fifh will do, or even a Piece of Scarlet Cloth; for they bite fo freely there is no danger of not having Sport; when you have taken one their own Flefh will ferve for a Bait. There is no occasion to be curious about your Tackle, for you may even fifh without a Rod, and with feveral Hooks at a time.

In the Weft of *England* they fifh for them with Nets, near the Shore in the following manner. One Man fixes a Pole into the Sand near the Sea, to which he makes faft one End of a long Net. Another in a Boat takes the other End of the Net in his Boat and rows round in a Circuit as far as the length of the Net will permit, and then back towards the Shore; when his Boat is a-ground he fteps into the Water, and taking the

the Cord of the Net with him drags the Net towards the Shore; then, upon a Sighal given, both the Men draw the Net out of the Sea, and by this Method often catch three or four hundred Fifh; they are immediately carried away by Horfes which wait for that purpole. The Quantity of *Machrel* taken upon that Coaft fometimes is almost incredible; and then they are fo cheap they are not worth carrying away.

The Flefs of a Mackrel is very good when fresh, especially if they are dreft when just taken out of the Water; and there is such a Difference between them and those that are brought to London, that it is not to be conceived by any that have not try'd. However they are not to be despised even when they are well cured by Pickling, and put up into Barrels.

There are two ways of *Pickling* them; the first is by opening and gutting them, and filling their Bellies with Sah, cramming it as hard in as possible with a Stick; which done they range them in *Strata* or Rows, at the Bottom of the Vessel, strewing Salt between the Layers.

In the fecond Way they put them immediately into Tubs of Brine made of fresh Water and Salt, and let them steep so long 'till they think they have imbibed Salt enough to make them keep; after this they take them out and barrel them up, taking care to press them down close.



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CHAP.

CHAP. XXVII.

Of the SEA-GUDGEON or ROCK-FISH:



THE Sea-Gudgeon, in Latin Gobius niger, is a flender roundifh Fifh, about fix Inches long, and fometimes more. The Colour is a light Blue, mix'd with Olive and fpotted with Black. They have likewife transverse Streaks of an Olive Colour which are pretty broad, and look agreeable enough. The Tail, which is circular when fpread, and the Back-Fins are of a pale Blue. The Covers of the Gill's and the Belly are yellowifh. The Eyes are fmall, yellow, and pretty near each other, looking upwards. The Head and Mouth are large, the Jaws furnished with a double Row of Teeth. The Pair of Belly-Fing coalefce on the Edges in fuch a manner that when they are difplay'd they represent a Funnel; with these he fastens himself to the Rocks, whence by some he is call'd the Rock-Fifb.

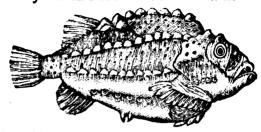
The Liver is pale and undivided; the Stomach wide, long, and reaches to the very Vent; the Spleen is finall, the Gall-Bladder round; the Air-Bladder flender, transparent, and not separated into Lobes.

It is a foft flippery Fifth; it is Scaly indeed, but the Scales are very fmall. It is always to be met with in the Fifth-Markets of Venice, and is taken near the Shore. or in Ponds made by the Sea-Water. The Fleff is fatand tender, and in very great Efteem.

CHAP.

CHAP. XXVIII.

Of the LUMP or SEA-OWL.



THE Lump, in Latin Lumpus Anglorum, is about a Foot or a Foot and a half long, and is a thick deform'd Fifh, as the Name implies. The Belly is broad and red, the Back is narrow, the Body without Scales, but there are black sharp Tubercles on all Parts of the Skin. On each Side there are three Rows of crooked Prickles; the first begins near the Eye and ends at the Tail, the second begins at the Gills and confifts of about fixteen Prickles, the lowermost Row upon the Belly has five Prickles only; there is likewife a Row upon the Back confifting of eight; but from this, as well as the reft, there is fome-The Mouth is like that of the Surtimes a Variation. Fift, but larger, being three Inches broad from Corner to Corner. The Lips are fat and thick, and the Jaws full of Teetb.

The Belly Fins are contrived like those of a Sea-Guageon, by which means he can fix himself at the Bottom, or adhere to the Sides of Rocks at Pleasure. The Nostrils are Tubes or Pipes which rise above the Skin in the same manner as those in a Cuckow.

The Liver is large and undivided; the Stomach, Spermatick Veffels and Kidneys are likewife large; but it has neither Gall-Bladder nor Air-Bladder.

It

SEA-FISH. 137

It is a very common Fifh, and frequently feen in the Markets, but the Flefh is in no great Efferm.



THE Pogge, in Latin Catapbractus, is about two Hands breadth in Length. The Head is but two Inches broad at the most, each Side of which is full of Warts or Tubercles, which render it a very difagreeable Sight. On the fore-part, about the Mouth, are a great many small Briftles, and the Hind-part is arm'd with Prickles which bend backwards.

The Snout turns up very remarkably, being defended by four Thorns, the foremost Pair of which are in Figure like a Half-Moon. The Mouth is small, and Semicircular, and the Chin, if it may be fo call'd, is bearded with Briftles. The Trunk of the Body is Odangular, but near the Tail Sexangular. The Back is Brown spotted with Black. The Belly white, in the middle of which is the Vent.

The Pogge is cover'd with Boney Scales, in the middle whereof a crooked Tubercle is erected, which being continued to the reft renders the Body Angular. It has no Teetb, but the Lips are rough like a File.

This Fifh is frequently taken in *York/bire* and the Bifhoprick of *Durbam*. It is accounted a delicious Morfel when the Head is taken off, and the Body divested of its

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its Armour. It feeds upon Sbrimps and Fish of the minutest Kind.



THE Cod, in Latin *Mellus major vulgaris*, is a Fifh of about three Foot long or upwards; those that are fmall are call'd *Codlings*. It has different Names from the different Places where it is taken, and from the different manner of curing it: Hence it is call'd Green-Fifh, Iceland Fifh, Aberdeen-Fifh, North-Sea-Cod, Stock-Fifh, Poor John, and Barrell'd-Cod.

It is a thick found Fifth, with a large Head and a prominent Belly. It is brown on the Back, white underneath, and is full of yellow Spots. The Scales are Imall and flick clofe to the Skin; the Eyes are large, and cover'd with a loofe transparent Skin; on the lower Jaw is a Barb of about an Inch long; the Tongue it broad, round, for and imooth; there are feveral Rows of Teeth in the Jaws, one of which is longer than the reft. There are likewife Teeth on the Palate and in the Throat.

The Stomach is large and is often found full of fmall Fish, particularly Herrings; the Liver is large and divided into three Lobes; the Gall-Bladder is large; the Kidneys run all the length of the Back; the Swimming-Bladder is thick, firong, and connected to the Back, and is by most People call'd the Sound. The Flefth is exceeding good, and highly effected. It is greatly in use as well fresh as falted; and in *Lent* it goes by the general Name of *Salt-Fifth*. The Head of a large *Cod* is thought, by those who are Judges of nice Eating, to be a most excellent Dish.

Fre/b Cod, that is Cod for prefent use, is caught every where on the Coast of Great-Britain; but there are particular Times of Fishing in particular Places, because they are then found in great Plenty. Thus from Easter to Whitfontide is the best Season at Alanby, Workington, and Whitebawen on the Coasts of Lancashire and Cumberland: On the West Part of Ireland from the Beginning of April to the Beginning of June: On the North and North-East of Ireland from Christmas to Michaelmas: And on the North-East of England from Easter 'till Midsummer.

But the chief Support of the Cod-Fiftery are the Banks of Newfoundland, which are a kind of fubmarine Mountains, one of which, call'd the Great Bank, is four hundred and fifty Miles long, and an hundred broad, and feventy-five from Newfoundland. The beft, largeft and fatteft Cod are those taken on the Southfide of the Bank; those on the North-fide are much finaller.

The best Season for fishing for them is from the Beginning of *February* to the End of *April*, at which time the Fish, which had retired during the Winter to the deepest Parts of the Sea, return to the Bank and grow very fat.

Those that are taken from March to July keep well enough; but those in July, August and September, soon spoil. The Fishing is sometimes done in a Month or fix Weeks, sometimes it holds fix Months.

When Lent begins to draw near, the' the Fishermen have caught but half their Cargo, yet they will hasten homewards because the Markets are best at that time; and fome will make a second Voyage before others have got a sufficient Cargo for the suff.

Each

Each Fisher can take but one at a time, and yet the most expert will catch from 350 to 400 in a Day. They are all taken with a Hook and Line baited with the Entrails of other *Cod*, except the first. This is very fatiguing, both on account of the Heaviness of the Fish and the Coldness of the Weather; for tho' the *Great Bank* lies from 41 to 42 Degrees of Latitude, yet the Weather, in the Season of Fishing, is very servere.

The ufual Salary allowed to the Captain and Sailors is one Third of the Cod that they bring home found.

They falt the Cod on board the Ship in the following manner: They cut off the Head, open the Belly, and take out the Guts; then the Salter ranges them fide by fide at the bottom of the Veffel, and Head to Tail, a Fathom or two fquare: When one Layer is compleat he covers it with Salt, and then lays on another which he covers as before; and thus he difpofes of all the Fifh caught in the fame Day, for Care is taken not to mix those of different Days together. After the Cod has lain thus three or four Days, they are removed into another Part of the Veffel and falted afrefh; and then it is fuffer'd to lie 'till the Veffel has its Burthen. Sometimes they are put into Barrels for the Conveniency of Carriage.

The principal Place for Fifhing for Cod which is defign'd to be dry'd, is along the Coaft of Placentia in Newfoundland, from Cape Race to the Bay of Experts, within which Limits there are feveral commodious Ports for the Fifh to be dried in.

In this Fifhing Veffels of all Sizes are used, but those are most proper which have large Holds, because the Fish have not a Weight proportionable to the Room they take up.

The *Time* of Fifhing is in the Summer-Seafon for the Conveniency of drying the Fifh in the Sun: On which account *European* Veffels are obliged to fet out in *March* or *April*: For as for those that begin their Voyage

Voyage in June or July, their Defign is only to purchafe Cod that are already caught and prepared by the Inhabitants of the English Colonies of Newfoundland and the neighbouring Parts; in Exchange for which we carry them Meal, Brandy, Linnen, Moloffus, Bifcuits, &cc.

The Fifh which they choose for Drying is of a fmaller Sort, which is the fitter for their Purpole because the Salt takes more hold of it.

When the Fishing-Vessel arrive in any particular Port, he who touches Ground first is intitled to the Quality and Privileges of Admiral, has the Choice of his Station, and the Refusal of all the Wood on the Coast.

As faft as they arrive they unrigg all their Veffels, leaving nothing but the Shrouds to fuftain the Mafts; in the mean time the Mates provide a Tent on Shore, cover'd with Branches of Fir, and Sails over them, with a Scaffold 50 or 60 Foot long, and zo broad: While the Scaffold is building the Crew apply themfelves to Fifting, and as faft as they catch any Fifth they open them and falt them on moveable Benches; but the main Salting is perform'd on the Scaffold.

When the Fifh has taken Salt they wash them, and lay them in Piles on the Galleries of the Scaffold to drain; after this they range them on Hurdles only a Fifh thick, Head against Tail, with the Back uppermost. While they lie thus they take care to turn and shift them four times in every twenty-four Hours.

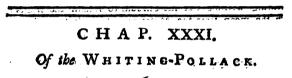
When they begin to dry they lay them in Heaps, ten or twelve apiece, to retain their Warmth, and continue to enlarge the Heap every Day 'till it is double its first Bulk; at length they join two of these Heaps into one, which they continue to turn every Day as before, and when they are thorough dry they lay them in huge Piles as large as Hay-Stacks.

Befides

Befides the Body of the Fifh, there are the Tripes and Tangues, which are falted at the fame time with the Fifh and barrell'd up. Likewife the Roes, being falted and barrell'd up, are of Service to throw into the Sea to draw Fifh together, particularly Pilchards. The Oil is used for dreffing Leather and other Purpoles in the fame manner as Train-Oil.

When Cod leave the Banks of Newfoundland they go in pursuit of Whitings, and it is owing to this that the Return of the Whitings is frequent on our Coaft.

On the Coafts of Buchan the Scots catch a fmall kind of a Cod which is highly prized; they falt it, and dry it in the Sun upon the Rocks, and fometimes in the Chimney; but the greatest Part of it is spent at, home.





T HIS Fifh is the Afellus wirefcens of Scowfield, and has the English Name of Whiting-Pollack beflow'd upon it from its Likenefs to a Whiting. However it is larger, proportionably broader and not quite fo thick. The Back is blackifh, or of a dirty Green; the Sides beneath the Lateral Lines are varioufly flreak'd with a dusky Yellow; the Body is Scaly, but the Scales are very fmall.

The Mouth is large and the Teeth fmall; the Tongue is fharp at the Point; the Eyes of a Silver Colour and 'large; large; the lower Jaw is a little more prominent than the upper,

The Liver is pale and divided into three Lobes; the Spleen is triangular, oblong and of a blackifh Colour; the Air-Bladder is thick, and connected to the Ribs.

He lives upon Fish, particularly Sand-Eels.

He differs from a *Cod* in Magnitude, not being much above fifteen Inches long, and four broad; in having a proportionably lefs Head, a broader and thinner Body; in having no *Barb*, and in the Belly-Fins being much lefs.

He is frequently taken near *Penzance* and St. *Ives* in *Cornwall*; and is likewife often caught in *Rock-Fifting*. He ftruggles hard for his Life, and yields the Angler good Diverfion.

Proper Baits in Rock-Fifting are a live Sprimp, a Cockle, a Periwinkle, a Lob-worm, a Mar/b-worm, and a Hairy Worm that is found under the Sand at the Tide of Ebb.

This laft, as it is the most natural, fo it is the most fuccesful Bait; besides it has this Advantage, that it needs no Scouring as other Worms do. They must be dug for on that Part of the Shore that is half Mud and half Sand. When full grown they are near four Inches long, and are of a pale Flesh-colour; for Shape they refemble an *Ear-wig*.

If you fifh out of a Boat or Smack you will need no Rod, and your Line may be fixty Yards long, with three or four Hooks one above another, and baited with different Baits. Some Inches above the higheft Hook must be fixed about half a Pound of Lead. When you fifh you must quoil your Line in feveral Rings in your left Hand, and holding your Lead in the Right throw it as far into the Sea as you can, taking care to hold the Loop of your Line fast in your Hand, left you loofe it.

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The best time for Sea-fishing is in warm Weather, and early in the Morning, or after Sun-set, provided the Tide has been ebbing near an Hour.

Some in this kind of Fishing choose to place themfelves under the Covert of a Rock, where they shelter themselves and fit secure from the Inclemencies of the Wind and Weather, and this in a proper Sense may be called *Rock-Fishing*. In this Case a Rod is necessary, as likewise a Float. It is common to use two Hooks, one to lie at the Bottom, and one to hang about Mid-water; and if a little mischievous Fish, call'd a *Miller's-Thumb*, should happen to carry your Bait into the Clefts of the Rocks, you must have Patience 'till he thinks proper to come abroad, for there is no dealing with him by Force.

The Flefh of a Whiting-Pollack is well-tafted, nourifaing and flaky, like that of a Cod.

CHAP. XXXII.

Of the COAL-FISH or RAWLIN-POLLACK.



T H E Coal Fifb, in Latin Afollus niger, is very like the former, only the Lateral Lines are white, broad, and not fo crooked, by which Mark the Fifbermen diftinguish it from the Whiting-Pollack. Befides, the Colour is more black, lively, and fhining; likewife all the Fins are of a blackish Blue, the Scales less, and the Fyes larger and more protuberant. In a Cod the upper Jaw is a little longer than the lower, but the direct contrary obtains in this, the under Jaw being longer than than the upper; the Cod has a Barb hanging at his Civin, but this Fish has none; likewise the Tail of this is more forked than that of a Cod.

They are taken on the Coaft of Northumberland and York/hire, and are call'd Coal-Fills from the Black Colour of their Back and Head. The young ones of this Kind are called Billards, Pollards, and Rock-Whitings.

Some reckon this Fifh to be better than a Haddock, and inferior to a Whiting or a Cod; and it is confequently fold at a cheaper Rate than the latter.

There is another Fish of this Kind which the Cornif call a Bib, or Blinds, which grows to about the length of a Foot, and is rather of a broadish Make than thick and round. On the Back it is of a light Olive or dirty Yellow, and on the Belly of a Silver Colour. Its Scales are twice as large as those of a Cods and at the End of the lower Jaw there is a Barb of half an Inch long, and fometimes an Inch.

A Bib may be diftinguish'd from a Cod by its Size, which is fmaller; by its Shape, which is shorter and broader; and by the Bigness of its Scales, as was before mention'd.



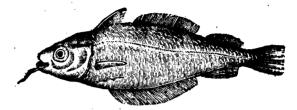
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CHAP. XXXIII.

Of the WHITING - POUT.



THE Whiting-Pout, in Latin Afellus mollis latus, is remarkably broad in proportion to its Length, by which it is diffinguifh'd from all other Fifh of this Kind. The Edges of the Tail and Fins are black.

The Size of this Fifh is generally about eleven Inches long, and three and a half broad. It has fmall Scales, and is of a Silver Colour on the Body like a Whiting. It has also a fmaller Mouth than other Fifh of this Kind.

The young Fifh of this Sort are call'd by the Londoners, Whiting-Mops, and are expos'd to Sale in great Plenty in October.



CHAP.



A N Haddock, in Latin Afinus, has the Appellation of Afellus tertius by Rondeletius. It is of a middle Size between a Cod and a Whiting. This Fifth is blackifth on the Back, and is cover'd with fmall Scales. From the upper Corner of the Gills to the Tail there runs a Black Line; and on the middle of both Sides, not far from the Gills, is a large Black Spot, which they fay is a Mark made by the Finger and Thumb of St. Peter, that he might diftinguift this Fifth from others, as being very much to his Liking. The fame Monkifh Fable is told of another Fifth call'd the Pipter.

The Eyes are large; and there is a Barb on the lower aw about an Inch long. The Tail is forked. In other hings it refembles a Cod.

Some reckon this to be but a coarfe Fifh, and apt to caufe Fevers; but that chiefly happens when it is aken in Seas that are fhallow and muddy, as about *Friefland*: But where the Seas are deep and the Water lear this Fifh is wholefome enough, and the Tafte is at from being defpicable.



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CHAP.

C H A P. XXXV.

Of the WHITING.



THE Whiting, in Latin Afellus mollis major, fea albus, is one of the fmalleft of this kind of Fifh, it being feldom met with above a Foot in length. It is a flender Fifh for the Size, efpecially towards the Tail, for about the Head the Make is confiderably farger. The Belly is white, and the Back much whiter than in any other of this Sort, from whence it derives the Name of Whiting. The Fins below the Vent are fpeckled with Black. It has no Barb. The Scales are fmall; the Eyes large, and cover'd with a transparent loose Skin; the under Jaw is longer than the upper, infomuch that when the Mouth is flut the long crooked Teeth fland out of it; but those within the Mouth are fmall.

The *Liver* is white, having the left Lobe of it very long, and neaching to the bottom of the *Abdomen*. The *Stomach* is large, and often furnish'd with Bones, as is suppos'd, of small Fish.

The *Flefb* is fweet, tender, and in universal Esteem. In fome Parts of *England* and *Holland* they take out the Guts of these Fish, and then dry them, by which means they may be kept a confiderable time. They eat pretty enough.

There is another fort of *Whiting* not above feven Inches long, which is very common in the *Mediterranean* Sea, and is call'd by the *Venetians*, *Mollo*, but by the People of *Marfeilles*, *Capelan*. It is doubted by by fome whether they are found in the Ocean or not; and yet it is probable that this is the fame Fifh which our Countrymen corruptly call *Capeling*, and which they catch upon the *American* Coaft for a Bait in *Cod-Fi/bing*. It is of a darker Colour than a common *Whiting*, and has a *Barb* at its Nofe like a *Cod*. The *Fle/b* is very foft, tender and nourifhing.

The Fifting for *Whitings* in a Boat or Smack is diverting enough, because they bite very freely, and require no very nice Tackle to catch them. You may know where to cast Anchor by the Sea-Gulls, for they never fail to hover over the Place where the *Whitings* lie, and if they feem to dip into the Water every now and then you are fure not to lose your Labour.

The beft Bait is the Hairy-Worm, but if that is not to be got a Lob or Mar/b-worm will ferve. You need not use any Rod, but a Pater-Nofter Line, with half a dozen Hooks half a Yard distant from each other. The Line may be fasten'd to the Infide of the Boat, by which means you will have but little Trouble, except in drawing up your Fish and putting on fresh Baits. The Time of waiting before you examine your Hooks need not be long, for they are a very greedy Fish.



THE Herring, in Latin Harengus, is a well-known Fifh of nine Inches or a Foot in length. It is H 3 com-

commonly thought to be the *Halec* of the Ancients, which is a great Miftake, for *Halec* is not the Name of any fort of Fifh, but only of a Sauce to Salt Fifh in general.

That which diftinguishes this kind of Fish from all others, is a *Scaly Line* that runs along the middle of the Belly from the Head to the Tail. The *Colour* of the Belly and Sides is of a shining Silver, and the *Scales* are harge and easily come off.

A Herring has no Spots, the Belly is sharp like a Wedge; the Eyes red; the lower Jaw a little longer than the upper, and full of *Teeth*, as are the *Palate* and *Tengue*; the *Tail* is forked.

The Swimming-Bladder is of a Silver Colour, and runs the whole length of the Belly; the Spleen is red, the Gall-Bladder large, the Gut runs directly from the Stomach to the Vent.

A Herring dies immediately after it is taken out of the Water, whence the Proverb arifes, As dead as a Herring. The Flefh is every where in Efteem, being fat, foft and delicate, especially if dress'd as soon as taken. That it is a Fish every where in Efteem, appears from the vast Quantities that are taken and consum'd, as well falted, dry'd and pickled, as fresh.

It was a Quefion formerly whether *Herrings* fed upon any thing befides Water, but *Lewenboeck* has made it evident that they come every Year in Purfuit of Worms and fmall Fifh, which at the time of their Arrival abound in the *Channel*; for when they have clear'd the Northern Seas of their Stock of Provisions, then they travel Southward in fearch of a frefh Supply. Their most conftant Abode feems to be in the Seas between the North of *Scotland*, *Norway* and *Denmark*, from whence they make annual Excursions through the *Britifb* Channel as far as the Coaft of *Normandy*.

The Dutch begin their Herring-Fiftery on the fourteenth of June, and employ no lefs than a thousand Veffels therein. These Vessels are a kind of Barks, called Buffer,

Buffes, carrying from forty-five to fixty Tun, and two or three finall Cannon.

None of them are allow'd to ftir out of Port without a Convoy, unlefs they carry twenty Pieces of Cannon among them all, in which Cafe they are permitted to go in Confort. Before they fet out they make a Verbal Agreement, which has the fame Force as if it was in Writing.

The Regulations of the Admiralty of Holland are in a great measure follow'd by the French, and other Nations: The principal are, That no Fisher shall cast his Net within a hundred Fathom of another's Boat: That while the Nets are cast a Light shall be kept on the hind Part of the Vessel: That when a Boat is by any Accident obliged to leave off Fishing, the Light shall be cast into the Sea: Likewise that when the greater Part of the Fleet leaves Fishing, and casts Anchor, the rest mall be oblig'd to do the same.

The beft Times of Fifhing on the Coaft of Norfolk and Suffolk, near Yarmouth, Leftoffe and Southwold, are from the middle of September 'till the middle of October. The Nets that they use are about five Yards deep, and twenty-five Yards long: They fometimes fasten fo many of these Nets together as will take in a Mile in compass.

They judge whereabout the *Herrings* lie by the Hovering and Motion of the Sea-Birds, which continually purfue them in Expectation of Prey. The Fifhers, as they row gently along, let their Nets fall into the Sea, taking their courfe as nearly as they can againft the Tide, that fo when they draw their Nets they may have the Affiftance of the Tide. As foon as any Boat has got its Load it makes to the Shore, and delivers the *Herrings* to the Man who is to wafh and gut them.

They diffinguish their *Herrings* into fix different Sorts, as the *Fat Herring*, which is the largest and thickest of all, and will keep about two or three Months; the *Meat-Herring*, which is likewise large, but not so thick

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nor fo fat as the former; the Night-Herring, which is of a middle Size; the Pluck, which has received fome Damage from the Nets; the Shotten-Herring, which has loft its Milt or Spawn; and the Cop/ben, which by fome Accident or other has been depriv'd of its Head.

All these Sorts of Herrings are put into a Tub with Salt or Brine, where they lie for twenty-four Hours; then they are taken out and put into Wicker-Baskets, and wash'd; after this they are spitted on small wooden Spits, and hung up in a Chimney built for that purpofe. at fuch Diftances that the Smoak may have free Access to them all. When they have fill'd thefe Places, which will hold ten or twelve thousand, they kindle the Billets which are laid on the Floor in order to dry them; this done they flut the Doors, all other Air-Holes being ftopt before, and immediately the Place is fill'd with Smoak. This is repeated every Quarter of an Hour, infomuch that a fingle Last of Herrings require five hundred Billets to dry them. A Last is ten Barrels, each Barrel containing near a thousand Herrines. These, thus prepar'd and dry'd, are call'd Red-Herrings.

The Pickled Herrings are best done by the Dutch, who take them for that Purpole about the Summer Solflice. The usual Method of Pickling them is this: As foon as the Herrings are taken out of the Sea they are gutted and wash'd; then they are put into a strong Brine made with Water and Sea-Salt for fifteen Hours; after this they are taken out and well drain'd, and put in a regular Order into Barrels, with a Layer of Salt at the Bottom of the Barrel, and another at the Top. They then take care to flop them up carefully that no Air may get in nor Brine out, either of which would be prejudicial to the Fifh.

Herrings always fiim in Shoals, delighting to be near the Shore. They Spawn but once a Year, and that is about the Autumnal Equinox, a little before which, like most other Fish, they are highest in Season.

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CHAP. XXXVII.

Of the SPRAT or SPARLING.



A Sprat is fo like a Herring in every Particular, that after the most diligent Examination, the best Authors have concluded that there is no difference between them but in their Age.

They are taken annually in great Plenty about the Winter-Solflice, and, as it is well known, are not fold by Number or Weight, but Measure, at a very low Price. An old Cornif Fisherman, who was consulted in this Affair, declar'd that there are two kinds of Sprats usually met with upon that Coast, one of which is young Pilchards, and the other young Herrings, which may be easily diffinguish'd from each other: That the Pilchard Kind travel no farther Eastward than Devonfbire and Cornwall; whereas the other are to be met with every where.

In Rotherston, or Rostern-Meer in Cheshire, there are Sprats taken annually for ten Days about Eafter, which are not to be diffinguish'd in any manner from Sea-Sprats, being of the fame Colour, Shape and Tafte. Likewife at the fame time that they are taken in the Meer, they are also caught in the River Mer/ey below Warrington-Bridge, where the Tide brings up the Salt-Water, which Place is about feven or eight Miles from the Meer. But the most remarkable Circumstance relating to the Affair is this, That tho' there is a Rivulet runs thro' the Meer into the River Merley, and though there are feveral Weirs between the Lake and the River, yet no Sprats have been ever caught or feen between those two Places; therefore the Question is, how they Ης

they can get out of the River into the Lake? If they do come from thence it must be by means of a Flood, and even then they must reject two or three other Rivers that run into the Merley for the fake of this Lake; for there are no Sprats found in the Bullen or Berken, which are join'd by the Rivulet that runs thro' the Meer before they reach the Mer/ey. There is, indeed, a parallel Instance in the fame Neighbourhood in favour of this Opinion, there being two Rivers, the Weever and the Dane, which meet at Northwich, and yet Salmon, when they come out of the Sea, always enter the Dane, and never visit the Weever. But tho' this is allow'd to be the Cafe of the Sprats, yet what Reason can be affign'd that none are ever taken at the Weirs, fince they must necessarily pass thro' them once a Year? Some, who are aware of this Difficulty, fuppose they were first carry'd into the Lake by an extraordinary Inundation, and have bred there ever fince, only, like the Char, making their Appearance at the Time of Spawning. But if we grant this Supposition it may be fill ask'd, Why they are never taken of a larger Size, fince a Sprat is nothing but a young Herring? In short the Difficulties on both fides are fo great that we must leave this Matter undetermin'd.

CHAP. XXXVIII. Of the PILCHARD.

THE Pilebard, in Latin Harengus minor fou Pilchardus, is never above nine Inches long, and is fomewhat of a thicker Make than a Herring. The Each is of a bluich Green, the Belly and Sides of a Silver ver Colour; near the upper Corner of the Gills on both Sides there are black Spots, and in fome there are four or five placed in a right Line towards the Tail. The *Month* is wide, but there are no *Teeth* either in the Tongue, Palate or Jaws. The *Eyes* are of a middle Size and of a Silver Colour, with a little Tincture of Red. In most other things it refembles a *Herring*.

The *Flefb* eats admirably well, and is more firm and delicate than that of a *Herring*; and befides, its falutary Properties are no way inferior to its Tafte.

The Pilchard is a Fifh of Paffage, and fwims in Shoals in the fame manner as the Herring and Anchory. The chief Fifheries are along the Coaft of Dalmatia, to the South of the Ifland of Ifea; on the Coafts of Bretagne from Bell-Ifle as far as Breft, and along the Coafts of Cornwall and Devonfbire. That on the Coaft of Dalmatia is fo plentiful that it not only furnishes all Greece, but a great Part of Italy. That on the Coaft of Bretague employs yearly above three thousand Sloops, and most of the Seamen of the Country.

The Pilchards taught on our own Coafts are not fo much valued, though bigger, as those on the Coaft of France, which is owing to their not being fo well cured.

The Seafon of Fifthing is from June to September ; tho' fometimes they are caught on the Coaft of Cornwall at Christmas.

Near France they use the Row of Cod-Fifb as Baits, which thrown into the Sea makes them rise from the Bottom, and run into Nets placed for that purpose.

The *Pilcbards* naturally follow Light; and for that Reafon will gather about a Boat which carries a Light in the Night-time, which renders the Fifhery much more expeditious and eafy.

On the Coafts of Devonshire and Cornevall they fet Men to watch on the Tops of Mountains and Cliffs, whom they call Huers, who are able to difcover when a Shoal of Pilchards are coming by the Blacknefs or Furple colour of the Water, and in the Night by its fhining.

thining. • When the Huers perceive by these Marks where the Fish are they direct the Boats and Veffels, by Signs before agreed upon, how to manage their Nets, which they call Saines, by which Means they often take at one Draught a hundred thousand Pikbards and upwards.

They lay the *Pilchards* in a Heap in a Warehoufe upon the Ground, placing one Layer upon another with a fufficient Quantity of Salt between each; thus they go on laying, *firatum fuper firatum*, as the Chymifts fpeak, 'till they are an Ell and a half high; after they have remain'd fifteen or eighteen Days in this manner, and are thoroughly falted, they take them out and thruft wooden Spits through their *Gills*, that they may wash them with greater Ease. After they have been wash'd twice they put them into Barrels, and prefs them down with heavy Weights, which force out a great Quantity of Oil ferviceable for many Purposes; then they fill the Barrels up again, and fell them to the Merchants. This Fishery yields great Profit to the People in those Parts.



T HE Anchorvy, in Latin Encraficholus, is a fmall Fifh about as thick and as long as ones Finger; but near Chefter they have been taken much larger. The Body is of a rounder Make than a Herring's. The Eyes are large, the Body of a Silver White, and the Gills are of a finning Red; the Snow is fharp; the Mouth wide, but

but without *Teetb*; yet the *Jaws* are as rough as a File. The *Tail* is forked.

Anchowies are very common at Venice and Genoz, as also at Rome. They are likewise plentiful in Cataloniz, at Nice, Antibes, St. Tropez, and other Places in Provence.

They are most commonly taken in the Night in *May*, *June* and *July*; for in these three Months they leave the Ocean, and pass up the *Mediterranean* towards the *Levant*. When they fish for *Anchovies*, and would take a large Quantity, their Method is to light a Fire on an Iron Grate placed at the Poop of the Ship, so that the Fish seeing the Light make towards it, and are more easily taken.

When the Anchovies are caught they gut them, and take the Gills out of the Head, and whatever elfe is apt to putrify, and falt them.

As to the manner of Salting them, they do nothing elfe but range them in Barrels of different Sizes, with a proper Quantity of Salt; the largest Barrels do not weigh above fix and twenty Pounds.

In choosing Anchore is, those that are least ought to be preferr'd; as also those that are white without, red within, that are firm, and have round Backs.

There is another Sort of Fish fold instead of Anchovies call'd a Sardin, which is very probably a young *Pilcbard*, it being larger and flatter than an Anchory, and not fo well tasted.

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CHAP. XL.

Of the HORN-FISH or GARR-FISH.



THE Horn-Fifb, in Latin Acus Vulgaris, is a long, flender and roundifh Fifh. The Snout is very long, Gender and fharp; the Head is flat, and of a bluifh Green; the Back is green, with an obfcure Purple Line running along the Middle of it; the Lateral Lines that run along the middle of the Sides are Scaly; the reft of the Body is fmooth; both the Jaws are arm'd with a great Number of fharp Teetb; the Lower is longer than the Upper; but what is most remarkable of all the upper Jaw is moveable as in a Crocodile. The Tail is forked.

The Gas runs directly from the Stomach to the Vent; the Liver is not divided into Lobes; the Gall is of a bluifh Black.

It does not grow to any large Size; for fix of those that are usually taken will not weigh a Pound. Yet fome have been caught that have weighed two or three Pounds.

The *Flefs* is hard and dry, and confequently not very eafy of Digeftion; but yet it yields good Nourifhment. They are common every where, and are usually brought to the Market in *May*.

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CHAP. XLI.

Of the ISING-GLASS-FISH



T HE Ifing-Glafs-Fifb, in Latin Hufo or Exoffis, has a very thick, heavy, large Head; the Mouth is very long and wide, and there is a Barb or long Excrefcence hangs from each Side of his Upper-Jaw; his Back is full of little white, prickly Scales, placed in exact Order; the Tail is forked.

Authors have been guilty of feveral Miftakes concerning this Fifh, becaufe they never had an Opportunity of feeing one; as that it is without Bones; that it has a fmooth Body without Scales or Prickles; and that it was of the Cetaceous Kind, and refembled them in Nature and Bulk.

The Length of this Fifh is about twenty-four Foot, and it weighs about four hundred Pounds. It is usually met with in the Seas about *Muscory*, and in the *Danube*.

The *Flefb* is fweet and viscid, and eats best when it has been fome time in Salt; the Flefh of the *Back* has the Tafte of Veal, and that of the *Belly* is thought to be as fweet and good as Pork. It is a very common Dish in *Muscovy*, and the Jelly is very wholefome and nourifhing.

As to the manner of making the *Ifing-Glafi*, the Guts, Stomach, Tail, Fins and Skin are taken and boil'd 'till they are all diffolved that will diffolve, then the Liquor is ftrain'd and fet to cool; when it is cold the Fat is carefully

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carefully taken off, and the Liquor itfelf is boil'd again to a juft Confiftency, after which it is cut into thin Slices, then hung upon a String and carefully dry'd. That which is cleareft and whiteft is beft. The chief Confumption of this is by the Wine-Merchants, who make use of it to Fine or Force their Wine, as they themfelves term it.



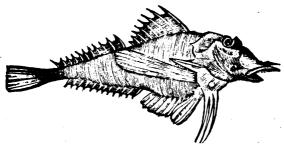
HE Grey-Gurnard, in Latin Gurnardus grifeus, has a Back of a dirty Green, fometimes speckled with Black, and always with Yellow or White. The Lateral Line is more rough and prominent in this than in others of the fame Kind. Under this Line the Sides are of a lighter Colour, and fuller of white Spots. The Belly, as in most other Fish, is white; the Head is large and cover'd with Boney Plates, the uppermoft of which ferves for a Shield to the Top of the Head, and terminates on the back-part in two sharp and prickly Horns; the Snout likewife is a double Horn arm'd with four or five Prickles; on the fore-part of the Eye are two Prickles, which bending backwards lie over the Eye. The Eyes are large and of a Silver Colour, but clouded with dusky Spots. The Mouth is large, and the Teeth very fmall, growing as well

well upon the Tongue and Palate as the Jaws. The Cover of the Gills is double, and rough with Prickles. The Inteflines have nothing very fingular.

This Fifth is very common in the Britifh Ocean, and frequently met with in the South of England.

CHAP. XLIII.

Of the Red-GURNARD or ROTCHET,



THIS Fifth is the Cuculus of Aldrovandus, and is not fo large as the Grey-Gurnard, it never exceeding a Foot in length. It has a large Boney Head arm'd with Prickles; the Body gradually decreafes in Thicknefs from the Head to the Tail, which is very fmall; both the Body and Fins are of a reddifth Colour, from whence it derives its Name; the Yaws and Mouth are rough with very fmall Teeth; the Eyes are large; the Covers of the Gills feem to have Lines engrav'd in them, proceeding as it were from a Center; they are likewife arm'd with three remarkable Thorns or Prickles.

The Tub-Fi/b, which is the Hirundo of Aldrovandus, is very like the Red-Gurnard, only it is larger and has a bigger Head; likewife the Gill-Fins are larger, and the Body is of a paler Colour.

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The Flesh of the *Red-Gurnard* is hard, brittle, white, well-tasted and wholesome, claiming a Place among Fish of the highest Esteem.

This Fifh makes an odd fort of a Noife, which fome fancy to be like the Singing of a Cuckow, others like the Grunting of a Hog; others again affirm, that when it is taken out of the Water and touch'd it erects its Prickles, and cries Curre very plainly; whence, in fome Parts of England, they go by the Name of Curres.



T H E Piper, in Latin Lyra, is of the fame Colour as the Red-Gurnard, only the Head is lighter, and has a yellowish Caft. The Snout is divided into two broad Horns, which about the Edges are arm'd with Thorns or Prickles. On each Side there is a very large Thorn fituated above the Gill-Fins. The Bones of the Forebead hang over the Eyes like a Penthouse, and at the Corner of the Prominence arises a flort, fharp, crooked Thorn. Below the Gill-Fins there are three Excressences, which some call Fingers. The Boney Plates, which cover the Top of the Head, terminate in two two Horns, which are pointed at the Ends. The Jaws are rough like a File.

The Air-Bladder is very large, and the Liver small.

It is met with both in the Britif Ocean and the Mediterranean Sea. It feeds upon fmall Crabs, among other things, they being often found in his Stomach.

The Flift is of the fame Nature as that of the Red and Grey Gurnard, both for Tafte and Wholefomenefs.

This Fifh makes a fort of a Noife when he is taken out of the Water, which has given the *Cornifb* People occasion to diffinguish him by the Name of the *Piper*.



THE Surmullet, in Latin Mullus, is from fix to nine Inches long: it has a thickifh Body, which gradually decreases in Circumference to the End of the Tail. The Scales are large and come easily off. The Colour is a dusky Yellow. When the Scales are off the Sides are of a lively Red, whence the French give it the Name of Rouget.

He has two long *Barbs* hanging from his Chin, which he can turn up and hide under the lower Part of his Gills at Pleafure. He has no *Teetb*, but the lower *Jaw* is rough like a File. His *Tail* is forked.

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This Fifh has always been effected a great Rarity, and was fo dear formerly that it fold for its Weight in Silver.

There is another Fifh of this Kind better known in England than the former, and is twice the Size of it, for fometimes it grows to be fourteen Inches long. It likewife differs from the former in having the Back-Fins beautifully painted with Red and Yellow; when those of the lefter Sort are white, mix'd with a pale Purple. The fame thing may be faid in a Sense of all the reft of the Fins. In This the Scales are thick, and adhere closely; in the Former the directly contrary obtains. But what is the plaineft Diffinction of all is, that there are three or four parallel Lines which run all the length of the Sides, of a bright Yellow or Gold colour.

The Surmullet is very common in the Mediterranean Sea, and the larger Sort is not very fcarce in the Ocean, it being often feen in the Market at Penzance in Cornwall.



T HE Weever, in Latin Draco Marinus, has a longifh Body and a ftraight Back. The Sides are painted with yellow and brown Lines, which run obliquely from the Back towards the Belly. The Gills are yellow, and the Belly white. The Eyes are placed at a fmall diftance from each other, and nearer the End of the Nofe than in any other Scaly Fifth that we are acquainted with i with; they are of a Gold-colour fpeckled with Black. The Mouth is very wide; and the lower Jaw is a little more prominent than the upper; they are both full of fmall Teeth. The Aperture of the Gills is very wide. and at their upper Angle, on both Sides, is placed a sharp strong Thorn. The Tail can be scarcely faid to be forked; it is of a bluish Colour speckled with Yellow.

He is often taken a Foot and a half long. The Fleih is firm, and eats agreeably enough.

The Fin on the Back, next the Head, is faid to be poisonous; and if a Fisher happens to be wounded with it the Part swells, and is very full of Pain, which continues very intense 'till the Return of the Tide, and then abates. But fome doubt whether these Circumstances are not exaggerated or not.



HE Scad, in Latin Trachurus, is like a Mackrel both in Shape and Tafte, for which Reason the French give it the Name of the Baflard-Mackrel; but it is confiderably lefs than a Mackrel, and not of fo round a Make. The Back is of a fhining Blue; the Belly of a Silver Colour with a Tincture of Purple; the Borders of the Gills feem to be stain'd with Ink.

In the middle of the Sides there is a Line cover'd with fmall Boney Plates; it does not run directly along, but bends a little downwards. These Plates are furnish'd with Prickles Prickles which are largeft near the Tail, by which means it feems to be of a quadrangular Figure. The *Eyes* are large. The *Jaws*, *Palate* and *Tongue* are rough like a File. The *Tail* is very much forked.

Thefe Fish firm in Shoals, and are taken in great Numbers near the French and Spanish Coast along with the Mackrel. They are likewife taken near Cornwall, and on other Parts of the British Coast.

The Flefs is dry, and harder than that of a Mackrel.



T HE Doree, in Latin Faber, is a very broad flat Fifh, and almost every where of an equal Thickness. He is shaped almost like a *Plaice*, but swims erect, and therefore ought not to be number'd among the flat Fifh.

The Head is very large; the Mouth monftroufly wide; the Eyes yellow and great; the Sides are of an Olive-CoColour, varioufly mix'd with a light Blue. On each Side there is a black Spot as big as a Silver Groat. There are *Teeth* in both the *Jaws*; the *Tongue* is long, fharp and fmooth; the *Lateral Lines* are bent as in the Figure; the *Tail* is round.

The Size of this Fish is generally about eighteen Inches long, and feven or eight broad.

The Flefs is tender and easy of Digestion, and for Delicacy is by many thought superior to that of a Turbet.

This Fifh was formerly hung up in Churches on account of the remarkable Spots that appear on each Side, which were faid to be the Marks of St. *Chriftopher's* Fingers, who caught this Fifh as he was carrying our Saviour over a Ford: Or, according to others, becaufe this was the Fifh out of whofe Mouth St. *Peter* took the Money wherewith to pay Tribute; and that the Spots are elegant Reprefentations of the Coin, being left as a Memorial of the Miracle. But thefe fort of Fables meet with little Credit now even among the *Roman Cathelicks* themfelves.

They are taken both in the Ocean and in the Mediterranean Sea, and are often exposed to Sale at Penzance in Cornwall.



THIS Fifth, in Latin Umbra, in Italy is called Umbrana or Ombrino, and is chiefly known in England SEA-FISH.

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England by being the Subject of feveral diverting Scenes in one of *Beaumont* and *Fletcher's* Plays.

In Colour it refembles a Tench, but the Shape is more like a Pearch. The Mouth is not large, but there are Teeth in the Jaws. The Edges of the Back-Fins and the Extremity of the Tail are black. The Eyes are of a dark Colour, and the Belly-Fins are as black as if they had been dipt in Ink. The Tongue is large; the Scales are of a Lead Colour; and the Tail is round.

The Liver is fmall, and divided into two equal Lobes; the Gall-Bladder is full of a reddifh Liquor; the Stomach is of a moderate Size.

This Fifh is in the higheft Efteem among the *ltalians*, and is thought to make a Repaft worthy of a Prince. Sometimes they are taken of a large Size, and then the Head is efteem'd the most tempting Part. They are often feen in the Markets at *Rome*; but in other Places it is a very great Rarity.



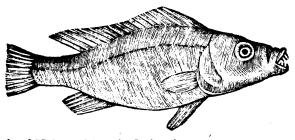
T HE Sea-Bream, in Latin Brama Marina, is a flat Scaly Fifh about twenty-fix Inches long, and ten broad. The Tail is very fmall, and the Fin of it long and forked. The Back is black, the Sides are of a lighter Colour, and the Belly is white. The lower Jaw Yaccu has two Rows of *Teeth*; the upper, one. The *Eyes* are large, and for Colour and Shape refemble those of *Quadrupedes*. The Covers of the *Gills* are large like those of a *Salmon*. The *Fins* are placed as in the *Cut*.

The *Flefb* cuts red, and is of a very delicate Tafte, far furpaffing either the *River* or *Pond Bream*, infomuch that it feems ally'd to them in nothing elfe but the Name.

It is often caught in *Rock-Fifbing*, and is to be met with on any Part of the Britifb Ccaff.

CHAP. LI.

Of the OLD-WIFE or WRASSE.



THE Old-Wife, in Latin Turdus vulgatiffimus, is in Shape like a Tench, and in Length about nine Inches. It has very large Scales, fome of which are red, others yellow, and others of a Fillemot Colour; and they are fo placed as to compose five or fix right Lines from the Head to the Tail. The Snout is oblong, and a little turn'd up at the End. The Lips are thick and flefhy; the Mouth fmall; the Teeth are like a Saw, and not very fharp. The Eyes in fome are blue, in others of a Gold-colour. The Gill-Fins are yellow. The Iail, when extended, is round.

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The Air-Bladder is undivided, the Gall green, the Urinary-Bladder is very visible, and the Gut is apt to fall or appear through the Vent.

The Fleff is no way to be commended, either for an agreeable Tafte or wholefome Properties.

The People of Cornwall call this Fifh a Wraffe; and the Welch, Gwrach, which has fome Affinity to it in Sound, and fignifies an Old Woman: The French likewife give it the Name of Une Vieille, which has the fame Meaning; but what ground there is for these Appellations we can by no means discover.



THE Dolphin of the Moderns, in Latin Auratus Pifcis, is taken from four or five to fix or feven Foot long. It is a Fish well known to Sailors, and by them greatly celebrated for its extraordinary Beauty; but this Beauty must confist in the Colour rather than the Shape, for neither the Head nor the Body are of fuch a regular Proportion as merit the least Praife, fince they feem to be rather difagreeable than otherwise. The Back, Belly and Fins are of a lively Green mixt with a Silver Colour; the Belly is white, but every Part is fpotted with a fhining Blue, which renders this Fish a very agreeable Sight both in the Water and out. There is only one broad Fix on his Back, which runs the whole length of his tapering Body, and always ftands upright when he fwims. His His Scales are fo fmall and fo fmooth that he feems to have none at all. His *Tail* is very forked, and the *Fins* of it are long, fometimes a Foot and a half in *Dolphins* of the largeft Size.

This Fifh is a very fwift Swimmer, and will accompany a Ship for a long while together and very often proves a feafonable Relief; and as the Flefh is very well tafted, though dry, the Sailors are never backward in endeavouring to make a Meal of them as often as they can.

The Dolphins are a great Enemy to the Flying-Fifb, and are always purfuing them, which is one Reafon of their being feen fo often out of the Water. Some Writers call this Fifh a Dorado.



THE Flying-Fifh, in Latin Hirundo Marina, is very common between the Tropicks. There are feveral forts of them, but they are all about the Bignels of a Herring, and their Gill-Fins are fo long and broad that they look like Wings; with these they are enabled to skim along the Surface of the Water in the manner of a I 2 Swal-

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Swallow, infomuch that it is very common for them to fly into the Ships which are failing in those Seas. They are an excellent Bait for the *Dolphin* above described, and are often made use of by the Sailors for that purpole. They cannot fly far, because their Wings soon stand in need of wetting.

There is a fort of a Flying-Fifb fometimes feen in the Mediterranean, which is call'd Milvus by Salvianus and other Writers; but between the Tropicks they appear by thoufands at a time, and it is thought a very good Diversion to see the Art they make use of to avoid the Delphins.



pearance it makes in the Water. The Snout is cloven into two Parts, which look like Horns; on each Side are two narrow Fins; on the Back, especially near the Head, are very dark Spots. It grows to the length of seven Foot, and seems to be of the Thornback Kind. The Flesh has a rank Tafte.

CHAP. LV. Of the Sucking-Fish.

THE Sucking-Fi/b, in Latin Remora, has a roundifu Body about eighteen Inches long and four thick. It has a triangular Mouth, the upper Part of which is fhorter than the lower. From the upper Part of the Head to the middle of the Back there is a griftly Substance of an oval Form, like the Head or Mouth of a Shell-Snail, but harder. This Excreption is about feven Inches long, five broad, and half an Inch high. It is full of fmall Ridges, wherewith it will fasten itself to any thing at Pleasure.

This Fifh ufually attends upon Ships for the fake of any Filth that is thrown out of it. In fine Weather they will play about the Ship, but when it blows hard, and confequently the Ship fails very fwift, they will flick to the Bottom of it, from whence they are not to be removed either by the Motion of the Ship, or the Beating of the Waves, tho' the Sea is never fo tempefluous.

Sometimes they take the Advantage of flicking to fome large Fifh or other, for they cannot fwim very fast themfelves. They often flick to a *Sbark* even af-

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ter he is taken out of the Water, and throws himself about violently on the Deck of the Ship for half an Hour together; for a *Sbark* is a very frong unruly Fifh, and hard to be mafter'd.

The Sucking-Fifb is fuppofed to be the Remora of the Ancients, and was faid by them to have fuch an extraordinary Force or Virtue as to ftop a Ship when under Sail. But this is not the only Thing in which fome of those Writers, especially *Pliny*, have been miftaken. However it is certain that several of these Fifh, flicking to the Bottom of a Ship, may be a confiderable Hindrance to its Sailing.

The Body of this Fifh is of an Afh-colour, has no Scales, and is very good Eating.

CHAP. LVI. Of the BALANCE-FISH.

THE Balance-Fifs, in Latin Zygena or Libella, differs from all others in the monftrous Shape of its *Head*, which is like a Smith's Hammer. It grows to a very extraordinary Size, and is of the Shark Kind.

The Eyes are placed on each fide of the Head as far from each other as it's possible for them to be; they are large, round, and look rather downwards than upwards. He has a very large Mouth placed underneath his Head, which

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which is furnish'd with exceeding flrong, broad, fharp Teeth. The Tongue is broad and like that of a Man. The Body is round and long, not cover'd with Scales, but with a Skin like Leather. The Back is Ash-colour'd, the Belly white.

The Back-bone is continued to the upper Part of the *Tail*, which is very long and fringed with *Fini* on both fides. The other *Horn* of the Tail, if it may be fo call'd, is very fhort. But the lefs needs to be faid of thefe Parts, because the Form of the Head and the Position of the Eyes are fo very remarkable, that by them he may be readily known from all other Fifh.



THIS Fifth is called in Latin Vulpes Marina, and Simia Marina, from the Length of his Tail, as well as from the ftrong Smell of the Flefth which is like that of a Fox; tho' fome think he had these Names given him on account of the natural Cunning wherewith is endow'd.

He grows to as enormous a Size as any of the Shark Kind, and fometimes weighs hundreds of Pounds. His Body is round and thick; his Mouth fmall, and not far diftant from his Snout which is fharp, and yet has fome Refemblance of a Shark, as he has in every thing elfe

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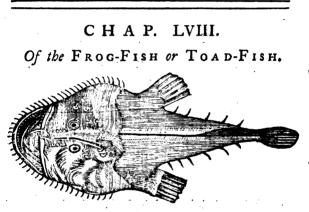
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except

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except his Body and Tail; for his *Body* is thicker and fhorter, and his *Tail* much longer than in any of that Kind. The Skin of the *Belly* is White, the *Back* of an Afh-colour.

Rondeletius affirms he once faw a Sea-Fox open'd, in which were feveral young ones of the fame Kind; from whence he concludes that this Fifh, as well as the Sbarks, foster their Young in their Bellies. Tho' the Fishermen, who were Spectators, believ'd he had devour'd them as Food; but they being alive, and unhurt, he supposed proved the contrary.



THE Frog-Fifh, in Latin Rana Pifcatrix, refembles a Tad-Pole in Shape, and feems to be of a middle Nature between the Boney and the Griftly Fifh. His Head is of a circular Figure, and very large in Proportion to his Body. His Mouth is monftroufly wide, and the low Jacw flands out an Inch farther than the upper. Both his Jaws are arm'd with long fharp Teeth. He has likewife Teeth on the Palate, and at the Root of the Tongue, which is large and broad. The Back is flat and of a gray Colour, with fomething of a reddifh and greenifh

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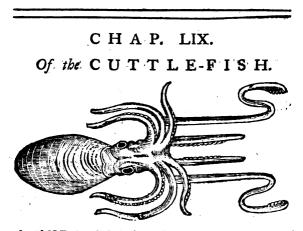
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greenish Cast. The Eyes are white and placed to look upwards.

On the Head, about half an Inch from the Corner of the upper Jaw, are two *Briftles* or *Strings*, the foremost of which is fix, the other four Inches long; with these he is faid to fish as with a Line. On the middle of the Back are three other *Briftles* in the room of a *Fin*, and round the Circumference of the Body hang a fort of *Strings* in the Nature of Fins.

On the lower Part of the Body, under the Throat, are placed two Fins which refemble the Feet of a *Mole*, by the Affiftance of which they creep at the Bottom of the Sea.

The Flesh of this Fish is white when it is boil'd, and refembles that of a Frog in Taste.



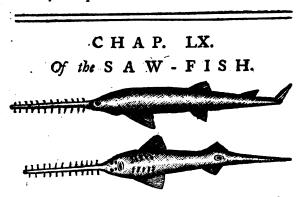
THE Cuttle-Fifh, in Latin Sepia, is a deform'd uncouth fort of Fifh, the Name of which is well known on account of the Bone which is put to various Ufes. He has two Trunks fix'd to his Head which ferve inftead of Hands, being not only useful in Swimming, I c 178

but in taking what ferves for Suffenance. His Back is cover'd with a fort of Shell about an Inch thick in the Middle, but thinner on the Sides; it weighs very light, is hard without and fpongy within. It is of a very white Colour, and has fomething of a faltiful Tafte.

This Fifh carries underneath his Throat a Bag or Receptacle full of a Liquor that is blacker than Ink, which he discharges when pursued, and by that means conceals himself from the Sight of his Enemies, and so makes his Escape. Besides, he has fix Feet on the upper Part, and two larger below arm'd with Teeth.

They are eaten very commonly in feveral Parts of France, and are faid to be good Meat.

They live upon fmall Fifh.



THE Saw-Fift, in Latin Prifis or Serra Pifcis, has often been treated of in an uncertain and fabulous manner; we shall therefore take care to fay nothing about it, but what has been related by Eye-Witness themselves.

For Magnitude it may be reckon'd among the Cetaceous Kind, but has nothing elfe in common with them. The Body, both in Shape and Colour, has a great Refemblance femblance of the Dog-Fifb, but is without Spots. Out, the Back it is of an Ash-colour, and the Belly is white. The Skin is coarfe and rough like that of the Balance-Fifb. The Head is flattish, and of the Shape of a Heart. The Smut is long, narrow, hard and fmooth, on each fide of which appear between twenty and thirty Testb fomewhat refembling a Saw, from whence it derives its Name. Some of these are five Foot long, and the Body of the Fish is ten Foot. The Mouth is a transverse Sciffure like that of the Balance-Fifb, but without Teetb. The Lips are rough like a File. Frazier, who in his Voyage to the South-Sea happen'd to fee a Saw-Fifth, fays the Mouth of it is like that of a Man; his Words are. Il a une bouche & une autre Aperture bumaine. What he means by his autre Aperture will best appear from the Cut. In one, whole Body was about a Foot and a half long, the Eyes were as big as a Dutch Stiver, about an Inch from each of which was a Hole which fome think ferves for Hearing, others for fpouting Water. The Apertures of the Gills on each fide are five. The Fins, with the Tail, are feven, placed as in the Cut.

This Fifh is chiefly feen and taken in the Western Ocean. Frazier fays the Saw ferves as a Defence for it against the Whale, as he judged from an Engagement he happen'd to see between them on the Coast of Chili.

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CHAP. LXI.

Of the DOLPHIN of the Ancients.



T HE Dolphin properly fo call'd, in Latin Delphin, is a Cetaceous Fifh, and is cover'd with a fmooth hard Skin. He has an oblong roundifh Body, is Hogback'd, has a long round Snout which is turn'd a little upwards. The Cleft of the Mouth is long, and fluts very clofe. The Teeth are fmall and fharp. The Tongue large and flefhy. The Eyes are likewife large, but fo cover'd with the Skin that nothing but the Pupil appears; they are placed not far from the Mouth, and almost in the fame Line. On the Top of the Snout is a double Pipe by which he fpouts out the Water; it is placed before the Brain, and communicates with the Alpera Arteria. He has a very ftrong Fin on each Side, and another on the Back, which is partly boney and partly griftly. The Tail consists of two Fins.

The Back is black, the Belly white; the Skin thick and firm, but foft, on account of the Fat that lies underneath. The Flefs is blackish and refembles that of a Hog. The Parts which ferve for Nutrition and Generation are more like Quadrupedes than Fishes. The Lungs are large, and defended with strong Ribs, the Substance of which is dense and hard like Liver. The Heart is placed in the middle of the Thorax, and exactly actly refembles that of a Hog. In fhort, the Kidneys, Penis, Vulva, Teftes, and all the internal Parts have a great Likenels to those of Quadrupedes.

He differs from a Porpu/s in having a long Goale-like Snout, in being more flender and flefhy, but not fo fat. The Porpu/s is lefs, but has a broader Back and a blunt Snout.

The Dolphin generates in the fame manner as a Whale, and goes with Young about ten Months, feldom producing above one at a time, or two at the moft, and that in the midft of the Summer. They live a confiderable time, fome fay twenty-five or thirty Years. They fleep with their Snout out of the Water, and fome have affirm'd they have heard them fnore. When they feem to play on the Top of the Water it is a certain Sign of an approaching Tempeft. What has been faid by the Ancients of this Creature's

What has been faid by the Ancients of this Creature's Love to Mankind is as erroneous as the Figure which Painters ufually give of him, than which nothing can be more falfe and ridiculous.

They five very fivift, which is owing to the Strength of their Muscles, and pass at a flated Season out of the *Mediterranean* thro' the *Hellespont* into the *Euxine Sea*. They fometimes five in Shoals, and there is never lefs than a Male and Female together.

They will live three Days out of the Water, during which time they figh in fo mournful a manner as to affect those with Concern who are not used to hear them. The *Fleft* is feldom eaten but by very poor People out of mere Neceffity.

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CHAP. LXII.

Of the Doc-Fish or Picked Doc-Fish,



THE Picked Dog-Fifb, in Latin Galeus acanthias five fpinax, has a roundish oblong Body, which is cover'd with a rough Skin of great use among the Joiners for polishing Wood.

The Back is of a brownifh Afh-colour. The Belly is white, and more fmooth than the other Parts. The Eyes are in the fhape of a Boat, and cover'd with a double Membrane. The Mouth lies juft under the Eyes, and is furnifh'd with a double Row of fmall Teetb. The Back is provided with two Fins, on the fore-part of both which are placed two Spines or Thorns, from whence he is call'd the Picked Dog-Fifb. The Males have two Penis's which join to the Belly-Fins near the Vent. The Tail is a little forked, and the Fin that others of this Kind have between it and the Vent is wanting.

The Dog-Fi/b brings forth his Young alive, which are produced from Eggs hatch'd within the Body of the Fifh. He never grows to any large Bulk, the largest never weighing full twenty Pounds.

He has a large Stomach, and feveral Cuttle-Fifb have been found in it at once. He is frequently taken in the Britifb Ocean, and in the Irifb and Mediterranean Seas.

There is another Dog-Fift call'd the Smooth or Unprickly Hound, which is very like this, but he has neither Prickles nor Teeth, and has a Fin between the Pair at the Vent and the Tail, which the Picked-Dog has not. The SEA-FISH. 182

The Flefs of all these kind of Fish is rank and unwholesome.

CHAP. LXIII.

Of the SEA-UNICORN or NARWAL.



THE Sea-Unicorn, in Latin Monoceros Pifeis, is often found near Iceland, Greenland, and other Countries that lie very far North. It is a kind of Whale, and carries a fmooth large Horn at the End of its Snout. It is of a Spiral Figure, and may be feen of different Weight and Sizes in the Cabinets of the Curious, fome of which are at leaft three Ells in length. Thefe are the Horns which are commonly fhewn as a great Rarity for Unicorns Horns, and to which they attribute apon a very flight Foundation fuch extraordinary Virtues.

He is faid to carry this *Horn* for his Defence, and is fo courageous he will venture to attack the largeft *Whales*.

Mr. Dumantel fays he faw a prodigious one near the Island of St. Domingo in the Year 1644. But if what he reports of it be true, it must be of a quite different Sort from the Narwal. It was eighteen Foot long, and was as thick as a Hogshead. His Body was cover'd with Scales as large as a Crown-piece; and he had fix great Fins of a Vermilion Colour, four of which were placed on the Belly, and the other two look'd like Ears. The Scales on the Belly were yellow; the Tail was forked; the Head like that of a Horse, and cover'd with a hard brown Skin. The Horn was nine Foot and a half long, and and the thick End was fixteen Inches in Circumference. It was fo hard that a good File would fcarcely touch it.

It had two great Gills like other Fifh. The Eyes were of the Bignels of a Hen's Egg, the Pupil of which was of a Sky-Blue enamell'd with Yellow, and furrounded with a Vermilion Circle, which was fucceeded by a very bright one fining like Crystal. The Teeth in the fore part of the Mouth were flat and fharp. The Tongue was cover'd with a rough red Skin.

The Fle/b of this Fith was larded with Fat, and when it was boiled it was flaky like *Cod*. Above three hundred People fed upon it, and thought it very fine Eating.

The fame Perfon talks likewife of an oval Crown on the Top of this Fifh's Head, raifed a little above the Skin; but this and the Shape of the Head it is probable, are owing in a great measure to Fancy.

CHAP. LXIV.

Of the SWORD-FISH.



T HE Sword Fift, in Latin Gladius or Xipbias Pifcis, has a Snout in the fhape of a Sword, which is fo remarkable that he is every where call'd by a Name of the fame Signification.

It grows to a large Bulk, being fometimes fifteen Foot in length, and weighing above a hundred Pounds. The Body is long, round, and thick towards the Head, but final fmall towards the Tail. The Skin is rough and black on the upper Part, but white on the Belly. The Mouth is of a middle Size and without Teeth. The upper Jaw terminates in a long Snout like a two-edged Sword, which is about one third Part of the whole Length of the Fifh. The lower Jaw is pretty long, and ends in a fharp Point. The Eyes are white, prominent and large, but not in proportion to the Fifh. The Tail is in the Shape of a Half-Moon.

The Stomach is long, reaching almost to the Vent. The Liver is fmall and red. The Spleen is little and of a dirty Colour.

The Sword-Fifb continues to be taken in the fame Place as it was formerly, that is between Italy and Sicily, and much in the fame manner. Their Custom is to place Watchmen on the high Cliffs that hang over the Sea, whole Bulinels is to oblerve the Motion of the Fifh. As foon as they perceive any they give Notice to the Boats below, by Signs agreed upon, and direct them what course to take. As foon as they draw nigh the Fisherman, who is us'd to the Sport, climbs up a fmall Mast placed in the Boat for that purpose, that he may observe the Motion of the Fish which he dcfigns to strike, at the same time directing the Rowers which way to fleer. When they have almost overtaken him, the Fisher immediately descends from the Mast and strikes a Spear or Harping-Iron into his Body; the Handle of which being loofe in the Socket, he takes back, while the Iron Part which is made fast to a long Cord remains in his Body. The Fish thus hamper'd is fuffer'd to flounce about 'till he is tired and faint. After this they either hoift him into the Boat, or if he is very large tow him on Shore.

The *Flefb* is whiter than that of a *Tunny*, and is well enough tailed. It is not very eafy of Digeftion, but it nourifhes much. The People of *Meffina* are very fond of it, preferring it to *Sturgeon*.

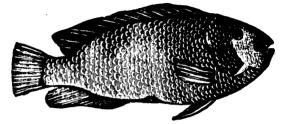
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This Fish is not only taken in the Mediterranean but in the Ocean.

CHAP. LXV.

Of the AMERICAN OLD-WIFE.



THIS Fifth is the Acarauna quadrata of Margrave, and is often taken notice of in the Relations of modern Voyagers, being a Fifth well known to Sailors.

It is a Fifh about two Foot long and nine Inches broad, having a fmall Mouth and a large Eye. He has one large Fin on his Back, beginning at the hind-part of his Head and ending at the Tail; he has a pretty broad Fin on each Side near the Gills, and another under the Belly. They are all of a very light Blue, as the Body is of a deep Blue. The Edges of the Fins are yellow. His Body and Head have a great many Spots and Streaks feeming to crofs each other.

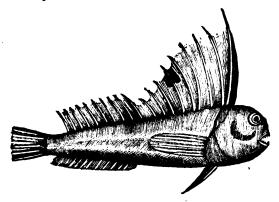
The Sailors often take this Fifh in their Voyages, and it is reckon'd by them to eat agreeably enough.

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CHAP.

CHAP. LXVI.

Of the BUTTERFLY-FISH.



THE Butterfly-Fift, in Latin Blennus, is about feven or eight Inches long. It is of a light Blue or Afh-colour, mixt with Olive or a dirty Green. The Eyes are large and of a Saffron-colour, being placed pretty near the Top of the Head. The Mouth is not large. The Teeth are long and round, and placed in a regular Order. The Tongue is foft, round and flefhy.

It has only one *Fin* on the Back, which reaches from the *Head* to the *Tail*, on the fifth *Radius* of which a beautiful *Spot* begins to be painted, and terminates at the eighth. It is black in the middle, and is encircled with a white Ring, which gives it the Refemblance of an *Eye*. The *Tail* is fomewhat round, and fpotted with a dark green Colour. The *Body* is without *Scales*.

The Butterfly-Fi/b is often exposed to fale at Venice among other small Fish, perhaps during all the Winter.

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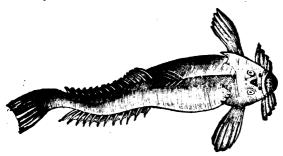
THE Sea-Eagle, in Latin Aquila, has a Head almost like that of a Toad. The Sides are expanded like Wings, and the Tail is exceeding long and venomous. The Eyes are large, round and prominent, and the Mouth is full of Teeth. The Skin is fost and smooth, the under Part of which is white, and the upper livid. Those that are usually taken are small, yet sometimes they weigh three hundred Pounds.

The *Flefb* is foft and moift, having a rank naufeous Smell, and is rejected as well by the Peafants as People of Fashion.

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CHAP. LXVIII. Of the STAR-GAZER.



THE Star-Gazer, in Latin Uranofcopus, is about ten or twelve Inches long. The Head is large, fquare, rough and boney. The Body is of a roundifh Make, afh-colour'd on the upper part and white on the lower. The Scales are fo fmall that fome have affirm'd he has none. The Face is flat, looking upwards, in which the Eyes are fmall, protuberant, of a Gold colour, and placed near together; befides, they look directly upwards, from whence he is call'd the Star-Gazer. The Mouth is large and placed on the upper Part of the Snowt. The Chin has fomething refembling that of a Human Face. The Palate, as well as the Jacws, are arm'd with fharp Teeth, and the lower Lip is fring'd with a fort of Briftles. The whole Face, and effecially the Covers of the Gills, are very rough with a fort of Warts and Tubercles, fome of which are prickly.

The *Flefb* of the *Star Gazer* is much commended by fome, and difliked by others. He is often taken in the *Mediterranean* Sea.

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THE Sea-Wolf, in Latin Lupus Marinus, is taken near Hilligland, not far from the Mouth of the Elb. The Head is larger and more round than that of a Dog-Fi/h. The Back, Sides and Fins are blue, but the Belly is white. The Skin is fmooth and fleek in every Part. The Heart is about the Size of a Bean. The Fle/h is white.

¹ He is a very voracious Animal, and well furnish'd with dreadful *Teeth*. They are fo hard that if he bites the Fluke of an Anchor you may hear the Sound, and fee the Impression of his Teeth.

They grow to be near a Yard long, and fometimes have a Mixture of Black on the upper Part. They are caught likewife in all Parts of the Ocean.

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CHAP

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CHAP. LXX.

Of the Bounce, Rough-Hound or Morgay.



THE Bounce, in Latin Catulus major vulgaris, is fometimes feen above the length of two Fost, and is fpotted like a Leopard. The Spots are black, and the Skin Ash-colour'd with a reddifh Cast; whence the French give him the Name of Roujette.

The Belly is flat and the Back broad; the Snout is fhorter and more blunt than that of the Dog-Fi/b; the Mouth likewife is greater and broader; the Jarws are full of fharp hooked Teeth bending inwards; the Tongue is broad and fmooth; the Snout does not reach above an Inch beyond the Aperture of the Mouth, which is in the under Side of the Fifth; the Nostrils are very large, the Eyes oval and half cover'd with a Skin, the Gills have five Holes or Apertures on each fide, the Fins are placed as in the Cut.

He is caught very frequently in the Mediterranean, and not feldom in the Britif Ocean.

There is another Fish of this Kind, which is call'd *Catulus minor*, and differs from the former chiefly in being much lefs, and of a lighter Colour. The Spots likewife are fmaller and more thick, and the *Belly* is entirely white.

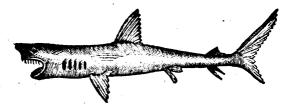
The Flels of this last is commonly eaten, and is fold in the Fish-Markets at Rome. The Skin of both is rough, and ferves for the fame Purpoles as the Skin of the Dog-Fish.

CHAP.

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CHAP. LXXI.

Of the BLUE-SHARK.



T HE Blue-Shark, in Latin Galeus glaucus, is as bold and mifchievous a Fifh as any that fwims. His Back is of a lively Blue, and his Belly of a Silver Colour; his Skin is not fo rough as the Dog-Fiß, and others of the fame Kind; the Snout is long, fharp, flat, and indented with many fmall Holes above and below; the Mouth is very large, and the Teeth fharp, but not fo numerous as might have been expected; the Holes of the Gills are five on each fide; the Tail is divided into two Parts, the upper of which is much longer than the lower.

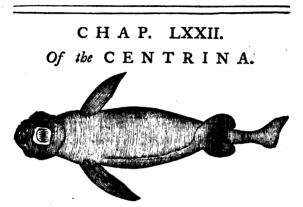
^AThe Stomach of the Blue Shark is fo large that the *Tunny-Fifb* is often found entire therein; the upper Part of the Guts are fmall, the lower thick; the Liver is large, of a bluifh Red, and divided into two Lobes; the Spleen is very fingular, being divided into innumerable fmall Lobes, which refemble a Heap of Eggs or Spawn; the reft of the Viscera have nothing very fingular.

This Fifh is fometimes taken two Yards and two Yards and a half long. He is very fond of Human Flefh, and watches all Opportunities of feizing the Legs of those that are within his Reach; nay there are Inflances of his following Boys that have walk'd along the

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the Shore, and attempting to fnap at their Heels. His *Fle/b* is tough, rank, and hard of Digeftion; yet it is fometimes eaten, and is faid to be nourifhing.

He is fometimes taken on the Coaft of Cornwall and other Parts of the Ocean, as well as in the Mediterranean Sea.



THE Centrina is of the Dog-Kind, and is call'd by the Italians, Pelce Porco, either from his being like a Sea-Hog, or from his wallowing in the Mire.

His Body, from the Head to the Vent, is of a triangular Shape; the Belly being broad and flat makes one of the Sides, and the Back being fharp makes the opposite Angle. They are taken of different Sizes. The Liver of one was to large that it yielded fix Pounds of Oil. The Colour is of a dark Brown.

The *Head* is fmall and flat; the *Noftrils* are large, and placed underneath the Snout; the *Eyes* are oval and cover'd with a Skin like an Eyelid; the *Pupil* is black, and the *Iris* green; the *Mouth* is fmall, and on the under Part of the Head; there are three Rows of *Teetb* in the upper Jaw, and one in the lower. Behind K

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the Eyes are two *Holes* in the Shape of a Half-Moon, which perhaps may ferve for Hearing.

On the Back are placed two Fins, which have each a Thorn or Prickle which feems to penetrate thro' it. The foremost of the Fins is so thick at the Bottom that it feems to be a Production of the Back it felf.

The Liver is whitish, divided into two Lobes, and is of a monstrous Size; the Stomach is but small, and the Spleen is double.

He is taken in the *Mediterranean* and brought to the Fifh-Markets at *Rome*. The *Flefb* is tough, and fo full of hard Fibres that it will neither feparate from the Skin nor yield to the Edge of a Knife without Difficulty. He is but feldom caught, and feldomer eaten even by the pooreft People, when Fifh are very fcarce, there being fomething in it of a poifonous Nature.



THE Gill-Head, in Latin Aurata, is broad and flat, being in fome respects like a Bream; whence he is call'd by the French, Brame de Mer, a Sea-Bream. Sometimes it grows to be two Spans in length, but feldom weighs full ten Pounds. The Body is cover'd with Scales of a moderate Size; the Back is of a dark Green.

Green, almost black; the *Sides* are Brown mix'd with Gold colour; the upper Corners of the Covering of the *Gills* are spotted with Black; between the *Eyes* there is a Streak of a Gold-colour in the Shape of a *Half-Moon*, the Horns of which point towards the Eyes, and the gibbous Part towards the Snout; the *Eyes* are large and of a Silver-colour; the *Mouth* is of a middle Size; the *Tongue* sharp, the *Teeth* regularly placed, and the *Tail* is forked.

The *Flefb* is neither foft nor hard, but of a middle Confiftence, and yields good Nourifhment. It is feldom taken in the Summer, but often in the Winter, when it is higheft in Seafon. It is often feen in the Fifh-Markets of *Genoa*, *Venice* and *Rome* in great Plenty; nor is it a Stranger upon the *Britifb* Coaft, it being taken in the *Ocean* as well as the *Mediterranean*.

It is call'd a *Gilt-Head* from the remarkable Semicircle of a *Gold colour* between its Eyes.



THIS Fifth is very uncommon, and was first defcribed by Dr. Tylon in the Philosophical Transac-K 2 tions,

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tions, N° 233. From the Liken's of the Fins he placed it among the Gurnard Kind, for they had no Name for it on the Coast of Suffex where it was taken: He therefore calls it, Cuculus lævis cæruleo-flævefcens, cui in fupremo Capite Branchiarum Opercula; that is, The Smooth Gurnard of a bluish Yellow, having the Cover of the Gills on the Top of the Head.

The Head of this Fifh is thicker than the reft of the Body, and leffens gradually, or tapers 'till it comes to the Tail. It was about eleven Inches in length, of which the Tail was two. The Girth of the Head was four Inches and a half. The Fins, as to Situation and Number, were the fame as in the Red Gurnard. The first Spine or Radius of the Back-Fin was fix Inches long, the next two, and the reft fhorter. The Colour of the Fins was yellow mix'd with blue Spots. The Situation of the Fins will beft appear from the Cut.

The Belly of the Yellow-Gurnard is white, but under the lower $\mathcal{J}aw$ black. The Sides and Back were yellowifh, but between the Belly and the Sides there ran a blue Streak or Lift about a Line and a half broad from the Head \mathfrak{O} the Tail; and a little higher on the Sides there was a Chain of blue Spots the whole length of the Fifh, with this Exception, that from the Eyes to the Extremity of the Snout the Spots were of a deep Yellow; and it was remarkable enough, that where the Spots were yellow the Ground was blue; and vice wer/a, where the Spots were blue the Ground was yellow.

The Body was fmooth, being without Scales. On the hinder Part of the Head, and about an Inch from the Eyes, were two Apertures or large Holes through which it fpouts out the Water. These Holes are so very remarkable that they may be look'd upon as a Characteristick of the Fish; for tho' the Cetaceous Kind have Spouts in their Heads they have no Gills, but Lungs.

The Eyes of the Yellow Gurnard are placed more on the Top of the Head than those of the Red; they are like-

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likewife more flat, and are almost half cover'd with the Skin like an Eyelid. The Extremity of the Snout, the *Teeth* and the *Tongue* are like those of the *Red Gurnard*; only that in the Palate were two griftly Bones whose Edges bended downwards. These, as Dr. Ty/on thought, ferve for hooking and flaying the Griftle of the Tongue when it makes a Compression, in order to force out the Water through the Holes of the Head.



THE Sheat-Fift, in Latin Silurus, fometimes grows to a large Bulk weighing eighty Pounds. In the Elb there have been taken fome that have weigh'd 120 Pounds; and in the Viftula that runs into the Baltick they are fometimes caught fixteen Foot in length, and twenty-feven Inches in breadth.

It is of the Colour of an *Eel*, only the *Belly* and Sides are diverfify'd with White and Black. The *Body* is thick, round and flippery, being cover'd with a flimy *Mucus*. The *Head* is flat and broad, and the *Moutb* exceeding wide. In the upper $\mathcal{J}aw$ it has two *Arcolæ* of *Teetb*, and but one in the lower. The *Tongue* adheres to the lower Part of the Mouth. The *Eyes* are fmall, protuberant and round, and cover'd with a Membrane. Before the Eyes, on the upper Jaw, are two long *Barbs* or *Wattles*, and from the lower Jaw four others which are more fhort and flender. Thefe are thought by fome

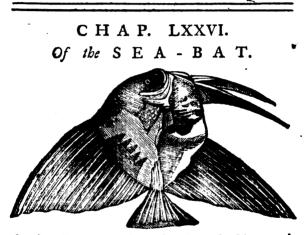
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to fall off yearly, and to grow again, and to be of the fame Nature as Horns. The Tail is not forked.

The Flelb is commended as wholefome Food, and is drefs'd in the fame manner as an Eel. It is found in many large Rivers upon the Continent, and in fome Lakes, their Delight being in rough muddy Waters. It is a very voracious Fifh, and upon that account is reckon'd very mischievous. This is not indeed a Sea-Fifb, but as it is not caught in our own Rivers it comes in as properly here as any where elfe.



H E Sea-Bat, in Latin Vespertilio Marinus, is about eight Inches and a half in breadth from the Extremity of one Fin to the Extremity of the other. But the breadth of the Body is no more than three Inches and a half, and the length from the End of the Snout to the Tail-Fin is about five, whereof the Tail it felf is fomewhat more than an Inch. The Colour is reddifh, but diversify'd in the manner of Waves. Near the Gill-Fins the Colour is yellow. The Eyes are likewife yellow.

CHAP.

CHAP. LXXVII.

Of the SEA-LOACH or WHISTLE-FISH.



HE Sea-Loach, in Latin Mustela vivipara, is properly a Sea-Fish because it never is to be met with out of the Salt-water; but it is very common near the Coast and in the Creeks of the Baltick, where they call it Aelpute or Eel-Pout, and is probably the fame Fifh which at Chefter they call the Sea-Loach, and in Cornwall the Whiftle-Fifb.

It is about a Foot in length or fomewhat better. The Skin is fmooth, of a dusky Yellow on the Back, and full of black Spots; on the Sides it is of a lighter Colour, and on the Belly almost white. The Head is much like that of an Eel. The Gills on each Side are quadruple. It has no Teeth, but the Jaws are rough.

The Sea-Loach brings forth her Young alive, and the Females feem to conceive about the Vernal Equinox, because about that time they begin to have Spawn like other Fish; but the Eggs are very small and white, like About Whitfontide the Eggs begin to look a Nits. little reddifh, and to attain the Size of a Grain of Muftard-Seed : Likewife about that time they begin to foften, for when they first appear they are hard. After this they begin to affume an oblong Figure, and to discover two blackish Specks which are the Rudiments of the Eyes and Head. Then the Belly begins to appear, and afterwards the Tail about the Thicknefs of a very fine Thread.

As the Eggs encrease the Belly is not only diffended with their Bulk, but with a flimy Liquor full of flender Fibres.

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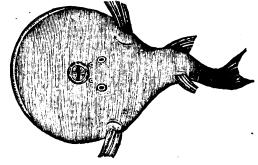
Fibres, by which means the tender Bodies of the young Fry not only lie foft and in a regular Order, but are kept from crowding and hurting each other.

When the young Ones are cut out of the Uterus, they bend their Bodies like *Eels*, moving their Mouths and Gills, and live feveral Hours. The time of their being excluded naturally is about the *Winter-Solftice*. The Males are diftinguish'd from the Females by being lefs, and of a brighter Yellow, whereas the Female is more of an Ash colour.

After the Summer-Solfice the Sea-Loach retires from the Shore and Creeks into deeper Places, where they have a particular kind of Lurking Holes from whence they are taken by the Fishermen; but fometimes they go out of their Reach. The Fle/h is hard and not very agreeable, being chiefly eaten by the poorer Sort.

CHAP. LXXVIII.

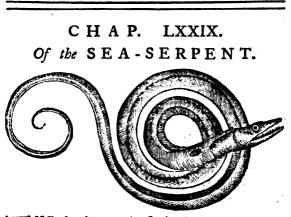
Of the ORB or SEA WEATHER-COCK.



THE Orb, in Latin Orbis, is taken in the Mouth of the River Nile in *Ægypt*. The Figure is nearly Spherical, the Tail only excepted. It is cover'd with a hard Skin which is all over befet with fharp Prickles. It

It has only one Hole at the Gills, which is near the Finthat belongs to them. The Mouth is fmall and arm'd with no more than four broad Teeth. It has another Fin near the Tail on the upper Part of the Body, and one anfwering to it on the lower.

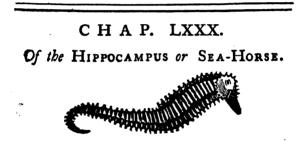
This Fifh is not eatable, it being either all Head or Belly, which you pleafe; and is commonly hung up in the Cabinets of the Curious as a Rarity. Some fay if this Fifh is fulfpended in a proper Place, the Snout will always point to the Quarter from whence the Wind blows, whence the Germans call it the Sea Weather-Cock.



THE Sea-Serpent, in Latin Serpens Marinus, is commonly about five Foot long. The Body is exactly round, flender, and of an equal Thickness, except towards the Tail, where it grows fensibly more flender.

The Colour of the upper Half is of a dusky Yellow, like the dark Side of old Parchment or Vellum. The lower Part is of a brightifh Blue. The Snout is long, flender and fharp, and the Mouth opens enormoufly wide. K 5 Near Near the End of the lower Jaw there are four or five large *Teeth* bending inwards; the reft are fmall and almost inconfpicuous. The upper Jaw likewise has four large ones, the reft are small as in the lower. The *Eyes* are little, and of a Gold-colour speckled with Brown. They are cover'd with a thick transparent Skin. It has only one Pair of *Fins* which are placed at the Gills. The Holes of the Gills are at some distance from the Head as in *Eels*.

The *Flefb* is very well tafted and delicate, but is full of very fmall Bones, and therefore cannot be eaten without fome trouble. It is taken very frequently in the *Mediterranean*.



T H E Sea-Horfe never exceeds nine Inches in length, and is about the Thicknefs of ones Thumb. It has a Head and Snout of the fame Shape as those of a Horfe, and the Body is full of Clefts or Sciffures. The Snout is a fort of Tube with a Hole at the Bottom, to which there is a Cover which he can open and flut at pleasure. The Eyes are small and prominent, and between them are two high Tubercles. The Trunk of the Body confists of seven Sides, but beyond the Vent of four only. The Tail ends in a Point, and is generally very much contorted. Behind the Eyes, where the Gills are in other Fish, are placed two Fins which look like Ears. Above the Fins are two Holes, but there are no Gills Gills neither externally nor internally. Under the Belly are two Vents, thro' one of which the Excrements are excluded, and the Eggs thro' the other.

The whole Body feems to be composed of Cartilaginous Rings, on the intermediate Membranes of which feveral fmall *Prickles* are placed. The *Colour* is of a dark Green, but towards the *Tail* inclining to Black. The *Belly* is mark'd with Spots of a whitifh Blue.

The Stomach is proportionably large, and the Heart is fmall. The Liver and Spawn are red. Ælianus fays the Belly of this Animal is venomous.

It is taken in the *Mediterranean*, and likewife in the *Western Ocean*. There is a large amphibious Animal call'd by fome a *Sea Hor/e*, which ought not to be mistaken for this.

CHAP. LXXXI.

Of the TORTOISE or TURTLE.



THE Tortoi/e, in Latin Teftudo, is a kind of an Amphibious Animal, living both by Land and Water. They are cover'd with a fine large Oval Shell, which is marbled with various Colours. Their Sizes are different, but they are often met with in America five Foot long and four broad.

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There are four forts of Tortoiles, call'd by Sailors the Trunk-Turtle, the Loggerhead, the Hawks-Bill, and the Green-Turtle. The Trunk-Turtle are commonly bigger than the reft, and their Backs are higher and rounder. The Flesh of this Sort is rank, and not very wholesome. The Loggerhead is fo call'd from the Largeness of its Head, it being much bigger than those of the other The Flesh of this Kind is likewise rank. and Sorts : not eaten but in cafe of Neceffity. The Hawks-Bill Turtle is the leaft of the four ; they have long and fmall Mouths fomething refembling the Bill of a Hawk; on the Back of this Turtle grows the Shell that is fo much efteem'd in Europe for making Combs, Boxes, &c. Some of them carry three Pounds, others which are very large fix Pounds of Shell. It confifts of thirteen Leaves or Plates, of which eight are flat and five hollow. They are raifed and taken off by means of Fire which is made under it when the Flesh is taken out: as foon as the Heat affects the [Leaves they are eafily raifed with the Point of a Knife. The Fleih is but ordinary Food, but fweeter and better than that of the Loggerhead; yet fometimes it purges both upwards and downwards, especially between Samballoes and Porto-Bello.

The Green-Turtle are fo call'd because the Shell is greener than any other. It is very clear, and better clouded than that of the Hawks-Bill; but it is fo exceeding thin it is used only for Inlaying. These Turtles are generally larger than the Hawks-Bill, and weigh fometimes two, fometimes three hundred Pounds. Their Heads are round and small, and their Backs flatter than the Hawks-Bill.

The *Turtle* is a dull, heavy, flupid Animal, their Brain being no bigger than a fmall Bean, though their Head is as big as a Calf's; but they have a very good Eye, and a quick Sight. Their *Flofb* looks fo like Beef it would hardly be diftinguish'd from it, if it was not for the Colour of the Fat, which is of a yellowish Green. They ١

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They feed upon Mo/s, Gra/s and Sea-Weed, unlefs in the time of Breeding, when they forfake their common Haunts and are fuppofed to eat nothing. Both the Male and Female are fat the beginning of this Seafon, but before they return the Male becomes fo lean that he is not fit to eat, while the Female continues in good Plight, and eats well to the very laft. They couple in the Water, and are faid to be nine Days in performing the Work. They begin in March and continue 'till May.

This Coupling-time is one of the principal Seafons of Fifhing for them. They are very eafily difcover'd when they are in the Action, the Male being upon the Back of the Female. As foon as they are perceived two or three People approach them in a Canoe, and either flip a Noofe round their Necks or one of their Feet; or if they have no Line they lay hold of them by the Neck, where they have no Shell, with their Hands only, and by this means catch them both together; but fometimes the Female escapes, being more fly than the Male.

Another way of taking them at this time is with the Spear, which being thrown at the Back of the *Turtle* pierces the Shell, and flicks as fast in it as if it were folid Oak. He struggles hard to get looie, but all to no purpole, for they take care that the Line which is fasten'd to the Spear be strong enough to hold him.

The Time of taking Turtle upon Lard is from the first Moon in April to that in August, being the Season in which these Creatures lay their Eggs. The Quantity which they lay is prodigious, being at least feveral Hundreds in one Season. The Night before the lays the comes and takes a View of the Place, and after taking one Turn about it the goes to Sea again, but never fails to return the Night following.

Towards the Setting of the Sun they are feen drawing to Land, and feem to look earnefuly about them as if they fear'd an Ambuscade. If they perceive any Person on Shore they feek for another Place, if otherwise they come

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come on Shore when it is dark. After they have look'd carefully about them, they begin to work and dig in the Sand with their Fore-feet. 'till they have made a round Hole of a Foot broad and a Foot and a half deep, a little above where the Water reaches when highest; this done they lay eighty or ninety Eggs or upwards at a time, as big as a Hen-Egg and as round as a Ball; fhe continues laying about the fpace of an Hour, during which time if a Cart was to be drove over her she would not stir. The Eggs are cover'd with a white tough Skin like wetted Parchment. When fhe has done Laying, fhe covers the Hole fo dextroufly that it is no easy matter to find the Place; after this she returns to the Sea. At the end of fifteen Days the lays again in the fame manner, and at the end of another fifteen likewise, laying three times in all.

In about twenty-five Days after Laying, the Eggs are hatch'd by the Heat of the Sand, at the end of which Term the little *Turtles*, being as big as young *Quails*, run directly to the Sea, without any Guide to lead them or fhew them the way. Those that are taken by the way are generally fry'd whole, and are faid to be delicious Meat.

The Men that ftand to watch for the *Turtle* turn them on their Backs, which is not perform'd without fome Difficulty, for they are very heavy, and ftruggle hard. After this he hales them above High-Water Mark, and leaves them 'till Morning, for when they are once on their Backs they are not able to flir from the Place.

As a *Turtle* enjoys the Benefit of *Lungs*, the can by fucking in the Air bring herfelf to an *Equilibrium* with the Water. She is also able to fwim, like other Animals, by the Motion of her Paws, the most commonly the contents herfelf with creeping.

The Turtle, as was faid before, feeds upon Grafs and Weeds, and this fhe does on the Land as well as in the Water. Near feveral of the American Islands there are a fort of green Meadows at the Bottom of the Sea, which is not many Fathom deep in those Parts; for which Reason when the Weather is fine, and the Water smooth, they may be seen creeping on this green Carpet at the Bottom of the Sea. After they have fed fufficiently they take their Progress into the Mouths of Rivers for Fresh-water, where they likewise take in the refreshing Air, and then return to their former Station. When they have done feeding, they generally float with their Heads above Water, unless they are alarm'd by the Approach of Hunters or Birds of Prey, in which Case they fuddenly plunge to the Bottom.

A Turtle of an ordinary Size, and of the beft Sort, will yield at leaft two hundred Pounds of Flefh, which the Sailors take care to falt, and near three hundred Eggs, which will keep a confiderable time.

The Shell may be fashion'd in what manner the Workman pleases by softening it in warm Water, and putting it into a Mold, for it immediately takes the Impression by the Assistance of a strong Iron Press, and may be asterwards adorn'd and embellished at Pleafure.

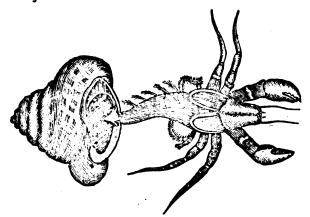


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CHAP. LXXXII.

Of the Soldier-CRAB or HERMIT.



THE Soldier-Crab, in Latin Cancellus, is about three or four Inches long. It has fix Feet, two of which are Biters; one of the two is as broad as ones Thumb, and fhrinks up ftrangely when he is in his Shell, to clofe the Mouth of it. All the reft of the Body is a fort of a Pudding in a pretty rough thick Skin, as thick as ones Finger and a little more than half the Length. At the end of it is a little Tail confifting of three fmall Shells like the Tail of a Sea-Grafbopper. The Infide of this Part is full of a Subftance like that in the Shell of a Crab, but red. When it is expos'd in the Sun, or fet on the Fire, it melts into a kind of Oil.

They vifit the Sea-coaft once a Year to change their Shells, which every one endeavours to fit himfelf with according to his Size. As foon as this is done they run backward into the Shell, and thus cloathed anew and armed armed like Soldiers they march back to the Mountains, and take up their Quarters among the Rocks and the hollow Trees.

They feed upon rotten Leaves and Fruit 'till they are fo increased in Bulk that the Shell becomes too ftrait for them, which obliges them to go down to the Sea-Coaft again to change their Houses. The Curious, who have been at the pains to observe them while they make this Exchange, have been very much pleased with their Manner of doing it; as they go along they ftop at every Shell to examine if it be for their Purpose, and when they have met with one that they like, they immediately quit the old one, and run back fo fwiftly into the other as if they were assorid the Coldness of the Air.

Sometimes it happens that two make choice of the fame Shell, and then this occasions a Battle, for they will fight and bite each other, naked as they are, 'till one of them yields and refigns the Shell to the Victor. When he has got Posses of the takes three or four Turns upon the Shore, and if he likes it he keeps it, otherwise he betakes himself to his old one again, and goes and choose another. This they fometimes do five or fix times, 'till they can get one entirely to their Liking.

There is another fort of *Cancellus* which the *French* call the *Hermit*, which is much less than the former; but as they belong to the Sea no otherwise than in borrowing a Shell from thence, we need not enlarge any more about them.

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CHAP. LXXXIII.

Of the LOBSTER.



THE Lobster, in Latin Aflacus, is better known by Sight than any Defcription that can be given of it. They always feed at the Bottom of the Water, and are furnish'd with a Pair of strong Claws, with which they fasten on the larger Prey that happens to come within their Reach; but when none such offers, they search the Beds of Mud and Gravel for the Worms that commonly lie hid therein.

Lobfters are taken with Pots, as they are call'd, made of Wicker-Work; in these they put the Bait and throw them to the Bottom of the Sea in fix or ten Fathom Water, or sometimes deeper: Into these the Lobster will creep for the sake of the Bait, and by that means is deprived of its Liberty. Their Fless is sweet, restorative and very innocent.

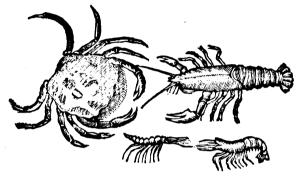
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CHAP. LXXXIV.

Of the CRAB, CRAW-FISH, PRAWN and SHRIMP.



THE CRAB, in Latin Cancer, is much of the fame Nature as the Lobfter, and may be caught in the fame manner. They often lie in the Mouths of Rivers, Creeks, and Ponds made with Salt-Water, and then they may be Angled for with a Piece of Liver, or the Garbage of a Fowl. There requires no great Art in the Management of this fort of Angling; the Bait needs only be tied to a String and laid where they are fuppofed to be; as foon as they are aware of it they will feize it with their Claws, and will not leave their Hold 'till they are drawn up near the Surface of the Water; at which time a Landing-Net fhould be convey'd under them, and by that means they may be brought fafe to Land.

The CRAW-FISH or Cray-Fift, in Latin Aflacus fluviatilis, exactly refembles a Lobster in Shape, and is to be found almost in every Brook and Rivulet in England.

land. The usual way of taking them is by Groping, for they shelter themselves in little Holes on the Banks of Rivers, where they fearch for them with their Hands; fome will take in this manner feveral Dozens in an Afternoon : Others will take a Score or two of Rods or fmall Sticks, and fplit them at one end fo that they may put a Bait in the Cleft ; these they stick in the Mud on the Side of the Brook at the distance of about eight or ten Foot from each other. After fome time they take them up, and if they perceive any Game flicking to them they flide a little Basket made with Rushes. having a long Handle to it, under the Craw-Filb, and fo take them fafely out of the Water in the fame manner as Crabs; for they will fuffer themselves to be drawn no higher than the Surface of the Water. The best time for this Sport is after Sun-fet, for then they feed most eagerly. There is likewife another Way more expeditious than this, which is to take a Bunch of Thorns and Lard it well with the Thighs of Frogs, and throw it into the Water, in the Evening the Craw-Filb will throng about it in Shoals, and so entangle themfelves in the Thorns that by gently pulling up the Cord, which is fasten'd to the Bundle, and slipping a Basket underneath it, you may catch them every one.

The PRAWN, in Latin Locufta, and the SHRIMP, Squilla, harbour themfelves in the Holes of Rocks, and fuch-like Places along the Sea-Coaft; and those that live near the Sea-fide may divert themfelves very agreeably in fpending an Hour or two in catching them. The Net that ferves for this purpose is fomething like a Cabbage-Net, but deeper, and the Messes fmaller; this must be fasten'd to a Bow, with a Handle of the fame Shape and Size as a Tennis-Ball Racket. Those who would take them must be upon the Spot as foon as it is High-Water, that they may be ready with their Nets when the Tide begins to turn. At this time the Nets must be thrust into the Holes and Clefts of Rocks, especially efpecially fuch where Sea-Weeds grow; when you lift them up turn all that you take into a Pail, or fome fuch thing, and then proceed from one Part of the Hole to another 'till you think you have taken all that are there. You may try fome Places twice or thrice over, for when they are diffurbed they will fhift their Station. By this Method you may take feveral Hundreds in an Hour's time.

The *Flefb* of all these fort of Fish are of the same Nature, and only differ in degree of Goodness. They are all supposed to have a Restorative Quality, and therefore must be very nourishing and wholesome.



THE Scollop, in Latin Pettern, is a Shell-Fifh of a fweeter and more agreeable Tafte than an Oifter, and, according to Rondeletius, is more eafily digested and more wholesome.

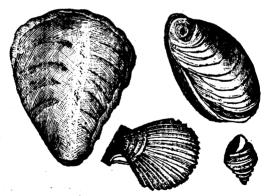
Mr. Reaumur, a Name well known in the Learned World, has taken fome Pains to difcover in what manner the Shells of divers Animals are first form'd, and after214 SEA-FISH.

afterward encrease; which he proves to be from a certain Juice which perspires from their Bodies, and forms new Shells for those Animals that cast them, and encreafes the Shells of those that do not.

This Species in particular are cover'd with Shells foon after they are generated; but as foon as the Fifh begins to grow bigger the Shell will not entirely cover his Body, and confequently a fmall Part of it will begin to appear thro' the Opening of the Shell; from this Part there proceeds a thick vifcous Subftance from whence an additional Piece of the Shell is form'd. From this gradual Encrease of the Shell those Wrinkles proceed which we may observe in all forts of Shell-Fifh, and which may in fome measure ferve for a Guide to determine what Age the Fifh may be of.

C H A P. LXXXVI.

Of the OISTER, MUSCLE, COCKLE and PERIWINKLE.



T H E Names of these Fish in Latin are Ostreum, Musculus, Pectunculus and Cochlea. They are so well known

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known to all that they ftand in no need of a particular Defcription.

The OISTER cafts his Sparum or Spat in May, which at first appears like the Drop of a Candle; it sticks to any hard Substance it falls 'upon, and seems to be provided with a Shell in two Days time, and in three Years they are fit for the Market.

These Oifters they term Natives, and they are altogether uncapable of moving from the Place where they are first Spawn'd. For this Reason the Dredgers make use of a fort of Nets, which are fasten'd to a strong broad Iron Hoop with a sharp Edge, which they drag along the Bottom of the Sea, and so take the Oifters.

The Oiffers thus taken are carry'd to different Places, where they are laid in Beds or Rills of Salt-Water in order to fat them, and thefe they term Layers. Those which when they are spawn'd happen to stick to Rocks often grow to a very large Size, and are called Rock-Oifters. And it is so far from being strange that the Oifters stick to the Rocks in this manner, that it is very common for Sailors to see Millions hang on the Roots of Mangrove-Trees at Low-water, in the Mouths of Rivers in many Parts of the World. What is commonly faid of their changing their Sides at the Ebbing of the Tide cannot be true, for they have not the least Power to do any thing but to shut and open their Shells.

But it is otherwife with the MUSCLE and COCKLE, for they being lighter are more liable to be carried along by any Motion of the Water, and if they cannot move themfelves from Place to Place, they can however hinder themfelves from being the Sport of the Waves. For this purpose they are capable of forming feveral Strings of the Thickness of Hairs, about three Inches long, and fometimes to the Number of 250. With these they lay hold of any thing that is near them. Mr. Reaumur has often feen them making these Threads, and when when he has cut them off they have begun to make others. This Mechanism is still more evident in the *Pinna Marina*, with regard to the Fineness and Number of their Threads: This is a Shell-Fish, which on the Coast of *Provence* grows to the length of a Foot, and on the Coast of *Italy* to that of two Foot. The Production of this Animal is as fine as Silk, and is made use of for the fame Purposes to this very Day at *Palermo* in *Sicily*, for they make various Kinds of Stuffs and other Curiofities of the Silk of this laborious Shell-Fish.

The Inftrument that the Mufcle employs in producing these Threads is what we commonly call the *Tongue*, in the midst of which is a narrow Channel, which serves as a fort of a Mold for their first Formation.

The Cockle has likewife a Power of making these Threads as well as the Mu/cle; the only Difference is, that those of the Cockle are more thick and more short.

As for the PERIWINKLE there is nothing remarkable can be faid of it, but what belongs in common to all Animals that have Shells. Their Bodies confift of a thick flimy Subfance, for which Reafon they are look'd upon as a Reftorative Diet, but not very tempting upon any other account.



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OF

FISH-PONDS,

And the MANNER of

FEEDING FISH.

N making of Fi/b-Ponds a principal Regard ought to be had to the Choice of a fit Place, and a proper Soil. It is now generally agreed that *heatby Land*, inclinable to Moorifh, and full of Springs, is the beft. Let the Situation, if poffible, be at the Bottom or Side of a Hill, that any fudden Shower or continued Rain may wash down Worms, Infects, and other things fit for the Nourifhment of the Fish. This likewife will be a means of filling and refreshing the Pond, if it has not the Advantage of a Brook or Rivulet. Moreover it has been obferved that those Ponds, which have been fo fituated as to receive the Stale and Dung of Horses, have bred the largeft and the fatteft Fish.

The Head of the Pond fhould be at the loweft Part of the Ground, and the Trench of the Flood-Gate or Sluice fhould have a pretty fwift Fall, that the Water may not be too long in running out when it is to be empty'd.

If more Ponds than one are to be made at a time, it will be most beautiful and advantageous to have them placed one above another, in such a manner that the L. Head

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Head of one may be next to the Point or Tail of the other.

If the Pond carry fix Foot of Water it is fufficient, but yet it fhould be eight Foot deep, that there may be room enough to receive the Rains and Frefhes that may fall into it. In fome places there fhould be Shoals for the Fifh to fpawn upon, and Sun themfelves in; as likewife Holes, hollow Banks, and Roots of Trees to ferve for Retiring Places. Some caft in Bavins in the moft fandy Places not far from the Sides, which ferve not only for the Fifh to fpawn upon, but are a Defence for the young Fry againft fuch Vermin as would devour them. Trees fhould not be planted fo near the Pond as to incommode it with the falling in of dead Leaves, becaufe they fpoil the Water and render it difagreeable to the Fifh.

In Stocking the Pond, if the Fifh are defign'd only for Store they fhould be all of one Sex, that is either *Milters* or *Spawners*; by this means *Carp* will become large and exceeding fat in a fhort time.

The most usual Fish which Ponds are flock'd with are Carp, Tench, Bream and Pike. Of these Carp and Tench agree well enough together, but any other Fish will devour their Spawn. The Pike admits of no Companion but the Pearch, and he is not always fafe, if not very large. However it is usual to put Roach, Dace, Bream, Chub, Gudgeons and Minmows into the fame Pond with him, that he may have wherewithal to fatisfy his voracious Nature, and grow fat the soner. Likewise care should be taken, that all the Pike which are put into the fame Pond should be nearly of a Size, because a Pike of thirty Inches will devour another of fifteen.

The beft Food to render *Pike* extremely Fat is *Eels*, and without them it is not to be done in any reafonable time.

The best Feeding Place for all forts of Fish is a Shoal-Place, near the Side, of about half a Yard deep, and this will be a means to keep the deeper Parts fweet and clean.

Befides, whatever is thrown into the Water will clean. be more readily picked up by the Fifh, and nothing will be loft.

Any fort of Grain boiled is proper Food for Fifh. especially Pease and Malt coarse Ground. Also the Grains after Brewing, while fresh and sweet, are very proper. But one Bushel of Malt will go as far as two of Grains.

Raspings and Chippings of Bread, or almost any Scraps from the Table, placed under a Cask of Strong-Beer or Ale, in fuch a manner that the Droppings of the Liquor may fall among them, is excellent Food for Carp. Two Quarts of this is fufficient for thirty, and if they are fed Morning and Evening it will be better than once a Day only.

From October to March thirty or forty Carp in one Stew-Pond may be kept well enough without Feeding : but from March to October they must be fed as constantly as Fowls in a Coop, and they will turn to as good an Account: And it must be always remember'd, that Constancy and Regularity in the ferving of Fish will conduce very much to their Feeding and Thriving.

It has been observed by some that Pike in all Streams, and Carp in hungry Springing-Waters, if fed at stated times. will rife up and take their Meat almost from the Hand.

There are Inflances of Fish gathering together to be fed at the Sound of a Bell, and other kinds of Noises, even tho' the Person himself keeps out of fight, which is a demonstrable Proof that Fishes hear. Tho' it must be acknowledged that fome very learned Men formerly have doubted whether Fish have this Faculty or not: But the Abbe le Pluche, the ingenious Author of Spectacle de la Nature, seems to intimate that it is now not fo much as question'd.

Befides the Food already mention'd, there is one fort which may be called accidental, and that is when Pools or Ponds happen to receive the Wash of large Commons, where

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where Flocks of Sheep ufually feed; for the Water, being enrich'd by the Dung, will maintain a much greater Number of *Carp* than otherwife it could do. For the fame Reason it is an Advantage for Cattle to stand in the Water in hot Weather and dung in it, for it nourisfies the Fish very much.

Some feed *Carp* and *Tench* with the fhort Mowings of Grafs, Bullocks and Sheeps Blood, and Chickens Guts, which will help the Growth of the Fifh, and fatten them likewife. But then care fhould be taken to fupply them with no larger Quantities than they can difpenfe with, otherwife they will rot and putrify, thereby making the Water unwholefom, and greatly endanger the Fifh.

It is observed by fome that *Tench* and *Eel* delight in those Ponds chiefly whose Bottom is full of Mud; whereas the *Carp* likes a found gravelly Bottom, where Grass grows on the Sides of the Pond, for in the hot Months, if the Water happens to rise, they will feed upon it.

Some make a fquare Hole in the middle of their Ponds three Foot deep, and cover it with a fort of Door fupported at the Corners by four ftrong Stakes driven into the Ground. This provides the Fifh both with a Place of Shelter and Retreat, and likewife preferves the Ponds from being rob'd, for the Door and Stakes would tear the Nets all to pieces.

Those that have variety of Ponds should let them dry in their turns every three or four Years, and so continue fix or twelve Months, which will kill the Water-Lillies, Can-Docks, Bull-Rushes, and other Weeds that breed there; and as these die for want of Water Grass will grow in their stead, which, as was said before, Carp are fond of in the hot Months.

In the Winter Seafon, when there happens to be a hard Froft, it will be neceffary from time to time to break Holes in the Ice in order to give the Fifh Air, otherwife they will all die, for they cannot live without fresh fresh Air. It must indeed be own'd that this is a Rule generally known, and as generally practifed.

Care fhould likewife be taken either to kill or drive away the Enemies of Fifh, and Devourers of their Spawn; fuch as *Herons*, *Cormorants*, *Sea-Gulls*, *Kings-Fifbers*, *Water-Coots*, *Water-Rats*, *Bitterns*, *Wild-Ducks* and *Otters*, if they frequent the Ponds; likewife *Tame-Ducks* are great Devourers of Spawn, and the young Fry of Fifh, and therefore fhould not be permitted to do Mifchief.

It is furprizing, that confidering the Benefit which may accrue from making of Ponds and keeping of Fifh, it is not more generally put in practice: For befides furnifhing the Table, and raifing Money, the Land would be vaftly improved, and be worth more this way than any other whatfoever. Suppofe a Meadow to be worth Forty Shillings an Acre, four Acres converted into a Pond will return every Year a Thoufand fed *Carp*, from the leaft Size to fourteen or fifteen Inches long; befides *Pike, Pearch, Tench* and other Fifh. The *Carp* alone may be reckon'd to bring, one with another, Six-pence, Nine-pence, and perhaps Twelve-pence a-piece, amounting at the loweft rate to Twenty-five Pounds, and at the higheft to Fifty, which would be a very confiderable, as well as a ufeful Improvement.



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A SHORT



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DESCRIPTION

OF THE

RISE and PROGRESS of all the Noted RIVERS in England, with the Remarkable Towns they pass by, and the Kinds of FISH they contain,

BARKSHIRE.



HE principal River in this County is the Kennet, whole Waters abound with excellent Trout; it takes its Rife in Wiltfbire, near a Village of the fame Name; from whence purfuing its Courfe about five Miles, it paffes by Marl-

borough, and in about ten more enters this County near Hungerford: At Newberry it becomes navigable as far as Reading, where it falls into the Thames and loses its Name.

The River Ock makes its first Appearance near Compton, in the Vale of the White Horfe, and then runs almost quite across the County to Abington, a little beyond which it joins the Ifis and mixes with its Streams.

The River Loddon first takes its Name in this County, but is the Product of four diffinct Rivulets, which have

their

A DESCRIPTION, &c. 223

their Spring-Heads in *Ham/bire*; after a fhort Courfe, without paffing by any Place of Note, it lofes itfelf in the *Thames* at *Wargrave* near *Henly*. All these abound with Variety of Fifh.

BEDFORDSHIRE.

THE River Oufe, paffing close by the Town of Bedford, winds through this County with various Meanders, and divides the whole into North and South. This County gives us but one River more, the Joel; but there are feveral Brooks that run into 'em both that afford good Trout.

BUCKINGHAMSHIRE.

THE River Tame I shall describe in Oxfordshire. • There are Streams about Stony-Stratford, and that Part of the County, where Trout may be found.

CAMBRIDGESHIRE.

THE River Cam takes its Rife at Dunton, runs by the Univerfity of Cambridge, and after a Courfe of upwards of ten Miles enters the Great Oufe, and is no more heard of. I know of but two other fmall Rivers in this County, the Welney and the Grant. Trout are hard to be met with, but there are Plenty of other Fifh. There are many large Meers and Lakes in the Ifle of Ely well flock'd with Fifh.

CHESHIRE.

THE River Dee rifes beyond Pemble-Meer in Merioneth/hire, and running through it foon after takes in the Gyrow and the Akwen, then entering Denbigh/hire paffes thro' the Middle of that County: With the help of other Streams it takes Poffeffion of Bangor, runs by Wrexham in Shrop/hire, and thro' Part of Flint/hire, then makes its Entry, attended with other Rivers, into Che/hire, ends its Triumph at Chefter, and with a Mouth of feven Miles wide makes a Breach in the Iri/h Sea.

The

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The River Wever rifes near Broxton, receives the Walwarn, the Lee, and feveral other Streams, then runs down to Northwich, where it takes in the Dane with its additional Streams, befides the Pever, and falls into the Irifh Sea with the Merfay. Into the Merfay run out of this County the Ringay and Berking. The Dee and the Merfay yield plenty of Salmon, and at a Diftance from the Sea abound with Trout, and all Sorts of River Fifh, as well as the other Rivers.

CORNWALL.

THE Tamer is by far the principal River of this County, for it runs a Course of near fifty Miles, almost from Sea to Sea, and divides it from Devonstrie. As it glides along it swallows up the Aire, the Kense, and the Lemara; it passes near Launceston, Saltash and Plimouth. and falls into the Sea in Plimouth Sound. There is such Plenty of Salmon in its Streams, that it gave Occasion to the following Distich:

Cornwall from England, Tamer's Streams divide, Whence with fat Salmon all the Land's supply'd.

The River Foy takes its first Rife near a Village called *Levethan*, and glides near *Bodman*, and after a Course of fixteen Miles runs into the Sea at Foy.

The River Loo, or Low, has its Spring at a fmall Village call'd *Temple*, and after a fhort Courfe of about twelve Miles difembogues its Waters between the two Lowe's into the Sea.

The fpring Heads of the River Valle appear at a Village called Roche, which as it runs widens its Banks till it mixes in the Waters that form the Harbour of Falmoutb.

The Cober rifes at Theram, and after a flort Courfe buries itfelf in the Sea near Helfton.

The River Hale rifes at a Village called Garmow, and falls into the Sea at Lalant.

Allen

Allen rifes at a Village of the fame Name, glides by the Town of *Truro*, incorporates with the Stream of the *Vallo*, and then fall together into *Falmoutb* Harbour.

Cornwall being a narrow Neck of Land, washed on each Side by the Sea, most of the Rivers run but a short Courfe; however they abound with Salmon, Salmon-Trout, Mullets and many other Sea-Fish, besides feveral Sorts of the fresh Water kind.

CUMBERLAND.

THE Kirkfop and the Esk come out of Scotland, the two Levins from Northumberland, and join together near Stapleton, and, with the Sark, bury their Waters in the Eden.

The Wampull runs into the Sea at Whitridge.

The River Derwent appears first at Barrowdall, and after a Courfe of twenty Miles runs into the Irifb Sea near Werkington. Befides these the Alne, the Petterell, the Cocker, that flows by Cockermouth into the Sea, and Vent, there are several nameles, Brooks that run into the above-mention'd Rivers, which afford plenty of Trout.

DERBYSHIRE.

THE Derwent rifes in the Peak, and receives in its Courfe the Burtock, the Wye, with the Lathlyll and Bradford; then runs down with a few Helps, to Derby, and about fix Miles farther finks into the Trent, as does the double-mouth'd Erwash two Miles farther.

The Dove rifes near the Three Shire Stones, and with little Affiftance glides to *Afabourne*, then, with *Treut* Streams on each fide it, falls into the *Treus*.

The *Ibber* and *Rother*, two more *Trout* Streams, join at *Chefterfield*, and three Miles farther meet the *Crawloe*, then run into *York/bire*; most of these Streams yield the best fort of *Trout*, and fome of them *Grayling*; but this Fish is most peculiar to the *Dove*.

LS

DEVON-

DEVONSHIRE.

THE River Ex, from whence the City of Exeter or Exchefter derives its Name, has its Rife in Somer let/bire, at Exford; after a Course of fix Miles, another River enlarges its Streams, called Dunsbrook ; three Miles lower two fmall Brooks join the Ex, and at Tiverton the River Lemon enlarges its Streams; then gliding about feven Miles fan. ther it receives the River Columb, and within three Miles of Exeter the Foreton pours down its Tribute of Waters. from whence running lovingly together they fall into the Sea at Exmouth.

The River Dart first appears among the Mountains near Gidley, and after a Course of near thirty Miles. falls into the Sea at Dartmouth.

The Plime makes its first Appearance at a Place call'd Welcomb, and after receiving the Waters of eight small Rivulets with the River Tavy, washes the Walls of Plimouth, and lofes its Waters in Plimouth Harbour.

The River Taw rifes a little above a fmall Village called Seale, and after a Courfe of thirty Miles, augmented with the Streams of the River Moul, that glides by Moulton, and three other fmall Rivers, is buried in she Sea beyond Barnstable.

These Rivers and many others, as the Tave, Tinga, Otter, Hareborn, Touridge, Abdne, are stock'd with excellent Trout, Salmon, and most River Fish.

DORSETSHIRE.

ONE Part of the double-headed Stour rifes near Mere in Wilifbire, and the other at Wincaunton in Somerfet/bire, which join at Stallbridge, and then it runs down to Hutton Maries, where it receives the Lidden and the Derelifs near Shermister; after a Course of about eight Miles it runs under Blanford Bridge, and at Craford, three Miles farther, it takes in another small Stream ; then near Winborne Minster a handfome Brook falls into it; afterwards it glides on so Perley, where it . takes

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takes in a River that flows from *Cranborne* nine Miles from the *Seour*; then augmented with fome petty Auxiliaries runs into the Sea near *Chriftchurch* in *Ham-Ibire*.

The River Frome raifes its Head near Bemifter, and, in its Current of three Miles, receives a fmall River to its Embraces; afterwards it glides on to Frome that gives it a Name, and takes in another Stream, then flows on with the Affiftance of two more Auxiliaries, gliding by Dorchefter the Capital of the County, and falls into the Sea at Warebam, taking Luckford Lake in its Progrefs. There are innumerable Streams in this County, be-

There are innumerable Streams in this County, befides the Rivers *Evoil*, Luddon, Allon and Piddle, all of 'em full of fine *Trout*, *Jacks*, *Pearch* and all Sorts of River Fifh.

DURHAM.

The Kellop, the Wellop, and the Burdop form the Ware at St. John's Chapel, then, with eight affiftant Streams, it fwells to the City of Durbam, and after a Course of forty Miles falls into the Sea at Sunderland.

The Derwen rifes at Newdon, and after a Journey of fixteen Miles feeks the Tyne near Newcafile. All these Streams produce Salmon and Trout, and most other River Fish.

For the Tees fee York/bire.

ESSEX.

THE River Chelmer rifes at Debden, then runs with a few affiftant Streams down to Dunmow in a Course of about seven Miles, and in about eight more enlarges its Banks to Chelmsford, and after another Course of seven Miles falls into the Sea.

The Blackwater rifes at Wisbich, mixes with the Chelmer near Langford, and finks with it in the Salt Water.

The

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The River Crouch begins its Stream near Burfled, and with the Sea forms Walfleet Island, famous for Oysters.

The River Stoure rifes near Sturmore, and after near thirty Miles Travel arrives at the Sea near Harwich.

The Colne, form'd by three fmall Rivulets, takes its Name at Great Yelden, and in a March of fourteen Miles touches at Colchefter, and a little below it bathes itfelf in the Sea and is drown'd.

All the Rivers which fall into the Sea in or near the Haven of *Harwich* are deep, and flow in Motion, and confequently have few or no *Salmon* or *Trout*, but are full of *Carp*, *Tencb*, *Pike*, *Pearch* and *Eels*.

GLOCESTERSHIRE.

THO' the SEVERN takes its Rife near Plinillimon Hill in Montgomery/hire, yet as it appears in its greatest Lustre in this County, running through it in a Course of above fifty Miles, I thought I could in no Place give the Description of it more properly than here. It is accounted the Second River in England. Before it enters Shrophire it receives above thirty Rivers into its Channel from the Mountains in Wales: with the Affiftance of these it runs down to Laudring, where it receives the Morda, that flows from Ofweftree; when it arrives near Montford it takes the little River Mon to its Embraces; after almost furrounding Sbrowsbury it glides on to Roxalter, and receives the Roddon and Terne in one Stream, then hasting to Bridgenorth the Worle mingles with its Waters; from thence it takes the Skirts of Stafford/bire, and enters Worcefter/bire, receiving the Little Dowle at a Village of the fame Name, till it comes to Redfton, where the Stoure encreases its Streams, and near Grimley the Salwarp hastens to augment its Train; then courfing below Worcester, the Terne runs into it at Powick; afterwards flowing forward, with the Auxilliaries of three small Streams, it joins the Avon, at Tewksbury, and then takes in the Caran.

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Caran, the Swiliat, and runs to the City of Glocefler, where it takes along with it the River Leden out of Hereford/bire; then with the Affiftance of the Stroud, and two fmall Streams, it falls into the Sea that bears its Name along with another Avon.

HAMSHIRE.

THE River Itchin has two Springs, the one at Nortington, the other at Henton, about fix Miles afunder North and South, joining their Streams at Itchington; from thence it glides on to Winchefter, and at Southampton lofes itfelf in the Sea. There are Plenty of Salmon caught in this River, and the Trout are well taffed.

There are many Rivulets and Brooks in this County plentifully flor'd with Trout and other River Fifh.

For the Rivers Avon and Stower, see Wiltschire and Dorsetsbire.

HEREFORDSHIRE.

THE Wye first shows its Head in Plinillimon Hill, near the Spring of the Severn, and may be allowed to be the fourth River in England; it runs from, its Head out of Montgomery/bire to the Skirts of Radnor/bire, then enters this County, takes in the Streams of the Lug near Hereford; then arrives at Rols, shears a winding Course to Monmouth, where it receives the River of the fame Name, and the Trothy from Wales, and near Chepflow mingles with the Severn. Some Miles below Chepflow the Usk, taking its Progress out of Wales, passes by Newport in Monmouth/bire, and falls into the Mouth of the Severn.

All the Rivers in *Hereford/bire* yield a prodigious Plenty of all forts of River Fifh; the Lug is well ftor'd with Grayling.

HERTFORDSHIRE.

THERE is no County in England better watered with fmall Rivers and Brooks; but they are defcribed in the Course of the Thames, for which see Middleser. HUN-

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HUNTINGTONSHIRE.

THIS County has only two Rivers, the Oufe and the Nen; but there are a great many Rivulets and Brooks, wherein are good *Trout*.

KENT.

THE Stour has two Heads, one rifes at Royfon, and, with three affiftant Brooks, runs to Albfort, where it joins with the other Head that comes from Pofiling, and, making one Body, runs to Canterbury, and from thence to Hackington Fordich, where it abounds with excellent Trout; afterwards it continues its Courfe to the Sea, which waftes the Shores of the Isle of Thanet.

The Medway rifes in Suffex, and flowing-through the Middle of this County runs by Maidfione and Rochefter, and fome Miles below forms a Bed, where most of the Royal Navy repose after the Toils of War; a great many fmall Rivers run in to the Affistance of this River well flored with Fish.

The reft, which are but few, I shall mention in the Course of the *Thames*, for which see *Middle Jex*.

LANCASHIRE.

THE Ribble rifes in York/bire, takes in the Calder near Whaley, and with the Affiftance of the Derwent runs by Preflon, and a few Miles farther finks into the *Irifb* Sea.

The Hindburn and the Roburn run into the Lone, as defcribed in Weftmorland.

The Irwell, the Spodden, and feveral other Streams, fall in with the Irk and Roche at Manchester.

The Merfay rifes in Derby/hire, washes the Town of Warrington, and, dividing this County from Chefbire, falls into the Irif Sea below Leverpool in Lanca/hire.

The Wyre rifes in Wyre/dale Foreft, and in its March receives the Calder and three other Sreams; then finks in the high Sea, with the Skippen at Hacking/gall.

There

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There are many more Brooks and Rivulets, most of 'em abounding with *Trout*, as the great Rivers with Salmon, and all other River Fish.

The Irk is thought to breed the fineft Eels in Great-Britain.

LEICESTERSHIRE.

THE Stour rifes near Sutton in this County, washes the Town of Leicefter, and below that Place takes in the Eye, the Wreak, and several other Streams, then buries itself in the Trent, with the Affistance of many Streams.

The Rivers Deane and Snyte taking their Rife in this County, the former at Godby, and the latter at Hoofe, augment the Waters of Trent. These Streams produce excellent Trout, and most other Fish.

LINCOLNSHIRE.

THE River Witham rifes at Witham on the Borders of Leicefter/bire, and after a Courle of thirty Miles with very little Help arrives at Lincoln; thence, with the Affiftance of the Bame that flows from Burgb, and three other Streams, it falls into the Sea at Boston. The Trent parts it from Leicesster/bire and Nottingbam/bire.

There are feveral Waters in the Fens that go by the Names of Dikes and Drains, which afford large Jack, Pearch, Carp and Tench, &c.

MIDDLESEX.

THE THAMES, which is the Southern Boundary of this County, is by far the principal River in England, and if we confider its Navigation, Commerce, the noble Towns and Palaces on its Banks, and the Multiplicity of Fifh that dwell in its Streams, it may be faid to be one of the Richeft in the World.

This Queen of Rivers raifes its Head among the Cetfwold Hills in Gloceftershire, then receiving the Churm from

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from Sheruton and two other small Streams glides on to Cricklade, where it finks its Bed, and widens its Bounds till it becomes navigable for fmall Barges; when it arrives at Lechlade the Coln and the Lech pay their Tribute of Waters; the one begins its Streams at Bradley, the other at North Lech, then flowing a Course of about ten Miles, with three Rivulets to enlarge its Streams, it receives the Windrufh, whole Head appears first at Cutt/den in Glocestersbire; then after a five Miles March takes in the Evenlode, which has taken from its Head at Evenlode a Journey of twenty Miles to join its Streams; from thence it flows to Oxford, where, as if it wanted Water to fupply that Nurfery of Learning, it receives the Affiftance of the River Charwell, and then divides its Streams to embellish fome of the Colleges in Oxford; then flows to Abington in Berk/bire, where it receives the River Ock, that rifes on the Borders of Wiltschire, another Tributary; then gliding between Berksbire and Buckinghamsbire augments its Train till it reaches Dorchester Bridge, where it weds the Thame, and from thence receives the conjunctive Name of Thame and Ifis, commonly called the Thames.

The Thame rifes with a double Stream, one in the Hills near Ailsbury, and the other at Merfworth, both in Buckingbam/hire; then namelefs it runs to Tame, where it receives its Title, and weds the Ifs at Dorchefter Bridge; at Reading it receives the Kennet, as defcribed in Willfhire; about three Miles farther it takes in the Loddon, a River that rifes in Hambire, and produces good Trout; at Shiplake near Marlow it takes in a fmall Stream, that rifes at Weft Wickham in Buckingbamfhire, from thence it runs by Maidenbead and Windfor; within half a Mile of Stains it takes in one Branch of the Coln, and at Stains Bridge another Branch runs in.

The River Coln is a Confluence of many Streams, and produces more *Trout* than any River within fifty Miles of *London*; one of its Springs rifes at *Afbbridge*, and runs by *Hemfted*, where it takes in another Branch that comes comes from Northchurch, and passes by Watford to Rickmanfworth; another Stream rifes in Bedford/hire, passes by St. Albans and Watford, and joins the Coln at Rickmanfworth. At Uxbridge it receives a Stream that flows from Great Miffenden in Buckingham/hire, then it divides into several Branches the two before-mentioned; a third runs over Hounflow Heath, which divides again; one Stream runs by Hanworth, and the other by the Powder-Mills, and meet again in Bufhy-Park, and enter the Thames from Hampton-Court-Garden; another Branch divides and falls into the Thames at Thifleworth.

The *Thames* now glides forward till it meets the Tide at *Tedington*: The other Rivers that run into it on the right are described in *Surrey*.

At Brentford it receives the River Brent, a poor Stream that rifes from a Spring near Coney-Hatch, and with the Affiftance of three or four fmall Waters makes fhift to creep into the Thames.

After this noble River has paffed London Bridge it runs by Deptford, where it takes in a fmall River that rifes near Kefton in Kent, and running by Lewifham takes the Name of Lewifham River: Beyond Elackwall it receives the Lea, which takes its Rife in Hertfordfhire, and becomes navigable at Ware Almost against Woolwich it receives into its Bosom the River Roddon, which flows from Dunmow in Effex.

Two Miles lower it receives the Waters from *Dagen*. bam Breach, where there is good fifting; and a little further a fmall River runs in from Brentwood. Almost against Purfleet the Darent from Surrey, affisted by the *Craye*, falls into it. From Effex it receives a fmall Stream from Thurrock, and enters the Sea between the North Foreland in Kent, and the Nafe in Effex, with a Mouth ten Leagues wide, after a Course of near three hundred Miles.

MONMOUTHSHIRE.

ONE of the most confiderable Rivers of this County



234 is the Ebuilt, which owes its Origin to two fmall is the Ebuilt, call'd Ebuilt Vawre and Ebuilt Vach; Rivulets, call'd Ebuilt Vawre and Ebuilt Vach; rear Rych it is augmented by the Sroway, and from thence continues its Courfe towards the Sea, into which it falls with the Uske at Newport Haven.

The Rhymny divides this County from Glamorganfire, and as it passes along receives the Addition of many small Streams, and at length fall into the Severn Sea not far from Landaff.

For the Uske and Wye fee Herefordjhire.

NORFOLK.

THE Yare is form'd by the Confluence of feveral Streams which take their Rife in the Heart of this County, and is particularly famous for breeding great Plenty of fine *Ruffs*. It paffes through *Norwich* the Capital of this County, from whence gliding along to *Yarmouth* it joins the *Thyrn* and the *Waveney*, and with them falls into the Sea.

The Waveney rifes near Lopham, and passing by feveral Towns, as Difs, Bungay and Beccles, separates this County from Suffolk, 'till arriving near Yarmouth it loses itself in the Yare.

The *Thyrn* appears first near *Burro*, and after a course of near twenty-five Miles is likewise swallow'd up by the *Yare* near *Yarmouth*.

For the Oufe fee Oxfordshire.

NORTHAMPTONSHIRE.

THE Welland rifes in Leicefter/bire, and divides the two Counties, runs by Stamford, and lofes itfelf in the Fens in Lincoln/bire below Crowland. The Welland from its Rife, for feveral Miles in its Courfe, affords good Trout; and above Spalding it is common to find Tench of four or five Pounds Weight.

The Nen or Nyne rifes among the Hills near Draughton, takes in feveral Rivers in its March till it reaches the Ifle of Ely below Peterborough, and then runs into the Sea below Wishich. There are Trout to be found in

moft

most of the Streams that fall into the Nyne, and yet there are but few in the River itself below Thrapflon; however there is Plenty of Jack, Pearch, Rud or Red-Tail, and very large Bream in the rest of its Courfe.

The River Charwell rifes from the Hills near Catefby, on the Borders of this County, and with the Help of two other Streams runs by Banbury in Oxford/hire, and enters the Ifis at Oxford, as mentioned before. The Charwell is the best Trout Stream in this County and Oxford/hire.

NORTHUMBERLAND.

THE Tweed rifes from the Erefleen Mountains, and after a long March, with the Aid of many Rivers, which are all well flock'd with Trout, it flows by the very Walls of Berwick, and immediately after loses itfelf in the Sea.

This River abounds with Salmon more than any other in England, there being a prodigious Quantity caught in it every Year, which, being pickled and fent to London by the Coal Ships from Neuvcafile, gains the Title of Neuvcafile Salmon.

The Tyne is at first two diffinst Rivers call'd North-Tyne and South-Tyne, whose Heads are at the distance of forty Miles from each other; they join their Streams near Hexham, and as they pass along take in the Skell, the manyheaded Read, the Allow, with the Harle, and many other Auxiliaries; then passing by Neuvcastle glides on 'till it forms Tinmouth Harbour.

The Pont rifes near the Picts Wall, and runs till it meets with the Blithe, then both embracing fall into the Sea, call'd Blithe's Nook.

The Wan/peck rifes near Whelpinton, takes in a fmall Stream, afterwards the Pont, runs by Morpeth, and dies in the Sea near Seaton.

The Coket, the U/way, the Redley, and Rilland unite at Allanton, and with the Addition of four other Streams fall into the Sea near Warnmouth.

The

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The Bromyshe rifes at Aylenamore, runs about twelve, Miles with the Aid of two fmall Rivers, then receives the winding Bowblent, and falls into the Tweed at Tilmouth.

The River Aln rifes at Alnham, and runs into the Sea at Aylmouth.

The Warn rifes at Warnford, then glides into the Sea at Warnmouth. All these Rivers are full of Fish.

NOTTING HAMSHIRE.

THE Rivers that water this pleafant County are Meden, Erwash, Idle, Mawn, Derwent, and Snyte, all burying their Waters in the filver Trent; and most of 'em produce excellent Trout.

OXFORDSHIRE.

THE Ouje takes its Rife near Fitwell in this County, and proceeds to Buckingbam, Stoney-Stratford, and Newport Pagnel in the County of Bucks; from thence it glides along to Bedford, afterwards to Hunfington and Ely, till arriving at Lyn Regis in Norfolk it falls into the Sea. During its long winding Courfe it fwallows up no lefs than fix Rivers, viz. the Lowjel, Ine, Cam, Little Ouje, Stoke and Lyn, befides a great Number of Rivulets and other namelefs Streams. The reft of the Rivers in this County are defcribed in the Courfe of the Thames, therefore I fhall not fay any more, than that their Streams will yield the Anglers good Diversion with all Sorts of Fish, but Salmon.

For the Ifis and Thames fee Middlefex.

RUTLANDSHIRE.

THE Chatter, in which there are good Trout, rifes on the Borders of this County, runs through Liefeld Foreft, and falls into the Welland near Stamford. The Welland runs into the Sea near Spalding.

The Wadeland rifes in Leicestersbire, and, after a Course of about twenty Miles, falls into the Welland below Stamford. SHROP. Noted RIVERS in ENGLAND. 237

SHROPSHIRE.

MOST of the Rivers in this Neighbourhood run into the Severn, which glides through the Middle of the County, for which fee Gloceftershire.

SOMERSETSHIŘE.

THE Avon, which is the principal River of this County, rifes with two Heads, one near Tetbury in Glocefters/bire, and the other at Hawkerton in Wilts/bire; it receives another fmall Stream near Malmsbury, and above Chipenham takes in the Coln and the Lyne in one Flood, afterwards the Stert and Brook near Bradford, then hastes to Bath, but before that receives the Frome, then with the Addition of three small Streams it runs through the rich City of Briftof under a Bridge, like London Bridge, with Houses built on each Side, and then is incorporated with the Severn.

The River Tone first shews its Head near Wivelfcomb, runs on to Taunton affisted by three Streams; then glides on till it loses its Name in the Parrot, a River rising at Croketborn, augmented with several Streams, and fall into the Sea at Huntspill.

For the River Ex, fee Devonshire.

For the River Frome, see Dorsctsbire.

The River Frome begins its Courfe at Menager, runs down with the Afliftance of three other Streams to , Bathford, where it falls into the Avon, and is no more.

The Tor appears at Burcomb-Lodge, haftens to Avelands Island, and near it forms a large Meer well for'd with Fish, then falls into the Sea with the Parrot.

These, with the Ordred and Evil, and many other Streams, wash the Finns of innumerable Shoals of Fish.

There are fo many Springs about the City of Wells, and fo well flor'd with Trout, that I have known a Brace of Eight Pounds fold for Three Shillings.

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STAF-

A DESCRIPTION of the

STAFFORDSHIRE.

ALL the Rivers in this County fall into the TRENT, which, many imagine, takes its Name from thirty Streams supplying it with Water; but others from thirty different kinds of Fish it produces.

It first fhews its Head near Norton below Moury Hill, and takes in the Streams of the Sow from Stafford, the Tyne from Newcastle, the Blithe and the Peak from below Burton upon Trent; it likewise receives the Dove, which is fam'd for Grayling, with the Manyfold, Hunsse, Charnot, Yendon, Teance, Erwasse, Darwen, &c. and at Nottingham the Lyne meets its Streams; in its Course to Newark three more Streams unite with it, and there the Snyte also joins it; and in its Progress to Gainfborough the Flete and two others attend its Motions.

The Sour from Leicefter, the Leen from Nottingbam, the Merrial, the Idle, and many other Streams, increase the Waters of this rich River, till it loses its Name in the Humber.

This noble Stream is flock'd with Variety of Fifh, and its Plenty and Abundance may vie with any other River of *England*; moft of the Streams that fupply it produce very good *Trout*.

SUFFOLK.

The Orwell and the Gipping join near Needham, where the Gipping loles its Name, and the Orwell, running by *lp/wich*, finks in the Sea fix Miles below that Town, yet retains the Name of Orwell Haven.

The River Breton rifes at Thorp, and, after a Courie of about twelve Miles, lofes its Name in the Stour that parts E_f/ex and Suffolk; the Little Oufe rifes in this County, or rather upon its Borders, and joins the Great Oufe about nine Miles beyond Thetford in Norfolk.

Few of these Rivers produce any Trout, but they are plentifully stock'd with Pike, Pearch and other Fish.

SURREY.

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THE River Wandle rifes near Croydon, glides thro' Bedington,

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Bedington, paffes through Cashalton, Martin, Mitcham, and falls into the Thames at Wandfor; from Martin to the Head of the Stream there are feldom any other Fish caught but Trouts and Eels; but from thence to the Thames there are several other forts of River Fish.

There is a fmall Stream that rifes above Yewell near Epfom, and enters the Thames at Kingfton, where formerly Trout have been caught, but they are now very fcarce, tho' there are feveral other Sorts of Fifh.

The next is the River Mole that rifes fome Miles above Darking, and a little beyond that Place finks into the Earth, and, after a Courfe of two Miles under Ground, rifes again near Leatherhead, then runs winding to the Thames, and, as tho' weary of its own Waters, parts near Ember Mills, and buries itfelf in the Thames, one Stream over-against Hampton-Court, and the other a little lower.

The River Wey rifes in Hamshire, runs down, together with three or four affistant Streams, to Godlamin, then to Guilford, where is a new Cut made navigable for Barges; at Weybridge the old River and new meet, and, lovingly wedded, again enter the Thames near Weybridge. In this old River I have caught good Trout between Guilford and Bysteet, but the Bottom is fo uneven, that if you fish with a Worm you must use a Float.

There is another Stream call'd *Abbey* River, but it is nothing more than a Cut from the *Thames* over-against *Pentybook*, which again joins its Mother Stream near *Chertfey* Bridge, and is full of all Sorts of Fish. This River was cut many Ages ago by the Monks of *Chertfey* Monastery.

SUSSEX.

THE River Ant, or Lavant, rifes near Rook/hill, and after a fhort Course of five Miles runs half round Chichefter, and two Miles below it enters the Sea; this River produces but few Fish.

The

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The Head of the Arun, I think, rifes in Leonards Foreft, and, with the Affiftance of four other Streams, washes the Walls of Arundel, and three Miles farther loses its Name in the Sea. This River is better stored with Mullets than any other in England.

The Lewes has more Heads than the Hydra, but its Body is not in Proportion; it glides by the Town of Lewes, takes in a fmall Stream at Bedingham, and falls into the Sea near Myching. The Rother takes its first Rife near Mayfield, and, with the Help of four more fhort Streams, leaves this County, and falls into the Sea at Oxney Island in Kent.

The River Rother has many Streams running into it before it takes its Title, and after a Course of seven Miles is devoured by the Sea near Old Shoreham: All these Rivers have many Sorts of Fish, but few Trout.

WARWICKSHIRE.

ALL the Rivers of this County run into the Avon, which rifes at Kilworth on the Borders of Leicefterfoire, and at Rugby receives the Streams of the River Swift, and at Stoneby-Abbey the Sow; then runs to Ebmonfon, where the River Leame encreafes its Flood; and after washing the Walls of Warwick Castle it hastens to Stratford upon Avon, the Burying place of the Immortal Shake/pear; two Miles farther the Stour mingles with its Waters, and below Bitford the Arrow incorporates with it, and with a few additional Streams falls into the Severn at Tewksbury in Glocefter/bire.

WESTMORTAND.

THE River Lone rifes in Matter-Strange Foreft, where, after a Courfe of two Miles, it receives the Barrow and the Burbeck; then runs down to Kirkby-Lonfdale, and falls into the Sea at Orton-Chapel in Lancashire; there are fine Trout in this River down to Kirkby, and from thence to the Sea plenty of Salmon.

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The

The River Can or Ken takes in the Sput and three other Streams before its Arrival at Kendall; then flies to the Sea at Kenlands in Lancafhire. In this River are two Catadoups or Water-falls.

The Eden rifes near the Head of the Swale, runs by Carlifle, leaving Weftmorland, and falls into the Irifb Sea: This River is full of Trout and Salmon, with plenty of other Sea and River Fifh.

The River Wynster rises at Wynster-Chapel, and falls into the Sea with the Can. Wynander Meer, famous for the Char, runs into Lancashire, and from the tree to the Sea at Kensands. The Glenkerwen and Glenkrode run into the Ulles Water on the Borders of this County, and enter the Eden at Hornby.

WILTSHIRE.

THE Avon first appears near Savernake-Foreft within three Miles of Marlborough, and in a Courfe of about fourteen Miles reaches Amesbury; from thence it glides along Salisbury-Plain'till it meets with the united Streams of the Willy and Nadder; then paffing by New-Sarum, it receives the Bourne. After this entering Ham/bire it takes in feveral fmall Rivulets as it paffes along, 'till at length joining the Stour near Chrift-Church, they both foon after fall into the Sea.

There is another Avon which rifes in this County, and paffing by Bath and Briftol falls into the Mouth of the Severn; for which fee Somerfet/bire.

The Nadder rifes near Shaftsbury, the Willy or Willybourne near Warminfter and the Bourne at a Village call'd Callingborne; all which, as was faid before, lose themfelves in the Avon near Salisbury.

WORCESTERSHIRE.

THE Rivers of this County are described in the Course of the Severn and Avon, for which see Glocesterfoire and Warwickshire.

YORK.

YORKSHIRE.

THE Tees is the Northern Boundary of this large County, and rifes near Hellopland Hill, where four Counties meet. Its Current is fo fwift that few Fifh are to be met with in it, except Salmon. About eight Miles from its Spring it falls fixty Foot perpendicular from a Rock; as it runs along towards the Sea, it takes in the Langdon, the Hude, the Lune, the Bauder, the Greata, the Skern and the Levan, befides feveral other namelefs Streams. It paffes by no Town of Note, except Stockton, about feven Miles below which it mixes its Waters with the Ocean.

The Yore and Swale first make their Appearance near Morvell Hill in this County, but taking different Courses, the former passes near Rippon, and the latter by Richmond, after which they join their Streams a little beyond Borougbbridge, and then lose their Names and are called the Ouse. Thus united they pass by the ancient City of York, and pursue their Course till they meet the Trent, where they all assume the Name of the Humber, which is continued till the Sea receiving its wide Stream destroys all Distinction.

All the confiderable Rivers in the County lose themfelves either in the Ouse or the Humber; thus the Dale and the Foss flow into the Ouse above York, the Aire, the Darwen and the Dun below it, the Foulney, the Ancum and the Hull mix their Streams with it when it is called the Humber.

There are many other Rivulets of fmall Note, which fearce deferve a particular Mention; however most of the Rivers in the County are well stock'd with Fish, particularly with the various kinds of *Trout* and *Salmon*.

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An

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An Account of the NAVIGATION of the River THAMES, and the LOCKS that are built thereon.

FTER what has been faid of the Rivers of England, perhaps the inquifitive Reader will not be difpleafed, to know in what Manner Barges of a large Burden are navigated into the very Heart of the Kingdom; efpecially fince it is an Invention fo ufeful to the Publick: For by this Means Tradefmen and Farmers are enabled to fend their Goods to an advantageous Market, and at the fame Time the most populous Cities are fupplied with Neceffaries of all Sorts at a moderate Price. To explain this we need only mention the River Thames, which is navigable upwards of 140 Miles above Lendon-Bridge.

It is very obvious to all, that the principal Obftruction to the Navigation of most Rivers is the Want of Water, especially in the Summer-time, when the Springs are low. Now, in order to remedy this Inconvenience, the Use of Locks was happily invented, which are a kind of Wooden Machines placed quite across the River, and so contrived as totally to obstruct the Current of the Stream, and dam up the Water as long as it shall be thought convenient. By this Artifice the River is obliged to rife to a proper Height, that is, till there is Depth enough for the Barge to pass over the Shallows; which done, the confined Waters are fet at Liberty, and the loaded Veffel continues its Voyage till another Shoal requires the 'fame Contrivance, and again retards its Course.

But

But though this Method is extremely convenient, it is attended with great Charge; for they are obliged to pay, in one Voyage, upwards of Fourteen Pounds; I mean, if they go through all the Locks in their Paffage to or from *London*. This extraordinary Expence is chiefly owing to the Locks being the Property of private Perfons, who raife a large annual Income therefrom; which may be readily effimated, if we confider that 300 Barges pafs and repafs at leaft fix Times in a Year: And yet, which is ftill more fuprifing, the Charge of the Locks is not above one Third of the Expence of a fingle Voyage.

But that the Reader may ftill have a clearer Notion of this Matter, I fhall fubjoin a Lift of all the LOCKS on the River THAMES, with their Diftance from each other, and the Price the Barges are obliged to pay : And herein it must be noted, that tho' between *Lechlade* and *Oxford* there are few or no Locks, yet in Summer, when the Water is low, they pay what is here fet down for Flashes only.

Dift. by Water.

								-				
PLACES.						M	lile	s.		l.	5.	- d.
Lechlade to St. J	oh	n's B	rid	ge,	Stor						01	
Busket Lock	-	-	-	-	-	-	2	-	-	00	02	o 6
Farmers Wires	or	Wei	rs	-	-	-	I	-	-	00	01	00
Lower Farmers	1	Wire	8	- ·	-	-	I	-	-	00	01	00
Daye's Wires	-	-	-	•	-	-	I	-	ľ-	00	oi	00
Radcot Bridge,	St	one	-	-	-	- '	2	-	-	00	00	00
Beck's Wire -	-	-	-	-	•	-	I	-	-	00	00	00
Oldman's Wire	•	-	•	-	-	-	2	-	-	00	01	00
Rufhy Wire -	-	-	-	-	-	-	1	-	-	00	01	00
Rudges	-	-	-	-	-	-	T	•	-	00	01	00
Thames Wire	-	[-	-	-	-	-	I	-	-	00	01	оo
Ducksford Wire		-	~	-	-	-	3	-	-	00	00	00
Shifford Wire	-	•.	-	-	-	-	Ī	-	-	00	oi	00
Limbress -	-	-	'n	-	•	-	3	-	-	00	01	00
				•							N	ew-

[245] Dift. by Water.

Dat. by wate	
PLACES. Miles.	l. s. d.
New-Bridge, Stone I -	- 00 00 00
Cock's Wire	- 00 ĐI 00
Noah's Ark 2 -	
Langley's 2 -	- 00 01 00
Pinkle I -	- 00 00 00
Bolde's Wire I -	- 00, 01 00
King's Wire 2 -	- 00 00 00
Godítow Bridge, Stone - I -	- 00 00 00
Oxford 2 -	- 00 00 00
Isley Turnpikes I -	- 00 02 06
Sandford Lock and Turnpikes - 2 -	- 01 02 00
Newnham Lock 2 -	- 00 02 06
Culham Turnpike, and the old Lock 2 -	
Culham Bridge, Stone	- 00 00 00
Sutton Lock I -	- 01 15 00
Daye's Lock 6 -	- 00 01 00
Benfon Lock 4 -	- 00 15 00
Wallingford Bridge, Stone	- 00 02 06
Mousford Lock 3 -	- 00 01 00
Cleve Lock 1	- 01 05 00
Goring Lock $\frac{1}{2}$ -	- 01 05,00
Hart's Lock 2 -	- 00 00 00
Whitchurch Lock	
Maple-Durham Lock 2 -	- 00 12 06
Cavershem Lock and Bridge, Wood 3 -	
Sunning Lock and Bridge, Wood - 3 -	
Cotterel's Lock 3 -	- 00 07 06
Mash Lock 4 -	- 00 07 06
Henley Bridge, Wood 1 -	- 00 00 00
Hameldon Lock 2 -	- 00 09 00
New Lock 4 -	- 00 07 06
Temple Lock	- 00 03 00
Marlow Lock and Bridge, Wood - 2	- 00 04 00
Bolter's Lock 4 -	- 00 07 06
M 3	Maiden-

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[246] Dift. by Water.

PLACES. Miles.	<i>I</i> .	5.	d.
Maidenhead Bridge, Wood 1/2 -	- 00	00	00
Windfor Bridge, Wood 8 -	- 00	00	00
Datchet Bridge, Wood I	- 00	00	00
Staines Bridge, Wood 6 -	- 00	00	00
Chertfey Bride. Wood 6 -	- 00	00	CO
Kingftone Bridge, Wood 10 -	- 00	10	00
London Bridge, Stone 20 -	- 00	00	00



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NECES-

Those that fell, offer or expose to Sale, or exchange for any other Goods Bret or Turbot under fixteen Inches long, Brill or Pearl under fourteen, Codlin twelve, Whiting fix, Bass and Mullet twelve; Sole, Plaice and Dab, eight, and Flounder feven from the Eyes to the utmost Extent of the Tail, are liable to forfeit Twenty Shilings by Distress, or to be sent to hard Labour for not lefs than fix, or more than fourteen Days, and to be whip'd.

Those who unlawfully break down Fife-Ponds, or Fish therein without the Owner's Licence, are liable to three Months Imprisonment, to pay treble Damages to the Party aggrieved, and to be bound to good Behaviour for Seven Years.

Every one who between the First of *March* and the Last of *May* shall do any Act whereby the Spawn of Fish shall be destroy'd, shall forfeit Forty Shillings and the Instrument.



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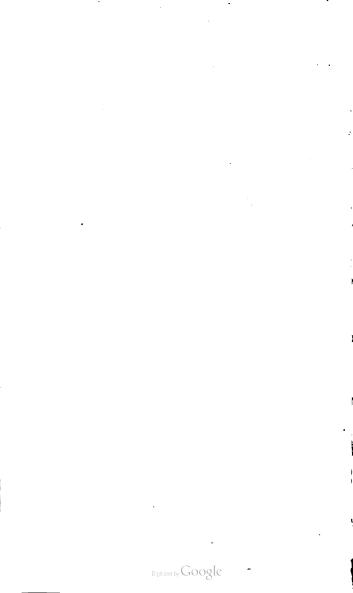
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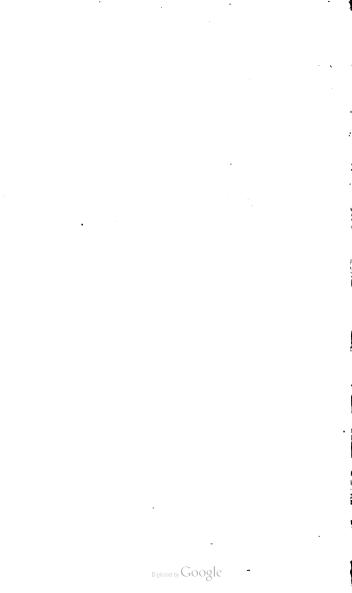
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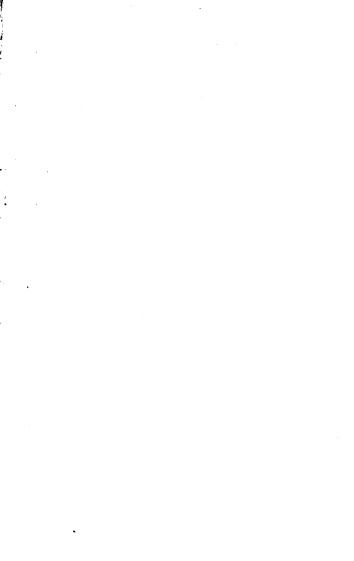




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