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Issued in connection with

The GREAT INTERNATIONAL FISHERIES EXHIBITION

FISHERIES AND FISHERMEN OF ALL COUNTRIES

FROM THE EARLIEST TIMES

BY

W. M. ADAMS, B.A.

FORMERLY FELLOW OF NEW COLLEGE, OXFORD
AUTHOR OF 'ZENOBIA: A TRAGEDY,' AND INVENTOR OF THE CŒLOMETER



LONDON

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ALL COUNTRIES.

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Fishes

A POPULAR HISTORY

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W. M. ADAMS, B.A.

FORMERLY FELLOW OF NEW COLL: OXFORD;
AUTHOR OF 'ZENOBIA: A TRAGEDY,' AND INVENTOR OF THE CELOMETER.

Are you a fisherman, father?
DECKER.

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FISHERIES AND FISHERMEN OF ALL COUNTRIES.

CHAPTER I.

THE CONDITION OF FISHERMEN IN EVERY AGE.

'Twas a fat oyster.

Pope.

Poverty is the badge of all our tribe.

Merchant of Venice.

3RD FISHERMAN.—Master, I marvel how the fishes live in the sea.

1ST FISHERMAN.—Why, as men do a-land : the great ones eat up the little ones.

Pericles.

A KAKI or oyster of venerable appearance and high reputation for wisdom, whose remarks have been preserved by the learned Kiuo in his famous Japanese sermons, was lying at ease one day amid the rocks beneath the Eastern waters, and was watching the sunlight which played among the reeds and grasses of that pleasant retreat. Now it needed but a very slight glance down through the blue limpid depths to see that this oyster, as we should call him, with his well-developed beard and general expression of cool tranquillity, was a highly distinguished member of his order. A gentle murmur proceeded from his half-open mouth as he addressed a youthful kurumayebi, or lobster, standing respectfully near him ; and any one acquainted

with the mollusc language might have perceived that he was comparing the relative advantages of shell-fish and their captors for the benefit of his friend. "I know quite well," whispered the Kaki languidly, "that unfortunate human race which cannot even breathe this delicious atmosphere. They are all an unhappy lot, and have very little idea of the pleasures of existence; but those who are the particular enemies of us and of others who dwell in the ocean, are worst off by far. Just look at the whole race of fishermen—I don't care of what country or what age—I defy you to mention a single man of wealth, or leisure, or importance amongst them, unless it was Masaniello—and how long did he keep his power. They are all as poor as a periwinkle, and as unprotected as a jellyfish. As for their houses, did any one ever hear of a fisherman living in a cottage lined with mother-of-pearl? And then look at the dangers which they are incessantly incurring. There comes a little puff and over they go, while I lie here and watch their bodies floating about upon the surface." Just at this moment a strange shadow passed across the sunlight; quick as thought the Kaki stopped his discourse and closed his shell with a snap. At last, when a long period had elapsed and he felt that all danger was past, he opened his eyes,—and found himself deposited upon the cool white marble of a fishmonger's stall.

In the sensations experienced by the hero of this little Eastern apologue, that of surprise would doubtless have predominated, but we question whether his astonishment would not have been higher in degree, as well as pleasanter in kind, if, instead of finding himself upon a stall in the Japanese market, he had awoke amid the magnificence of the International Fisheries Exhibition. For many of the remarks made by the acute, though rather too self-confident, mollusc were perfectly

correct. As, standing in the midst of the great palace, we look back upon the history of fishing and fishermen from the earliest times, it seems as if the abundant wealth and devices around us had risen from the ocean beneath the wand of an enchanter. Rich and varied as are the products here collected, there is no trade or occupation so peculiarly distinguished through all times and all nations by the poverty of its pursuers as that of fishing. From the boatless, netless, shiftless race of *Ichthyophagi*, described by Arrian and Strabo, to the big-booted and oilskin-coated individual who forms to the observant eye one of the most picturesque and familiar objects of the seashore, poverty is the badge which marks the fisherman.

Among primitive and unsettled communities the principal pursuits of life consist of fishing and hunting; yet even there the hunter claims the greater share of importance, since before either agricultural and pastoral pursuits have taken root, both food and clothing are alike supplied from the produce of the chase, while fishing must be content to confine itself to the former of these departments of the commissariat. As civilisation advances and the growth of agriculture converts hunting from a benefit into a detriment, rivers and streams no longer lie open to every chance comer, but yield their wealth only to a privileged and limited number. But though the waters which formerly supplied an industry for the many may now afford only an amusement for the few, yet little improvement has accrued to those who still follow that calling for their livelihood, no longer in the streams and rivers, but on the wild and dangerous seas. In character, as in habits, the fisherman seems little changed from the days of Oppian. Physically, he is still well-made, active and athletic; morally, he must needs be patient and enterprising. No calling indeed

demands so severe and constant a strain upon the moral virtues of patience and fortitude. His labour is incessant, his reward slight and uncertain. He must face the chance of sudden and violent end far more habitually than either soldier or sailor, yet must hope for no special glory or memorial as his recompense. He must be content often to leave wife and children with a smiling face, and know that as likely as not he may come back to them within twenty-four hours only as a corpse cast up by the treacherous sea. Death in its most rapid and startling form is his familiar companion, but he never can suffer his hardihood or his cheerfulness to be dimmed for a moment by that ghastly presence. A sudden gust, a bucket thrown carelessly over the side, an awkward movement at an inopportune moment, may in an instant snatch him away beyond recall, with no further memorial than a simple inscription of "Drowned at Sea." The church at which he worships is full of such records; and from his own family perhaps, a father, a brother and a son have all perished by a sudden death. Yet nothing daunts his unconquerable courage, or wearies out his inexhaustible patience. This it is which makes the fisheries of a nation so valuable a nursery for their national defences. England is not the only country which owes her greatness upon the seas in no slight measure to the qualities of her fishermen. The navies of Athens and Greece in the olden time, as of Holland and France in modern days, were largely recruited from the same ranks. Upon their calling, too, was conferred the most splendid destiny that has adorned the human race. From amongst the fishermen of Galilee came forth the spiritual princes of the earth, and the poverty and humility in which they lived is the very type of the apostolic life. Such a race of men, it is evident, must form not merely an

integral, but a most vital portion of a nation's strength ; and no pains can be too great for the purpose of ascertaining their customs and for developing their capabilities to the utmost possible degree. No doubt it may not be easy to obtain detailed information as to their customs in the earliest ages, for the very simplicity of their habits and retirement of their lives tends inevitably to create obscurity, though when we descend to modern days the copiousness of the treatment grows indeed apace. Fully to illustrate so vast and intricate a theme would require a lifetime of research and a volume—or rather a bookshelf—of no inconsiderable dimensions. Yet even the brief and unpretending sketches here presented can scarcely fail to catch some interest from the scenes in which they are laid, and the incidents by which they are diversified ; and may serve at least to indicate new fields or rather oceans for investigation to the student of historical philosophy, no less than new tracks of sympathy for the general public. Whether we stand by the Indian, as, in the glare of his midnight torch, he spears the leaping salmon in the reddened waters, or follow our own hardy fishermen to their wild and dangerous haunts in the northern sea ; whether we note the similarity of thunny catching in the heroic days of Greece with the mode pursued even now in parts of Southern Europe ; whether we learn from the Chinese the endless subtleties of device born of long observation and yet longer patience, or look back upon the efforts of a mediæval monk as they develop slowly through the centuries into a vast system of European pisciculture ; whether we descend with the learned Italian into the tomb, or inhale the breezes of ocean as we pursue the flying whale ; through whatever age and whatever land we stray, the same mingled sense of natural and moral beauty greets us on every hand. To the fishes with their

marvellous forms, their glowing hues, their lovely homes, belongs a world scarce penetrated yet by the eye of man. To the fisherman has been assigned the nobler privilege of offering an example of patient industry, of unrepining poverty, of discipline and self-restraint at least during his labours at sea, and of utter insensibility to danger in the pursuit of duty, which marks the followers of that craft in every country, even, so far as we can trace, from the very earliest times.

CHAPTER II.

EGYPT AND THE ICHTHYOPHAGI.

She was used to take delight, with her fair hand
To angle in the Nile.

Beaumont and Fletcher.

EGYPT, the China of the Western world, was the cradle of piscatorial as of other industrial arts and inventions. So prominent a part was played by the fishermen in the domestic economy of that country that the prophet Isaiah alludes in special terms to their desolation. In the sepulchral monuments of that extraordinary land where the living have the appearance of being already dead, and the dead vociferously claim to be considered alive, we find many allusions to the practice and illustrations of the methods pursued. Drag-nets and clap-nets are constantly represented full of fish, and bronze harpoons and fish-hooks still remain to bear witness to their early ingenuity. The tomb of Nevophth, built as early as the seventeenth dynasty, contains a representation of two men angling, with the hieroglyph of fishing inscribed above them. Another picture of about the same period shows five men engaged in net-casting: one standing in the water, and the other standing in the middle of the net. At Elethya in a similar painting, ropes are attached to each extremity. One of the hieroglyphs collected and conjecturally translated by the learned and

ingenious Italian, Rosellini, yields a suggestion that the device of using cormorants, or at least some kind of birds as intermediaries between themselves and the inhabitants of the waters, a kind of fish-hawking common enough in China, was not unknown to the Egyptians. As, however, the special point does not appear to have occurred to the professor, it may be as well to quote his own words, especially as they will illustrate the nature of the records from which our knowledge of these most ancient occupations is derived, and the amount of the skill required for their interpretation. The author speaks of the hieroglyphic word representing a net, and then, says he, there follows the figure of a bird with the signs of plurality. Then comes another bird with beak and claws, and that character expresses, as is evident from other places, a mode of taking fish, and in general the idea of fishing. More often one finds this symbol preceded by the phonetic word which in the spoken language expresses the same idea with the armed hand following the words indicating the action. In fact, it is the figure of a fish with the note of plurality. From these premises the learned and ingenious author concludes that the inscription represents the inspector of bird-snaring and fishing. “Si esprime dunque in questa iscrizione: *l' ispettore della caccia colle reti agli uccelli, e della pescagione dei pesci, che è l' ufficio dell' uomo in quella scena figurato.*” But with the most sincere deference to so high an authority, we cannot help thinking that the representation may have relation, not merely to birds and fish, but to catching the latter by means of the former.

Snaring crocodiles was another favourite industry or amusement with the people of ancient Egypt, as is shown by the tomb of Sciumnes at Kum-el-Ahmer. Men in flat-bottomed boats covered with palm or papyrus seduced the

unlucky reptile into shallow water where he could not dive, and speared him then and there. This somewhat resembles the process of cockatoo-shooting in Australia, which can only be effected by the sportsmen dressing themselves up in green boughs, and creeping along with the utmost caution so as to elude the vigilance of the two sentinels always on the look-out from the highest boughs of a gum-tree. As one reads all the various designs for the entrapping and destruction of these helpless creatures, one is visited sometimes with a qualm of compunction on thinking of the tremendous catalogue of never-ending treacheries which characterise the whole dealings of man with every other portion of living creation. Nor was Egyptian ingenuity confined merely to capture, but extended also to modes of preservation. The art of drying and curing fish, not discovered in Europe till the fourteenth century, that parent period of so many modern employments, was known of old in the land of the Pharaohs; and pictures are still extant representing the different stages of the process, and showing amongst other things how the big fish were cut in pieces previous to being desiccated. In one respect, too, that of the wholesale destruction of the fry, the fishermen of Egypt seem to have been open to the same charge as the most reckless of modern caterers. Every year, after the inundation, there were found in the receding waters numbers of small fish from six to nine inches long, which Djewhari calls Sir, and identifies with the *μαῖνις*; while Dioscorides considers them to be the same as the Sahnat or Sihna, though Makrizi distinguishes the two, as does also Avicenna according to De Sacy. This may be true enough, and the species may have been one incapable of attaining a larger growth; but when we read of the immense quantities caught after the closing of the sluices at high Nile, and find that throughout the rest of the year the great river was but

scantly supplied with inhabitants, and those of very large size; a remembrance of the Stormontfield experiments naturally recurs to the mind, and one wonders whether, as the parr were formerly distinguished from the salmon, so in this instance the Sir may have been nothing else than the young of some larger species, and their destruction have given rise to the scarcity prevailing in the waters of the Nile.

Holy wars seem to have been as much in fashion in Ancient as in Modern Egypt; and the controversy assumed the curious form of one tribe with the utmost irreverence eating up the fishes which the inhabitants of the adjoining territory held in divine adoration. This was a fertile source of recrimination and dispute, and the quarrel between the Ombitæ and their neighbours on this knotty point attained the dimensions of a very respectable war. A very ancient exercise of royal prerogative has been preserved for us by Diodorus. Mœris or Thothmes IV. made over to his queen all rights in the lake which bears his name, for her to buy ornaments with the produce; and if it be correct that twenty-two different kinds of fish were found there in great abundance, her Majesty had no reason to be dissatisfied with the amount assigned for her pin-money. In more recent times Ebn Modalbir, according to Abd Alatif, an Arab physician of the fourteenth century, was the first to lay a tax upon fishing, and for this purpose established regular inspectors at Alexandria, Damietta, the Cataract of Oswan, and other places.

Isis, under the form of a fish-tailed woman, the common object of adoration to the Egyptians, was also worshipped by the ancient Suevi as the discoverer of the sail. Doubtless Horace had her image in mind when he penned his famous comparison for an incoherent simile.

“Desinit in piscem mulier formosa superne.”

Which we may render—

A woman lends the lovely bust, a fish supplies the tail.

The following hymn in her honour, taken from the Magic Papyrus, bears some resemblance to the style of Hiawatha.

“ Isis has struck
 With her wing
 And closed the mouth of the rain,
 She caused the fishes to remain lying in the stream,
 Not a jug of water could be drawn out of it.
 Sinking of the water, rising of the water !
 Her tears fell (like) water,
 Her tears fell into
 The water ; a cubit of fishes at the mouth of the ape ;
 A cubit of wood at the mouth of the star.
 By Isis was uttered the cry : No crocodile !
 And was effected the act of salvation.
 Come, act of salvation.
 PAPALUKA ! PAPARUKA !
 PAPALURO.”

These latter lines form an invocation of the fish-god.

Akin to this deity, in substance if not in name, was Dagon, the fish-god of the neighbouring Phœnicians, whose grand temple stood at Azotus. The origin of his apotheosis is attributed by Sanchoniathon to his having been the inventor of the plough and the loaf ; a noble title indeed, which makes one half inclined to look with leniency upon the idolatry, especially when it is compared with the heavy fine which would now be imposed upon any one who conferred such a benefit upon the world at large, unless indeed he consented to be robbed of all his due. Dagon was probably identical with the *Κήτω* worshipped at Joppa, and *Δερκήτω* at Ascalon, all three towns being close together, and the nature of the worship being identical ; but a doubt may be permitted whether the transformation of Dagon on the one

hand into $\Sigma\iota\omega\nu$ or Sidon, and on the other into Atergatis, is a convolution possible to any except an etymologist of a happily extinct period. The two deities however, Dagoda (or Zephyr) of the ancient Suevi, and Dagoun, the beneficent principle worshipped at Pegu, may indicate some trace of earlier connection before historic times.

One or two points related by Ælian of Egyptian fish may here be cited as curiosities. He observes that the Egyptian sea-tortoise hides its eggs in the sand and then swims off to sea, and he points out the Darwinian adaptation of the polypods to their environments in assuming the colours of the rocks to which they cling. Egyptian frogs also exhibit a remarkable intelligence in the art of self-defence. When a frog, he says, sees a river serpent coming, he snaps off a piece of reed or cane, and holding it tight athwart him presents an impregnable defence against his opponents. Sea-foxes in Egypt were, it appears, quite equal in intelligence to their brethren on the land; and the angler who was so unfortunate as to make a catch of one of them found his line snapped like a flash of lightning before ever he could draw bait or prize from the sea. To the same author we are indebted for the information that fly-fishing was familiar to the Macedonians, and that tickling trout was a device by no means uncommon amongst the fishermen of that time in general.

Hard by the eastern borders of Upper Egypt dwelt, in ancient times, the tribe of Ichthyophagi, divided in Ptolemy's map, which accords with the best classical authorities, into two races, both exceedingly poor, one inhabiting the eastern coast at the entrance of the Red Sea, and the other to the east of the Persian Gulf, close to the land of the Gedrocians, and between what is now Cape Malan and Cape Jask. Pliny says this coast was thirty days' sail in length, but Pliny's

statistics are not always precise. To the former of these tribes, as Herodotus informs us, Cambyses sent messengers before going to war with their neighbours the Macrobian, in order to obtain ambassadors who could speak the Macrobian language. From the account both of Diodorus as to the Ichthyophagi on the western shores of the Red Sea, and from that of Arrian as to the portion of the tribe settled towards the east of the Persian Gulf, it is evident that the greatest poverty prevailed amongst them. Though they lived almost entirely on fish they had neither boats nor nets, and their implements, after the very rudest stage of industry, were made of stone.

CHAPTER III.

THE TIMES OF THE CLASSIC WRITERS.

All the old ones
He hath sent a fishing.

Massinger.

MANY allusions to topics connected with fishing are contained in classical works, though they do not frequently occur in the earlier writers. Homer, for instance, merely dedicates a short epigram, of no great merit, to some fisherboys who had pleased him; while Hesiod, so far as we remember, except in a single line, is altogether silent. Thunnies, in especial, afforded excellent sport with the people of ancient Greece, and are a frequent subject of reference. Their capture was effected by driving them in shoals into the harbour, and then battering them to death with harpoons and instruments of every kind, after the method still practised in Sardinia, where lagoons seven miles in length are divided by thick partitions of reeds, and the thunnies are beaten to death within the enclosures. This barbarous form of proceeding supplied Æschylus with a vivid image of the destruction of the host of Xerxes, an image placed with more poetic than dramatic aptness in the mouth of the Persian messenger, who describes the scene to Atossa. "But the Greeks kept striking," says the messenger, "hacking us with the fragments of oars and splinters of

wrecks, as if we were thunnies or a draft of fish." What a whirlwind of applause must have greeted that bold and glowing picture, which combined in one line the popular national pursuit and the most splendid victory ever achieved since warfare began! Aristotle mentions the thunnies, saying that they belong to a gregarious and carnivorous class, and deriving their Greek name of *hamiæ*, or companions, from their going always in shoals, a derivation which may have been more justifiable than it would seem; and Arcestratus gives a poetical receipt for dressing them, which has been translated into Italian verse by Signor Domenico Scina. According to Pliny, in whose mouth a story never grows less, they weighed as much as fifteen tons, the tail alone being nearly four feet in width. Fried slices of them made a capital dish for the Athenian poor, like fried plaice with our own population. "Who do you match with me, I'd ask?" says the Bobadil of Aristophanic Comedy. "I'll just eat some hot thunny and drink a gallon or so of wine, and then I'll blackguard you every general in Pylos." In the Idylls of Theocritus, whose every line breathes of pure air and summer skies, and compared with whom the idylls of other writers are like plants in a conservatory, occurs more than one allusion to the habits of fishermen, one eclogue in particular being especially assigned to those characters. Ausonius, too, in his poem on the Moselle, after describing the

"High-crested towns wrought from the hanging rocks,
Hills green with Bacchus' leaf, and pleasant flow
Of Mosel's silent stream that flows beneath,"

goes on to speak of "the grey crowd" of fishes swimming in the pleasant waters. Nor must we here pass over the interesting work entitled 'Geoponica,' drawn up, according

to the best authorities, by Cassianus Bassus at the command of the Emperor Constantine Porphyrogenitus. This curious treatise forms an admirable illustration of classic science, containing excerpts from Aratus, Hippocrates, Zoroaster, and numerous other writers on rural matters; and together with information of all kinds, botanical, agricultural, and piscatorial, it furnishes such items as receipts for universal bait, and charms for driving away mice from any particular field.* It is, in fact, an encyclopædia of ancient rural lore.

Hook, rod, line, and net, every weapon in fact now used by man in his finny warfare—except that potent instrument the trawl—was apparently common to classic times. When the enemy is so easily caught, there is little inducement to waste ingenuity in devising new means of offence. Still, the variety of methods, especially in relation to nets, was considerable; and fishermen, to follow Julius Pollux (or rather Polydeikes), might be divided into three classes—the anglers, the employers of nets and torches for night use with the spear, and the divers for sponges, or for the purple-fish. The ordinary implements were as follows: the *nassa*, or net, said to be made of twigs; baskets of various kinds; the casting-net; the drag-net; the *γάγγαμον*, or *sagena*, the time-honoured seine; corks; bamboo fishing-rods; poles or stakes to fix into the ground; fishing-lines; flax and sewing-thread; hooks; leads and fishing-spears. To this list the author adds the boat utensils; and observes

* I am indebted for a knowledge of the existence of this curious treatise, as well as for many other courtesies, to Mr. Garnet, the well-known superintendent of the reading-room at the British Museum; and I am glad to avail myself of this opportunity for expressing my thanks to the numerous officials in that department who have aided me in my researches.

that in the night fishing the fishermen propelled the boat down the stream with poles, and had ropes for mooring on land, machines for drawing the boat, connected with towing, the boats being drawn up trenches ; skins used to protect their hulls from injuries ; and props, or perforated stones, to which they attached the mooring-ropes. Eels were caught by letting down into their haunts from the top of a high bank some cubits' length of sheep's intestines, the lower end of which was seized by the eel. Thereupon the angler placed the other end, to which was attached a small wooden tube, in his mouth, and by means of inflation caused the eel to swell until it was hopeless to attempt escape. At Marseilles boats used to be shaped like swordfish, and then circled round to drive home the catch. Pilots possessed a large measure of influence, for to them was entrusted the important duty of determining the omens.

It is to filial piety that we are indebted for the most perfect and poetic description of this subject, whether of ancient or of modern times. A learned citizen of Anabarsus, being aged and infirm, failed to present himself before Severus when the emperor paid a visit to that town. For this omission the old man was banished to the island of Malta, and his son Oppian went with him into voluntary exile. To win his father's freedom was the object of this excellent youth ; and the mode he took was as brilliant as it was original. He wrote a poem descriptive of the whole range of fish and fishing ; and when Severus visited Malta recited it before him in the theatre. The emperor, struck with the beauty of the verses and the novelty of the idea, offered him what would now be considered a very respectable sum for a well-known writer in a first-class magazine, and upon his declining the money, promised to grant the author whatever boon he asked ; whereupon Oppian interceded for

his father, and obtained a remission of the sentence for both. The whole incident as it is recorded in history illustrates in many points—if fresh illustration were needed—the numerous anomalies inevitably attaching to such a system of personal caprice as obtained under the heathen emperors; but it must never be forgotten that even in contemporary affairs, and at the present day, men ignorant of the inner workings of political machinery constantly set down to personal influence that which is strictly governed by precedent, and that a more accurate knowledge of the Roman organisation might reveal all kinds of subtle limitations and modifications by which the imperial power was bound and restricted.

Here is a list of fish from Draper's translation which might entitle the author at once to take rank with ichthyologists—

“ Fish have no common rule of life assign'd,
 Not to one place, or to one choice confin'd.
 The sev'ral kinds pursue their proper good,
 Diff'rent their dwellings, and unlike their food.
 Some near the shore in humble pleasures blest,
 Approve the sands, and on their product feast.
 The flouncing horse here restiff drives his way,
 And soles on sands their softer bellies lay.
 Sea-roach in ruddy shoals frequent the land,
 And puny black-tails range the shelving strand.
 The clouded mack'rels choose the sandy ground,
 And with their speckled train the beach surround.
 Flat folios here stretch on the shaded seas,
 Here spiny scads and fruitful carps encrease.
 The broad-tail here, and dainty mullet feed,
 Frisk on the sands, or batten on the weed.
 Close to the shore soft slender swaths reside,
 And the gay mormyl shows his spotted pride.
 But what these love the slimy offspring hate;
 The cod and whiting kinds, the prickly skate,
 The thornback-ray an arm'd and hardy race,
 The pois'nous fire-flaire, and the smoother plaice,

Stretch on soft slime ; in slime the sea-cow hides,
 And on the yielding bed reclines her sides.
 The cramp-fish rightly nam'd from numbing pain,
 And wide-mouthed lizards sandy heaps disdain.
 In grosser filth they pass their wanton days,
 Search the rich mud and wreath thro' hidden ways."

Or again, to take the account of the diet affected by the various kinds of fish given in the third book—

"Sea-crows, the tunnie, shrimps, the wolf approves,
 The bream's voracious gust the gaper moves.
 Ox-eyes excite the sharp-teethed ruff's desire,
 Horse-tails the various rainbow's paint admire.
 The oerve surmulletts tempt to certain fate,
 For yellow-tails with bright-ey'd perch'es bait.
 Cackrels the gilt-heads glitt'ring race invite,
 And tender prekes the lamprey's taste delight.
 Thus larger kinds ; the fair one of the seas,
 Nam'd from his beauteous form, young tunnies please.
 On the small cod the full-grown tunnie feeds,
 When wolves attract the wounded anthie bleeds.
 To crested horse-tails, hungry sword-fish haste,
 And mullets please the shark's judicious taste."

Yet one more passage, in which we not only set the net, but descend with it into the deep abyss, and watch it gather in the frightened prey—

"Down thro' the gloomy regions of the bay
 The leaded snare divides its silent way,
 Impatient till it seize the destined prey.
 The spikes impetuous reach the dark profound,
 At once they reach, and dart the num'rous wound.
 Th' inverted barbs confine in cruel chains
 The captives writhing with the steely pains.
 "The various tortures of the bleeding shoal
 Command a pity from the stoutest soul.
 Here gasping heads confess the killing smart,
 There bleeds a tail, and quivers round the dart.

This in his sides receives the rushing wound,
 Hung by the back another twirls around ;
 Another's breast the thirsty steel divides,
 Breaks through the veins and drinks the vital tides.
 But gentler arts ensnare the youthful train,
 Entangled in the thready bosomed seine.
 When gloomy night obscures the frowning deep,
 In oozy beds the scaly nations sleep,
 All but the tunny's brood ; with wakeful care
 Each sound they dread, and ev'ry motion fear,
 Start from their caverns, and assist the snare.
 "The silent fishers in the calm profound
 With circling nets a spacious spot surround,
 While others in the midst with flatted oars
 The wavy surface lash, old Ocean roars ;
 Murm'ring with frothy rage beneath the blow,
 And trembles to remotest deeps below.
 The dreadful din alarms the tim'rous fry ;
 They fondly to the net's protection fly."

Some notice of an imperial edict published by Diocletian may form an appropriate conclusion to this brief review of classical fishing. It is remarkable, both because it fixes the current price of fish at the time, and also because from the form of the titles it favours the belief that the empire was not recognised as a formally amalgamated entity, but as a collection of separate kingdoms united under a single head, like the crowns of Austria and Hungary, and not those of England and of Scotland.

"[Imperator Cæsar Caius Aurelius Ualerius Diocletianus Pius Felix Invictus Augustus Po]ntifex Maximus Germanicus Maximus VI Sarmaticus Maximus IIII Persicus Maximus II Brittanicus Maximus Carpicus Maximus Armenicus Maximus Medicus Maximus Adiabenicus M Tribunicia potestate XVIII Consul VII Imperator XVIII Pater Patriæ Proconsul. Et Imperator Cæsar Marcus Aurelius Ualerius Maximianus Pius Felix Invictus Augustus Pontifex Maximus Germanicus Maximus V Sarm[aticus Maximus III Persicus Maximus Brittanicus Maximus Carpicus Maximus Armenicus Maximus Medicus Maximus Adiabenicus Maximus Tri]bunicia Potestate XVII Consul VI

Imperator XVII Pater Patriæ Proconsul. Et Flavius Ualerius Constantius Germanicus Maximus II Sarmaticus Maximus II Persicus Maximus II Brittanicus Maximus Carpicus Maximus Armenicus Maximus Medicus Maximus . Adiabenicus Maximus Tribunicia Potestate VIII Consul III Nobilissimus Cæsar. Et Galerius Ualerius Maximianus Germanicus Maximus II Sarm[aticus Maximus II Persicus Maximus II Brittanicus Maximus Carpicus Maximus Armenicus Maximus Medicus Maximus Adia]benicus Maximus Tribunicia potestate VIII Consul III Nobilissimus Cæsar. Dicunt.

Porcelli lactantis	in po I *	sedecim
Agnus	„ „	duodecim
Hædus	„ „	„
Sevi	ital po I *	sex
Buturi	„ „	sedecim
Item pisces		
Piscis aspratilis marini	„ „	viginti quattuor
Piscis secundi	„ „	sedecim
Piscis fluvialis optimi	po I *	duodecim
Piscis secundi fluvialis.	ital po I *	octo
Piscisalsi	ital po I *	sex
Ostrea n centum	*	centum
Echini n centum	*	quingquaginta
Echini recentis purgati	ital f unum *	„
Echini salsi	„ „ *	centum
Sphonduli marini	n centum *	quingquaginta ”

Mr. Leake, the editor of this interesting edict, gives a translation from which we make the following extract:—

Sucking-pig	by the pound	Den. 16
Lamb	„	12
Kid	„	12
Tallow	one Ital. pound	6
Butter	„	16
Item fish—		
Sea-fish of the best quality, or from } deep water	„	24
Second-rate fish.	„	16
Best river-fish	„	12
Second-rate river-fish	„	8
Salt fish	„	6

Oysters	a hundred	100
Sea-urchins	„	50
Salted sea-urchins	„	100
Sea-cockles	„	50

These latter prices, if we could fix the value of the denarius at this epoch, would prove an interesting subject for comparison with those now current at Billingsgate.

CHAPTER IV.

FISHERIES OF MANY CENTURIES.

May't rain above all almanacks, till
The carriers sail and the king's fishmonger
Ride like Arion upon a trout to London.

Beaumont and Fletcher.

ALTHOUGH the records of fisheries and fishermen during the earlier part of the Christian era are for the most part buried in obscurity, yet indications are not wanting of the importance attaching to them. For many centuries mariners and fishermen continued to be governed by the Rhodian Laws, a code originally promulgated by Tiberius, and confirmed by the Emperors Hadrian, Antoninus, Pertinax and Septimus Severus. Their origin is quaintly recorded in the preamble. "When," says Tiberius, "all the merchants and sailors petitioned me to furnish them with a report upon the general laws affecting maritime matters, Nero said to me: 'Most Illustrious Emperor, why not send a Commission to Rhodes to find out all about them?'" And so the Commission was sent. Some of the regulations thereby imposed were of a highly practical and ingenious order; as, for instance, the rule ordaining that when seamen quarrel they may fight it out as much as they like in words, but are on no account to proceed to blows; a regulation recalling the advice of Athene to the angry

Achilles. If, however, one hits another on the head he is to defray the doctor's bill, and pay his victim's wages until the date of recovery. Another proviso alludes to the practice of fishing by means of torches, for it forbids fishermen to display lights at sea lest they should deceive other vessels. About the eleventh century, when respect for the laws of Rhodes had in a measure worn out, and civilisation had gravitated towards the West, another island supplied the laws of mariners and fishermen to Europe; and no inconsiderable tribute to the maritime influence of France during the Middle Ages is testified by the wide prevalence of the laws forming the code of one of her islands. From Oleron off Saintonge in Aquitain, between the Isle De Ré and the river Charente, proceeded a code of laws recognised by the wide circle of the Hanseatic towns, though not published until the year 1536.

As for the credit of the work, the French, and especially those of Aquitain, assume it to themselves, alleging that Queen Eleanor, Duchess of Aquitain (the wife of Henry II. of England, and mother to Richard I.), having returned from the Holy Land, made the first draft of these laws, and called them *Roole d'Oléron*, by the name of this her beloved island. To which laws, says she, her son King Richard, having likewise returned from his expedition to the Holy Land, made some additions still under the same title. These assertions are backed by the arguments, that the laws were written in the old French, after the Gascon dialect, and not in English; that they were made particularly for Bordeaux voyagers, for the landing of wines, and other commodities in that place, and for transport and unloading at St. Malo, Caen, and Rouen, seaport towns of France; and lastly that there is not so much as any mention made of the Thames, England or Ireland.

According to these laws, if any man happen to find in the sea or sea-shore precious stones, fishes, or the like, of which no man was ever a proprietor, it becomes his own; but as to great (or Royal) fishes that are found on the sea-shore, regard must be had to the customs of the country where such fishes are found and taken. For the lord of the country ought to have his share. So a master that has hired seamen for voyage, is to keep the peace and to act the part of judge at sea. If the master himself gives the lie he shall pay 8 deniers. If any of the mariners gives the master the lie, 8 deniers. If the master strike any of his mariners, he ought to bear with the first stroke whether it be with the fist or open hand. But if the master strike more than once, the mariner may defend himself. If any of the hired mariners strike the master first, he shall pay an hundred sous or lose his hand.

And again, if two vessels go a fishing in partnership, as for mackerel, herrings, or the like, and set nets and lay their lines for the purpose, the one of the vessels ought to employ as many fishing engines as the others, and so they shall divide the profit equally according to the covenant made between them. And if one perish, relations and heirs may require to have their part of the gain, and likewise of fish and fishing instruments upon the oaths of those escaped. But they are to have nothing of the vessel if it survive. All these regulations seem to be dictated by justice and common sense. Of a similar stamp were the laws of Wisby in Gothland, in use with the Great International Confederation of the Hanseatic League.

About the middle of the fourteenth century the right of fishing upon our coasts was secured to the Spaniards by special treaty, and two hundred years afterwards a like privilege was granted as to the north coast of Ireland to

Philip II. at an annual rent of a thousand pounds. The high estimation attaching to this pursuit is evidenced more than once. When Richard III. summoned all the shipping of England against an anticipated invasion of the French, he nevertheless excepted the fishermen of Cromer and the neighbouring ports, lest their absence should impair the interests of the occupation in which they were engaged. For the furtherance too of this vital industry a Statute of Herrings was passed by Henry VII., directing that for every 60 acres of land fit for tillage one rood shall be sown with flax or hemp to provide materials for the manufacture of nets, as well as for linen; and a further measure passed in the reign of Elizabeth gives the Queen power to revive by proclamation the law for the better provision of nets and for furtherance of fishing, though in this case the manufacture of linen is not mentioned. The gradual disregard of days of abstinence and fasting during this reign much diminished the profits of the fishmongers; and commercial probably rather than theological zeal dictated their presentment against the butchers for selling flesh meat in Lent, which is preserved in one of the Lansdowne manuscripts. Some little time afterwards the decay of the fishing towns of the eastern coast aroused the alarm of the House of Commons, which poured forth its indignation on the inhabitants for their lazy and disgraceful practice of going half seas over to buy fresh fish from Flemings, Hollanders, Picardy men and Normans, instead of catching it for themselves, and ordained that any one guilty of such a proceeding should forfeit ten pounds every time he himself was caught. What a collection of curiosities in political economy might be discovered in the efforts of Parliament to "improve" the condition of trade!

With the general outburst of maritime enterprise which

followed upon the revelations made by Columbus at the close of the fifteenth century, renewing in a more civilised form the daring of the ancient Vikings, commenced also a new and energetic era in the history of fisheries and fishermen. Coast and river no longer sufficed for the restless spirits of that adventurous age, and the Atlantic and Arctic Oceans became the resort of the daring fisherman. As far back as the fifteenth century England enjoyed piscatorial rights in the seas of Iceland, and we learn from a reply, preserved in one of the Cotton MS., to a remonstrance addressed a hundred years later by the Danish Ambassador to the Government of England, that three sorts of localities alone were excepted: those which were reserved for the King, those which were private property, and those which were the subject of special grant. During a long period, however, the Flemings held pre-eminence upon the seas, but the persecution of the Duke of Alva gradually weakened the industries and drove citizens and commerce alike into foreign countries, until the victory of the Duke of Parma gave a finishing blow to their prosperity. Manufactures migrated to England, fish-curing and navigation to Holland, and the traditional contest between the Dutch broom and the British whip was the result.

Two years before the close of the same century a British vessel, with that spirit of mingled business and romance specially characteristic of the time, though even yet not wholly extinct, went sailing further and further from home towards what is now known as the Greenland coast, in search, like princes in a fairy tale, of whatever adventures might happen to befall them, when they came suddenly upon a veritable enchanted ground in the shape of a region frequented by schools of whales. This was, indeed, an

episode which Sinbad himself might have envied. One can hardly conceive an excitement more full of fascination than a whaling enterprise. As for fox-hunting, it pales before it. What is a five-barred gate compared with an iceberg, or the cry of "Gone away!" as against the ecstatic shout "She blows! she blows!" All the surroundings are full of spirit-stirring adventure. The wild voyage over the stormy northern seas, the long-continued watch for the sign of the first prize, the intense anxiety as the harpooner poises his weapon, the shout which hails the successful stroke, the mad gallop of the monster through the deep, dragging behind him the boat to which he is irrevocably harnessed, the frantic struggles of the indignant beast, the troubled sea lashed into foam on every side, the imminent peril lest boat and crew should disappear at a rush beneath the waves as the creature dives, or rises suddenly high in the air at a blow of his enormous tail,—such incidents as these afford no common excitement, and are not to be found in ordinary occupations. Equally attractive to a different and larger class of minds is the value of the take when captured. The Great or Greenland whale is a magnificent creature, measuring sometimes some sixty feet, but the well-known adventurer, Scoresby, says that though he killed 322, he never saw one more than fifty-eight feet long.

A whale of the South Seas, for they exist in both hemispheres, will bring in from eighty to one hundred barrels of oil, at £4 to £5 a barrel, besides whalebone to the value of £140, and those of the North will fetch double the amount. Every portion, too, of the huge fish, or rather beast, is available for the service of man. The flesh serves for manure, containing 14 to 15 per cent. of azote, its bones for charcoal, its intestinal linings give material for travelling

garments, and its very excrement is used as colouring matter. The inhabitants of those savage and desolate parts are greatly indebted to fishing for the support of their existence. During the whole of the long summer day they are engaged either in this pursuit or else in hunting. Whales, seals, and dog-fish afford them food, clothes, and even shelter, for their summer tents are made of the skin of the latter; and their frocks, their boots, and their stockings are manufactured from the entrails. A strange taste also leads them to prefer the blood of the dog-fish to any other less horrible beverage. The canoes of these tribes are of two kinds, and betray some ingenuity in construction, for they consist of pieces of wood fastened together in thongs, and being covered with sealskin are so pliable and elastic that they can weather the roughest sea. The larger, called the *uniak*, is flat-bottomed, and serves to convey the families from one place to another. The smaller canoe, or *rajak*, is used for the pursuit of the fish. These latter boats have room for one man only, who sits in a hole made in the middle of the upper surface, which he covers with his frock so as to prevent any water from entering. One oar, six or seven feet in length, is his only instrument of progression, and yet a man will, in this fashion, row sixty or seventy miles a day, about the same distance as an Indian will walk in snow-shoes.

The external concomitants of whaling soon promised to become as exciting as the incidents connected with the pursuit itself. For fourteen years the English managed to keep this splendid gold mine, as they were wont with perfect truth to describe it, all to themselves; but such a monopoly could not in the nature of things be made to last for ever. In 1612 the Dutch sent some vessels to work in the adja-

cent waters not yet occupied by British vessels. Highly indignant at what they considered an invasion of their rights, the commanders of the British ships attacked the Dutch and carried off the contents of two vessels fully loaded and valued at 130,000 guilders. Nothing daunted, the Dutch returned to the charge in the following year, and this time succeeded in capturing an English vessel. At last the original monopolists were compelled to cede something of their pretensions and to confine themselves within certain pretty broad limits, while the Dutch settled to the North of them, the Danes coming afterwards between the two, the Hamburgers to the West of the Danes and the French to the North of the Hollanders. Many of the names now borne by the bays and islands of that part attest the international division of the respective whaling grounds.

Other causes, more particularly the depopulation caused by the Civil War, now arose to depress our Greenland trade, and by far the greater portion of it fell into the hands of the Dutch, who in 1670 sent out 148 ships and captured 792 whales. Bad management on the part of the principals tended still further to deteriorate the British interests. An absurd system—or at least a system which seems absurd now, though it may have had its origin in some necessity of the moment—had grown up of allowing the captains of vessels to hunt deer, and to have the horns and skins for their perquisites; the result being that the whales were left undisturbed, and the ships came home laden with cargo for the benefit of the captain, and exceedingly lightly burdened on behalf of the owners. One would have thought that so great an abuse would have been sufficient to correct itself. Yet this was not the case; and

when the number of vessels sent from Holland had risen to 180, and those of Bremen and Hamburg to 52 and 24 respectively, the British trade had left little behind it except incessant and well-merited lamentations on the part of the British public.

Very shortly after the Restoration we find these same industries occupying the anxious attention of Court and Ministry. Before Charles II. had been seated two years upon the throne of his father, Lord Sandwich took advantage of a great assembly of naval officers at Jermyn Hall gathered at the funeral of Sir R. Stayner, to announce that the King had determined to give £200 to every man who would undertake the equipment of a new-made English buss, or fishing smack, by the middle of the following June. Two years afterwards a Royal Fishery Company was formed, one of its governors being Mr. Pepys, secretary to the Admiralty, to whom we are indebted for many a glimpse into the political and social life of that period, and whom we most unjustly and ungratefully call a gossip in return. That Mr. Pepys was no mere trifler but a very good man of business, is shown not merely by such a suggestion as that the Committee should refrain from limiting the number of bankers' assignments to the various ports until they had some idea as to the number of persons desirous of responding to the invitation, but by several of his observations in regard to this matter. It seems that a proposal had been made to raise money for the undertaking by the coining of farthings, and to this measure he readily gave his consent; but he is much displeased with another suggestion that lotteries should be established for the same purpose. "I was ashamed to see it," he writes indignantly, "that a thing so low and base should have anything to do with so noble an undertaking." His quaint accounts are, as usual, so full of

matter and spiced with his usual simplicity and directness, that it is impossible to refrain from quotation.

“10th March, 1664. At the Privy Seal I enquired, and found the Bill come for the Corporation of the Royall Fishery; whereof the Duke of York is made present Governor, and several other very great persons, to the number of thirty-two, made his assistants for their lives: whereof, by my Lord Sandwich's favour, I am one; and take it not only a matter of honour, but that it may come to be of profit to me. 7th July, 1664. To White Hall, and there found the Duke and twenty more reading their commission (of which I am one, and was also sent to, to come) for the Royall Fishery, which is very large, and a very serious Charter it is; but the Company generally so ill-fitted for so serious a work, that I do much fear it will come to little. 13th September, 1664. To Fishmongers' Hall, where we met the first time upon the Fishery Committee, and many good things discoursed of, concerning making of farthings, which was proposed as a way of raising money for this business, and then that of lottery, but with great confusion; but I hope we shall fall into greater order. 10th October, 1664. Sat up till past twelve at night, to look over the account of the collections for the Fishery, and the loose and base manner that monies so collected are disposed of in, would make a man never part with a penny in that manner. 22nd December, 1664. To the 'Change: and there, among the merchants, I hear fully the news of our being beaten to dirt at Guinny, by De Ruyter, with his fleet. The particulars, as much as by Sir G. Carteret afterwards I heard, I have said in a letter to my Lord Sandwich this day at Portsmouth; it being almost wholly to the utter ruine of our Royall Company, and reproach and shame to the whole nation.”

These records are of the greater interest, because in the very next year the Fire of London swept away all the books and accounts of the Fishmongers' Company.

Herrings are another fertile source of wealth and dispute, and they have left their traces through many hundreds of years. The earliest written record which appears in relation to them is a charter, dated 28th September, 1295, granting to the Hollanders, Zealanders, and Frieslanders free liberty of fishing on the coast about Yarmouth. Again, we find them figuring as a staple in the commissariat of the British Army, and the battle of the Herrings, fought in 1429, when the Duc de Bourbon was defeated in an attempt to surprise a convoy carrying herrings to the English camp at Orleans, is by no means the least celebrated in our military annals. A fame of a more lasting and peaceful character was conferred upon them in the intervening century by a certain Englishman named Will Belkinson, or Belkelzoon, as the Hollanders are pleased to call him, who invented the mode for pickling and curing the herrings, and who, probably finding England as ferocious towards any of her sons possessed of original genius in the fourteenth century as she is at the present day, set an example still pursued by all wise English inventors, and carried his discovery to a foreign land. To this English stranger the Dutch are indebted for the material foundation of their political celebrity and maritime ascendancy in after years, and the nation proved grateful to their remunerative guest. His memory was honoured by a public monument at Bieroleit in Flanders, where he died, and no less a personage than the Emperor Charles V. considered the tomb of that great benefactor of his adopted country not unworthy of a visit.

With the lapse of time the value of the herring fishery continued to increase, and in the days of Elizabeth it was

considered of such importance that a proposal was made for the establishment of a fleet around England for its protection. Some quaint Dutch plates still preserve for us the full details of the occupation, and illustrate with a minuteness worthy of a number of the *Graphic* each particular scene connected with this special industry, from the seaside cottage of its pursuers, and the preparing and victualling of the buss, up to the grand junketing festival and congratulation banquet, with the proprietor and his wife looking, like the immortal Mrs. Fezziwig, "one vast substantial smile." In the succeeding reign the Dutch fitted out in a single season 900 vessels and 1500 busses for the benefit of cod and herring, and each of these 1500 busses employed three more vessels to supply them with salt and empty barrels, and to transport the take, so that the number of vessels engaged amounted to little short of 7000. At the zenith of their prosperity, the Dutch, it is said, sold herrings in one year to the value of £4,795,000, besides what they themselves consumed, 12,000 vessels being engaged in this branch alone, employing about 200,000 men in their service. Well might they deck the steeple of Vlaardingen and ring a merry peal upon the bells when the first vessel came in sight of harbour. At this time, as we learn from a manuscript account, our own port of Barrow-in-Furness possessed a small fleet of five ships—two of them, it is curious to remark, being the *Vanguard* and the *Swiftsure*—maintaining together a crew of 660 men, whose pay and rations amounted to about £13,000 a year.

Sir Walter Raleigh, the Paladin of Elizabethan and Jacobean adventure, did not allow so tempting an opportunity to escape his notice; and he pointed out to James the immense number of foreign vessels and men who took

advantage of our coasts, adding significantly that twenty busses of herrings were sufficient for the maintenance of 8000 souls, including women and children. M. d'Aitzana, President of the Hanse Towns at the Hague and historiographer of the United Provinces, as well as the learned Du Moulin, testify to the Hollanders having drawn 300,000 tons of herrings and other fish for salting annually from the sea in these parts ; and to the tripling of the returns between the accessions of James I. and that of Charles II. Under the latter monarch, Dr. Worsley, whose position may best be described as that of Secretary of State for the Department of Trade and Plantations, was sent to Holland to enquire into all matters connected with the question ; and on his return reported to the King that the Dutch herring fishery, at the lowest computation, yielded an annual revenue of three millions sterling. In support of this estimate he adduced the number of busses employed, the quantity taken by each, the Custom House accounts of Holland, Zealand, and Friesland, and the prices of each export market ; and he affirmed that the value of the herrings and cod yearly taken by the Dutch greatly exceeded the produce of the manufactures either of France or of England, and more than equalled the sum then drawn by Spain from her rich colonies in America.

Herrings, in truth, were as profitable to the whole people of Holland as the great goddess Diana to the silversmiths of Ephesus. Portugal and Spain furnished them in return for this prolific export with wine, oil, honey, wool, lemons, and golden ingots, then familiar to the Spanish Empire. Salt, too, was procured in the same way, itself no inconsiderable item in the expenses of curing. From the Mediterranean came in exchange for the same commodity, raisins, oil, silk, velvet, satin, and all that brave apparel

which delighted the honest burghers no less than their wives. Half the art and glory of the Flemish cities are built upon no more substantial foundation than the herring. Germany supplied them with iron, wine, and all sorts of arms and munitions, while Nuremberg, having nothing apparently very attractive in its markets, was forced to send large sums in ready money, which is after all not the least attractive of commodities. To such a height did this industry attain that during the war of the Spanish Succession, its promoters were enabled to pay the States-General a German crown for every ten barrels of herrings with a view to maintaining a sufficient naval force to defend the busses from privateers. Sober calculations made with regard to the annual revenue derived from these sources show that Holland took more by these fisheries annually than Sweden could produce in twelve years from all her iron mines put together. So much for the expatriated Englishman.

During the eighteenth century the current still continued to set in the same direction. By an Act of George the First it was provided that £2000 a year should be applied to the encouragement and protection of the fisheries of Scotland, and about the middle of the century was founded the Free Fisheries Company, which had the Royal Exchange for its head-quarters, and transacted considerable business in the seas off Yarmouth and the north of Scotland. The letter-book of the Company gives a suggestive hint as to the political condition of the country, in the shape of a communication under date July 1756, from the secretary to a certain grocer and "considerable magistrate of the good town of Salisbury," asking him whether, as there were so many German troops quartered in the neighbourhood, he could not get the commanding officer to order some of his fine

herrings just fresh from the Shetlands. At the present day German troops quartered at Salisbury would raise some very different considerations from that of turning an honest penny by the sale of Shetland herrings. From the same source we find that no slight care was taken for the comfort, and even the caprices, of the crews, for the secretary, writing to the contractor who supplied the biscuits, apologises for the dissatisfaction which would probably be felt by the crews on finding the biscuits to be made of rye. Not that there was any fault to be found with the contractor, he hastens to say, "but that our men like everything of the best."

In France the laws affecting these matters entered into very minute and exact details. By an ordinance of Henri III., containing a hundred articles for the regulation of maritime matters, all parcs or artificial fishing-grounds constructed for forty years at the mouths of navigable rivers were ordered to be destroyed. Nearly a hundred years later a decree of Louis XIV. defined the foreshore as belonging to the crown, and laid down rules as to the permissibility of ravoirs, courtines, and vinets, or vonets, which are different collections of nets or filets constructed upon the foreshore so as to be hidden at high water and uncovered when the tide is low. Under the same statute amber, coral, whales, *poissons-à-lait*, and various miscellaneous productions of the ocean, belonged, if taken in the deep sea, wholly to the captor; if on the strand, then one-third went to the King, one-third to the admiral, and one third only to the discoverer of the prize.

At Maremmes the government nets were placed on the shifting sands, so that they had to be removed at every tide, small boats being used for the purpose. The nets were formed into angles, more or less obtuse, following the lay

of the shore, and exposed at will to the ebb or flow. In this kind of fishery, when the net is stretched and the tide coming in, the fishermen get into their boats and wait for the turn, and as soon as the sea has gone sufficiently out, they pull up the stakes and put the nets with their contents into their boats. Courtines of this kind are appropriately called vagabonds, because of their continual change of position. They cannot be used in the winter, because the violence of the gales frequently endangers the safety of the nets. Another sort of courtine is called volant, or flying courtine. A peculiar system of nets also prevailed at Nantes, called *rets traversants*; and another on the coasts of Guienne, which bore the local name of pullet.

Some allusion to two or three quaint works published at various times during the period described in the present chapter may not be here out of place. One of the earliest printed works, published on vellum in 1496, was that of Dame Juliana Berners, a lady celebrated for her love and knowledge of masculine sports. This *Diana of the English* gives very practical and exact directions for the making of hooks, observing at the same time that that portion of the whole outfit was the most difficult to make. Amongst other lore she describes twelve manners of impediments that cause a man to take "noo fysshe." "Now shall ye wyte," says this Rosa Bonheur of mediæval literature, "that there ben twelve manere of ympedyments whyche cause a man to take noo fysshe, w^lout other comyn that maye casuelly happe. 1, badly made harness. 2, bad baits. 3, angling at wrong time. 4, fish strayed away. 5, water thick. 6, water too cold. 7, wether too hot. 8, if it rain. 9, if hail or snow fall. 10, if there be a tempest. 11, if there be a great wynd. 12, if wind be east." And so forth through twenty-three pages of the best vellum. A somewhat

similar production was given to the world two hundred and fifty years later in the shape of a work entitled 'The Gentleman's Recreator.' This remarkable production, reversing the process of the celebrated treatise on tar-water, begins the encyclopædia of a gentleman's instruction with a description of astronomy and other sciences and arts, and concludes with some instructions in cock-fighting, that being an equally essential branch of knowledge in a liberal education. Among the various polite accomplishments here mentioned, such as horsemanship, hawking, fowling, and hunting, fishing is by no means forgotten. Its pages are adorned by a chart, exhibiting the various features of the art, and some peculiar kinds of nets and methods are described in its course. The wolf-net and the raffle are both mentioned, the former bearing a resemblance to a lobster-pot, and being designed for use in ponds and streams; the latter differing in that it was prevented from touching the bottom. A suggestion is given for storing and preserving fish in the midst of any river by making a warren, as it were, for the fish to retreat; and the method of taking pike with a running noose of horsehair as they lie sunning themselves in the sun, is also to be found there.

A work of a different and far graver stamp, though containing much matter which would hardly pass current with our present knowledge, is the history written by Olaus Magnus, the venerable Archbishop of Upsala, who was born at Linköpin towards the close of the fifteenth century, and after being sent by the Pope to attend the Council of Trent, died at Rome in 1568. His ably written and entertaining history, in addition to the information which it affords as to the condition of Biarmia and Finland, gives many details as to fisheries and fishing. He speaks of many kinds of fish being salted, dried, and hardened in

smoke : such as " pikes, mullets, prasnie and borbochi, and those they call syck in Gothland," and he describes a custom common in that country, where the rivers are frozen up for months together, of fishing through the ice and using horses to assist the men. The natives would walk on the ice clad in iron-pointed shoes, and in default of these would go barefoot rather than use the ordinary oiled leather which soon froze and became as slippery as the ice itself. The freezing of the river did not hinder them from pursuing their favourite occupation. Two great holes were opened in the ice some eight or ten feet broad, and distant about 150 or 200 paces from each other. Between these limits thirty or forty lesser openings were made, and cords, having nets attached to them, being dropped into the water at one extremity, were guided by means of spears penetrating through the smaller holes to the great opening at the further end. Here the cords were drawn out of the water and given to men on horseback, who rode off at a smart pace in order to drag the net out quickly and prevent the fishes from having time to break the mesh.

Jacopo Sanazzaro, a poet whose fishing eclogues were published by Aldus at Venice in 1570, with the well-known and appropriate emblem of the dolphin and anchor, had already obtained the praises of two Popes for the religious sentiment displayed in a former poem. As for his piety we readily concede it, but as to poetry we may be permitted to exercise an independent judgment. His verses are as correct, and about as much worth reading, as those of a fourth form schoolboy of twenty years ago. They teem with allusions to Melisæus, and Damon, and Alexis, and all the regular stock-in-trade of the Latin eclogue maker, and they have not a breath of nature about them. With the execrable, if accountable, taste of the time, Sanazzaro

evidently considered himself bound to produce still paler shades of those pale shadows, the Eclogues of Virgil, just as their author, the most precedent-loving of poets, rarely ventured to introduce an image or an incident without the authority of some Greek original.

All the strong energy and love of maritime dominion animating the British nation of that period is well brought out in Sir John Burroughes' work on the British Sovereignty of the seas. Cæsar, he says, found the islanders independent and absolutely repulsive of strangers, a phenomenon not even now wholly unfamiliar to our clubs and drawing-rooms. He quotes, too, the grandiloquent decree attributed to Edgar, wherein that monarch claims "by the wide-flowing clemency of the high-thundering God (*altitonantis Dei largifluente clementia*)," to be the Basileus of the English, and of all matters and islands of the ocean, and of all the nations which are contained within it. But, as the more sober Evelyn observes, the fact that the savages of Britain drove strangers from their coasts by no means argues any sovereignty over the waters; nor does Edgar's decree, even if we grant its authenticity, assert anything more than a dominion over the islands and the dwellers within them. Very strong arguments against the absurd assumption of an universal jurisdiction possessed by England over the waters of every ocean are brought forward by the latter author, though he is not ashamed to own that he lends it his public support. The licences imposed by the Scottish Parliament upon the fishermen of England are sufficient in themselves to destroy the notion, while the protest of the Danes at Breda against the proposed acquisition by the Scotch of the right of fishing at Orkney, on the occasion of the marriage of James the First and Sixth with the daughter of the King of Denmark, is another irrefutable proof that the

sovereignty of the seas could never have been acknowledged to be the property of England, or indeed of any one nation alone. A matter of greater moment treated by Sir John is the disposition of the fisheries around our coast about that time. Herrings were caught from July to November. Cod visited Lancashire in the spring, the west coast of Ireland during the summer, and took up its winter quarters near Padstow. Pilchards appeared from May to Michaelmas. Hake favoured the Irish seas rather late in the year, and ling both the north-east and south-west coasts of England.

One not unnatural consequence of the fury for adventurous enterprise was an amount of reckless speculation which could end at last only in disaster, and which in fact collapsed with so wide-spread a deluge of ruin as almost to attain the dimensions of a national calamity. During the early years of the eighteenth century, the speculation in fisheries attained its height, and all sorts of bubble companies sprang into ephemeral existence. There were Greenland companies and Orkney companies, private companies, such as Cawood's and Garraway's; there was to be a royal company of ten million, a company to fish up coral, and another to fish for wrecks off the Irish coast. But of all the projects then fostered none attained such importance or created such misery as that of the South Sea Fisheries Company. The scheme was founded upon grounds not unworthy of consideration; and a similar plan had been advocated a hundred years before by Sir B. Rudyerd in the House of Commons in order to cut out the King of Spain. Its designs, however, were probably too large for the machinery of the time, and the economical fallacy of the mercantile theory entered too prominently into its calculations. Its chief promoter was Sir John Eyles, one of the Commissioners for the Estates forfeited in the

Rebellion of 1715; and it was constituted upon a petition for a Grand Fishery Company presented in January, 1718, and signed by seven peers and many merchants and gentlemen. Many petitions on such matters were presented at the same time, and all were opposed by counsel, the Fishery alone excepted. On this the Crown lawyers reported that a Fishery Charter under proper regulations might be very beneficial to the nation. In regard to the same, the House of Commons passed a resolution on the 27th of April, 1720: "That the undertaking proposed to be carried on by the name of the British Fishery, wherein the seaports and royal burghs are concerned, may be successfully carried on, and thereby prevent great sums from going annually out of the nation; may secure a valuable trade; and may, upon any emergency, furnish seamen to man the royal navy; and therefore highly deserves encouragement." The following extract shows an inflation startling enough no doubt to the speculators of those days, though they rather pale before the records of Ballarat and San Francisco:—

	Original Money paid in or due.	Highest sold for in 1720.
	£ s. d.	£ s. d.
Royal Fishery Commission.	10 0 0 per cent.	25 0 0 per cent.
Fish pool, for bringing fresh fish by sea to London (Sir Richard Steele's project).	. . .	160 0 0 per share, before any money paid down.
Orkney Fishery.	25 0 0	250 0 0
For a Whale Fishery (Sir John Lambert).	0 10 0	3 10 0
National permits for a Fishery (George James's) 50,000 permits at six pounds each.	5 0 0 per share	60 0 0 each permit before any money paid down.
The Grand Fishery.	0 10 0 per share	5 0 0

Another project, of somewhat later date, for conveying fish to town by means of post horses, gives us an opportunity of comparing the rates of carriage existing about this time with those current at the present day. The company proposed to convey from eight to ten hundredweight of fish daily to the Hercules Inn, on the Surrey side of the metropolis, by relays of post horses, and put forward an elaborate calculation of the expenses involved. Taking as a basis half a ton, and assuming a rate of six miles with fresh relays at every second hour, we get the following items for the accomplishment of seventy-two miles in twelve hours :—

	£	s.	d.
72 miles @ 1s. a mile	3	12	0
Post boy @ 1½d. a mile	0	9	0
Greasing the carriage	0	1	0
Ostler, 6d. a stage	0	3	0
<hr/>			
Total, exclusive of turnpikes (which, says the author of the proposal, cannot be ascertained)	4	5	0

Upon this scale, therefore, half a ton could have been conveyed 144 miles in twenty-four hours at a rate now sufficient to convey an ordinary parcel by goods train for 400 miles ; a contrast not quite so deep as one might have fancied would be the case.

CHAPTER V.

DEEP SEA FISHING AT THE PRESENT DAY.

Ho ! come, and bring away the nets.

Pericles.

DEEP SEA FISHING, at least in its general form, is a creation almost of the last half-century. In Grimsby, for example, the capital, if we may so call it, of the deep sea trade, thirty years ago the imports of this kind hardly equalled those of Southport or Grossmont at the present day, and nowhere nearly approached Hartlepool or Filey. In 1854 the number of tons conveyed inland was 453. Ten years later it had decupled, in 1869 it had become sixtyfold, and by 1881 had attained a growth of nearly one hundredfold in little more than five-and-twenty years. Trawling is the method to which this great increase is principally due, and it may be well here to describe the peculiarities of the different kinds of nets used in deep sea fishing. On the open sea there are two kinds of nets chiefly in use: the trawl for those fish, such as turbot, which love to hide themselves at the bottom of the ocean, and the drag for such as like the herring prefer the surface. The trawl is in fact a kind of sea plough, one essential object of it being to stir up the inmates of those deep recesses, and it is fashioned with a view to effect this purpose, no less than to capture them when once driven

out of their hiding-places. It consists of a single spar, called the beam, about as long as from the stern of the boat to the mast, fixed upon two large iron supports or heads, and having a long flat and pocket-shaped net attached to it, the mouth of which is extended by being fastened to either end of the spar. These supports keep the trawl off the bottom, the apparatus being lowered in such a way that the spar always remains uppermost ; and a ground-rope is fastened to the lower margin of the net so arranged as to clip the bottom, and to cause any prey that may be lurking there to pass over it into the meshes. As this rope may by chance be caught in some irremovable obstacle, it ought to be somewhat old and easily broken, otherwise the more valuable part of the apparatus might be in danger of fracture from the resistance. It is, however, protected by a series of gutta-percha rubbing pieces from immediate contact with any rocks or stones, though fair ground only is suitable for trawling. The net itself is shaped in a very peculiar way. At its extremity is a smaller sort of bag called a purse or a cod, made with a lesser opening and with finer meshes ; and half-way from the mouth the upper and lower portions of the net on either side are sewn together for about 16 feet, forming two enormous pockets or valves, the mouths of which opening towards the cod leave a kind of valve or curtain flapping in front of it, on account of the greater resistance of the water due to the finer meshes with which that part is made. When the trawl is lowered, it is necessary that the vessel should be under sail, and proceeding through the water at a greater rate than the tide. This is required to keep the net extended as it descends, and to prevent it from twisting or otherwise getting out of gear. As soon then as the ground-rope reaches the bottom the fish disturbed from

their lurking-places rise up and dart forward, find that the head of the net has already passed over, and hurrying back are caught in the cod at the end, from whence there is no escape, except into the flaps and pockets at the side. Many countries are engaged in this modern but highly important form of capture. Belgium, Holland, France, all have their fleet of trawlers (though the occupation which goes by the name of herring trawling in Scotland is nothing else than seine fishing), and numerous stations in England, more particularly on our east and southern coasts, such as Hull, Grimsby, Dover, Ramsgate, Plymouth and Brixham, send out their boats to the Inner and Outer Well Banks, the Great Silver Pit, the Botney Gut, and other famous resorts not yet exhausted. Of late years these vessels have been built larger than of old, the length of the boats having been increased. A mizen has been added, so that the pressure on the sails has been lowered in its centre of gravity. Ice is now commonly carried in large quantities and wells have been added, so that the fish can if necessary be kept on board for a week, though their condition is undoubtedly deteriorated thereby. Accordingly steam cutters attend the different fleets and convey the catch either to the nearest port or else direct to London. The well is at the bottom of the vessel, the extremities of which are pierced with auger-holes in order to allow the sea to pass through freely, and it is said to have been imported from Holland, and to have been first tried at Harwich in 1712.

These additions have of course increased the cost of the smacks employed, and 1200*l.* is required now for engaging in the trade, where a few years ago 700*l.* would have sufficed. A double set of gear is requisite in order to provide against mishaps. A net, which should be made

of cotton, and dressed with cutch, may be reckoned to last about three or four years, though different parts will require repair from time to time. Carrier pigeons are in use with the men of some ports to bring early news of the take from the catcher on the ground; but the device has not yet become general. One practice connected with trawling, that of packing them in boxes, and placing them on board a steamer to carry into port, is attended with a good deal of danger, particularly if performed in rough weather, as is not unfrequently the case. Much complaint was made with reference to this practice before the Royal Commission held last year for the purpose of inquiring into the condition of our fishermen; but it seems impossible to suggest a substitute.

Fish habitually frequenting the surface of the water, such as herrings, mackerel, pilchard and the like, are caught by drift-net, mackerel being taken by line as well. Drift-nets, which catch their prisoners by the gills, are probably the oldest form of piscatory implement known to society, and are those of which mention is so frequently made by the writers of the New Testament. They are supported by floats, and at the present day are of enormous length, several being joined together so as to form a train from one to two miles long towed by a single vessel. The nets are kept afloat by small buoys or bowls, of which all but five are painted black. These five, called "gay bowls" are used for marking the extent of the net as it is hauled in, the first or casting bowl being painted wholly red, the next three-quarters red and one quarter white, and so forth, the last, or "puppy bowl," being wholly white. At the close of all is attached a buoy, with a flag, which remains always above the water and marks the end of the line of nets. Sunset or sunrise are the best times for casting, and

a slight ripple on the water is of much advantage. Off the Scottish coast a good take frequently succeeds a thunder-storm, but on the following day hardly any catch is to be made except at the verge of the deep sea. Herrings, it may be observed, are taken in largest quantities when the water has a temperature of about 54° or 55° Fahr., according to the best German authorities.

Two kinds of nets, more of local than of general use, may also here be mentioned: the trammel, employed in some parts of Devon and Cornwall, on the south coast of Ireland, in Guernsey, and on different parts of the Scotch coast; while the kettle-net is confined to the parts about Beachey Head and Folkestone. The trammel derived, according to Mr. Holdsworth, from the French tremail, or tramail, a corruption of *trois mailles*, consists, as its name implies, of a combination of three nets or wallings placed side by side and fastened together at the back, foot, and ends. Of these three nets the two on either side have their meshes wide and exactly corresponding to each other, but that in the middle is of much finer make and of nearly double the size, the result being a quantity of slack netting between the two. When therefore a prisoner having entered the first, endeavours to pass through the third net, he carries with him a portion of the second, and the more he struggles the more hopelessly he becomes entangled. The kettle-net is an arrangement of stakes and nets, used principally for the capture of mackerel when they come close in shore in the locality above mentioned, and not altogether unlike the nets in connection with towers on the Rhine, built for the purpose of catching salmon. The seine, used for operations performed from the shore, must be familiar to many who have spent their holidays at the seaside. In shape it used to be deeper in the middle than at the sides or

sleeves—at Tahiti one was used in the form of a V—as the fish congregate towards the centre, and its extremities are pulled together by two boats rowing towards each other, the towing boat being followed by a smaller vessel called the follower. On the Cornish coast, when a shoal of pilchards is expected, it is customary for a look-out man, called the crier, to ascend an eminence overlooking the sea, and to give notice of their approach by throwing up his arms. Amongst the lines used at sea the principal are the spiller and bulter, the former being employed for whiting or other smaller fish, the latter for catching cod, ling, halibut, and haddock. Fifteen dozen, with twenty-six hooks a-piece, are sometimes attached to the Grimsby smacks, the whole string being not less than seven miles in length, and carrying with it 4680 instruments of death.

Some years ago a great outcry was raised to the effect that trawling was destroying the fisheries by stirring up the spawn, and that the fishery grounds themselves were undergoing the same process of depopulation as the inland waters. In particular, difficulties arose with the men of Tarbert and Oban, and a Commission having been appointed to inquire into the matter, a sort of Melian conference took place, related in a strictly Thucydidean manner by the Commissioners. The drift-net fishermen and their supporters urged that immature herrings may be caught by the method of seining; that the shoals of fish, being disturbed and dispersed by the seine-nets on entering the estuaries from the sea, would soon desert the waters, which they would otherwise have frequented; that the shoal once scattered does not again unite; that the seine fishers sweep across the beds where the fish are depositing their spawn, and not only take the spawning herring, but destroy the spawn which

has been deposited ; that the herring caught by the seine are not fit for curing, on account of the injury received by them in their capture ; that the trawlers or seiners are a turbulent set of men, who wanton in mischief, and love to cut away drift-nets or stab the buoys which float them, and thus produce much damage to property ; that the two systems cannot be carried on together in narrow waters, as the trawlers get foul of the drift-nets, and drive away the fish which would have meshed themselves ; and that the extravagant gains of the trawlers, monopolised by a few, alter the market prices by sudden fluctuations, to the great detriment of the drift-net fishermen, who prosecute their labour in a more steady and less gambling manner. To this indictment the trawlers replied that when the mesh is less than that of the legal standard they catch immature fish, but that it is not their interest as a class to do so ; that larger and finer herrings are caught by the trawl (meaning the seine) than can be got by the drift-net ; that the enclosure of herrings in a circle by a net drawn gently round them in a retired locality on the coast cannot disturb the general shoal of fish as much as their meeting numerous walls of netting, often miles in length, let down into the sea to obstruct their progress ; that their nets do not interfere with the spawning-beds ; that there is only a small market for full fish on the west coast, and for this reason alone it is not their interest to catch fish in an immature condition ; that the destruction of the spawning-beds was not produced by them, but by the drift-net fishermen on the coast of Ayrshire, who sink their drift-nets as trammels to catch the fish in the act of spawning ; that the fish caught by trawling is, by the admission of all, good for the fresh market ; and that the fish so caught are quite fit for curing, though there may be an occasional inferiority in this respect, on account of the rapid and careless handling to which the fish are

subjected in the prosecution of an illegal fishing, which may at any time be interrupted. They denied too that as a class, they injure the nets of the drift-net fishermen; they pointed to the records of collisions between the drift-net fishermen themselves before trawling was introduced, and averred that the alleged instances of mischief on the part of the trawlers have never been substantiated when submitted to official investigation. They saw no difficulty in carrying on the two systems of fishing together, as the trawlers chiefly fish close to the shore in shallows, where the drift-nets are rarely placed; and they further asserted that instead of driving the fish away, so that they will not mesh in the drift-nets, they drive the shoals out of the shallow into deeper water, where the drift-nets are enabled to capture them; and finally that the large hauls got by the trawlers are of great benefit to the consumer of fish, by enabling him to get herrings at a much cheaper rate than he could by the old method of drift-net fishing, so that the poor especially benefit by the abundance of fresh fish thus thrown into the market.

After full examination of petitions and evidence on both sides, the Commissioners gave an elaborate judgment that in their opinion the fishery of Loch Fyne had suffered no diminution by the operations of the trawlers, but that, on the contrary, it is a steadily progressive fishery, when the periods of comparison are made sufficiently long to correct the annual fluctuations, which are always considerable in this as in all other herring fisheries. In support of this statement they adduced the following return for a period of thirty years:—

General annual average take from	1833 to 1843	. .	18,994	barrels.
„	„	„	1844 „ 1848	. . 15,427 „
„	„	„	1849 „ 1853	. . 19,149 „
„	„	„	1854 „ 1858	. . 25,744 „
„	„	„	1859 „ 1862	. . 42,165 „

This steady increase of the fishery during the period when trawling was practised, they went on to say, could not be ascribed to any augmentation in the number of drift-net boats; for these, on the average of the same years, with the exception of 1862, show no increase, while the number of square yards of netting employed remains also comparatively stationary. Hence they were forced to the conclusion that there were no grounds for the alarm that the fishery of Loch Fyne was being destroyed by the operations of the trawlers. The same reasoning was found to apply to the west coast of Scotland as a whole, viz., that there is a steady increase in the fishery during the periods when trawling was prosecuted; and that trawling (or rather seining) for herring has been an important means of cheapening fish to the consumer, and has thrown into the market an abundant supply of wholesome fresh fish at prices which enable the poor to enjoy them without having to come into competition with the curer. They pointed out also that by prohibiting the use of herring for bait during the close period from 1st January to 31st May, the white fish, like cod and ling, have been allowed to multiply. A single herring used for bait is employed to catch three of those fish, each of which if left in the sea would have devoured annually at least between four and five hundred herring; so that the cod and ling actually caught and cured on the Scotch coasts in 1861, would, if left in the sea, have destroyed more herring than 48,000 fishermen. As only 42,751 fishermen and boys were engaged in fishing in the year, the magnitude of this destructive agency will be readily perceived. The close time which diminishes the capture of such fish must necessarily prove destructive to the herring.

Nothing can be more satisfactory than to find that so far as regards the ocean, no danger of scarcity need be

apprehended in our day, and that there are still more fish in the sea than ever came out of it. According to Prof. Huxley, one of the greatest living authorities on these matters, the ravages of man are but very trifling in character when compared with those arising from other and natural causes, and more particularly from the depredations of the birds and the larger members of their own tribe. According to the illustrious Professor, in the case of the herring at least, bird, fish, and man form a kind of joint-stock company, the latter having to be content with a modest 5 per cent. of the annual dividends. In fact, so far did the trawlers turn out to be from destroying the herrings by routing up the spawn, that they tended greatly to their preservation through the capture of such fish as turbot, brill, sole, and plaice, who possess an epicurean appetite for that kind of food. Such a declaration is undoubtedly reassuring, but yet one cannot altogether repress a certain qualm of apprehension when we read upon an authority of such great practical experience as Mr. Olsen, of ground after ground, in which the abundance of fish is a matter of the past. In the Off-ground near Grimsby, formerly abounding with all kinds of fish, there has been a scarcity of late. In the California Ground, a small one no doubt, large quantities of soles *used* to be caught. On the Doggerbank codfish have been caught abundantly in former years, but have been scarce of late. From the Great Silver Pits large quantities of soles were taken for the first three years. The Botney Ground formerly abounded with a great variety of fish, but of late years it has not been so productive. Off the N.N.E. Hole the supply of soles, formerly abundant, is now fluctuating, though still occasionally large; and so on in the case of nearly every fishing resort mentioned by this high authority, that fatal past tense is continually recurring.

CHAPTER VI.

DIMINUTION AND REPRODUCTION.

Others will come, my lord, all sorts of fish.

May.

LIKE almost every other commodity, fish experienced the effect produced upon commerce by the introduction of railways, not merely in the increased production of the staple, but in the relative importance of the different kinds. Freshwater fishing in modern days has sunk almost into insignificance in comparison with coast fisheries, hardly noticed at the commencement of the present century, from the multiplied facilities for sale and transit ; but the increased activity in regard to our streams and rivers has by no means been followed by the same gratifying results. For that the inhabitants of our inland waters have disappeared with alarming rapidity in proportion as the numbers of fishermen have grown larger, cannot, unfortunately, be doubted for a moment. We may or may not give implicit credence to the venerable story of the apprentices' objection to the salmon, though it is strange that no indenture of the kind has ever been brought to light in spite of the handsome reward offered for a sight of it ; just as we may or may not altogether believe the parallel case of the little pauper child who was taken out to Canada, and there ran away from an excellent situation, for no other reason than

that her employers persisted in giving her turkey so frequently for dinner. But whatever our opinion may be upon the stipulations of the apprentices, there can be no question whatever that in former days many of our streams abounded with excellent fish, where few or none are now to be found. Nor is the evil by any means confined within the limits of England, or even of the United Kingdom. Switzerland sends forth a lamentation over her failing resources, so does Hungary, so does Belgium, so does Norway itself, the fruitful mother of cataract and fjord. Many causes, no doubt, combine to produce this disastrous result: the poisoning of streams by the sewage of towns, and by the refuse of manufactories, the greediness of fish-eating birds, surpassing, it would seem, even the voracious rapacity of fish-selling man, are all elements tending to the destruction of the aquatic creation. Rigid rules as to close time and prohibitions as to the discharge of deleterious matter enforced by active inspection have done something to arrest the wholesale waste of the material of food, but preventive measures alone will not suffice to restore the lost fruitfulness to our empty streams. To give back to the rivers the stock they once possessed and to vivify with fresh abundance our waste and desecrated waters, is a task requiring much intelligence, no little capital, and almost infinite patience. Yet so widely has it been attempted, and so beneficial are its results when carried on under the conditions necessary for success, that although these breeding-grounds are rather nurseries for the spawn than actual fisheries, still no history of the latter can have any pretension to completeness which does not afford some slight indication of the numerous efforts made in this direction.

Pisciculture in its simpler form was without question commonly practised in ancient times, and the classic writers

allude almost as familiarly to the fish ponds of the great as to the farms of the humbler class of citizen. Attention too was paid to the diet of the denizens of these ponds, but rather with a view to heightening the flavour to please the palate of the rich than to increasing the stock in order that the poor might have a more abundant and cheaper supply. Civil wars, however, jointly with foreign invasion, destroyed all traces of this art in classic lands, so that centuries elapsed during which little is heard of pisciculture in the western world. Its revival is due, according to the Baron de Montgaudry, to Dom Pinchon, a monk of the Abbey of Reome, in the Côte d'Or, during the fifteenth century. A very simple apparatus was all that the good father used—long boxes, wooden at top and bottom, and latticed at the extremities with osiers, were filled with fine sand as a lining, and covered at top and bottom with latticework. After the lapse of nearly three centuries, a second step was taken by a fisherman of Lippe in the direction of discovering the artificial propagation of trout, and a series of experiments was carried on for sixteen years by Jacobi, of Hohenhausen, the results of which were communicated some time afterwards by Sir Humphry Davy to our own countrymen. About 1824 Professors Agassiz and Voght had occasion to make experiments on a class of the salmonidæ in Neufchatel, and employed artificial fecundation for obtaining the eggs required. Next came Shaw's experiments at Edinburgh ; and the evidence given at Stormontfield irrefragably established the various stages of parr, smolt, grilse, and salmon. To another fisherman of Bresse, a village in the Vosges, is due the observation of the causes leading chiefly to the destruction of the fry to be found in the consumption of the eggs by other fish, the floods, the droughts, and the attacks of insects. And from him too

proceeded the suggestion of pierced tin-boxes for the eggs, which has proved so highly successful. A word of commendation must be paid also to the remarkable institution established by the French Government at Huningue in 1863, for the artificial stocking of rivers and streams throughout France, which has resulted in restoring many of her waters to their naturally prolific condition, although the territory containing the institution itself has passed into other hands. Sweden, no less than France, had recourse to pisciculture in order to restore to its waters their exhausted fertility, and her efforts have been crowned with equal success. A large establishment has been instituted by the Swedish Government at Ostan-Beck for the distribution of spat through the neighbouring localities, and very happy results attended the labours of Monsieur Widegren; while the experiments at Æstersund have also attained celebrity.

Norway, once revelling in the wealth supplied by her streams, has of late years experienced great sterility, but owing to the efforts of Professor Rasch steps have been taken toward remedying this terrible calamity. Since 1852 an Inspector of Fisheries has been instituted, and more than one hundred localities are now furnished with the means of repairing the loss inflicted by former carelessness and greed. Salmon has been restored in various parts of Sweden. Eight lakes, situated in Röraas, have been stocked with *Salmo-Fario*, and kindred sorts. Three lakes in the same neighbourhood have received similar advantages, as has also the large lake of Stort Jernet, near Sjøvold, and others in the neighbourhood of Sondrevik, Hitterdaal, and Folgen.

Almost the same experience has happened to the Russian Empire, which since 1854 possesses at Nikolks, in

the principality of Novgorod, an establishment of pisciculture, founded by M. Vrasski, whose efforts, though unattended at first with success, have since produced the very best results. The locality chosen by M. Vrasski is admirably adapted for the purpose on account of the abundance and the purity of the water, and the establishment being located at the point of separation between the basins of the Volga and the Ladoga, is especially suited to the purposes of acclimatisation. From half a dozen other countries of Europe the same story reaches our ears. Belgium and Hungary, Germany and Switzerland, all tell the selfsame tale of anxious effort to repair exhaustion caused by wanton carelessness; and in the last-mentioned of the countries, at Meilen, near Zurich, 200,000 trout are annually produced to repair the ravages of former years. The new country too is in the same category with the old, and in the United States, to quote a single example, the Commissioner, Mr. Atkins, states that the "passage of fish was interrupted by building impassable dams for manufacturing purposes on the Kennebec and Penobscot, in 1837. On the Kennebec the first fall is 17 feet at the head of the tide-waters." These two rivers of 500 miles had previously produced 180,000 salmon, and are now reduced to a catch of 2100 annually. Two other rivers, the Androscoggin and Saco, of 320 miles in length, which had previously produced 50,000 salmon annually, now produce only 2000. "Most of the rivers in the State are in the same condition as the Kennebec." The three rivers that previously produced 230,000 fish are 580 miles in length, and now produce only 4100 annually. We may fairly estimate the loss of 225,900 salmon, of average weight, 9 lbs., or upwards of fifty thousand pounds, at only 6d. per lb. value, as the annual loss of valuable nutritious food paid for the erection of a

few mill-weirs for water-power upon the three rivers. Thus, from every quarter rises up a chorus of testimony to the national injury and loss inflicted by neglecting the care of our Fisheries. It may be that we have yet to learn the still higher penalty attaching to the neglect of the interests of our Fishermen.

CHAPTER VII.

A GLANCE AT FOREIGN COUNTRIES.

Winged ships . . . and thousand fishers.

Spencer.

FRANCE with her coast-line of 1500 miles and her traditions of adventure, naturally claims to be one of the first rank in all matters relating to maritime affairs, and has held no less than three special exhibitions at Boulogne, at Arcachon, and at Dieppe, with a view to promoting her interests in this direction. Out of 90,000 sailors constituting her fine navy, not less than 65,000 are fishermen, a proportion well illustrating the expression, so often recurring in our own annals, to the effect that the fisheries are the nurseries for seamen. Whaling is the principal occupation of the major portion of this fleet, and a very remunerative employment it is. Establishments for the manufacture of fish products are found in France, as in Norway and Newfoundland : and yield excellent returns. The seas about Iceland and the rich banks of Newfoundland attract another large section of French vessels. In 1866, no less than 448 ships with 10,000 to 12,000 men on board, a formidable squadron of the naval nursery, left the shores of France for the cod fishing in the north-west Atlantic ; the wages of the men varying from £3 12s. to £4 a month. The presence of the French in

these parts is connected with many associations of our own history, and one can the better understand the miserable antipathy between the two nations, now happily almost forgotten, when we find them fighting tooth and nail over such easily comprehensible matters as the pounds, shillings, and pence, derived from the fisheries. Some one has, or ought to have, already observed that war never yet broke out which had not for its real intention a change in the ownership of territory; but most persons would be surprised at the number of Treaties in which the right of fishing claims the dignity of especial mention. Nearer home the capture of herrings employs some 4000 or 5000 Frenchmen from July to November, but the method of carrying is hardly so successful as that of Holland, and the fish suffer much in consequence of the want of wells in the boats. In the earlier part of the year, or rather during the spring, mackerel are obtained on the northern, western, and southern coasts; and what are popularly supposed to be sardines on a holiday excursion from their home in the Mediterranean, make their appearance in the fashionable month of May. At Dieppe there is a school for giving instruction in the mending of nets, two of which differ in their action from those hitherto described, the carelet being a net for upward, and the epervier for downward capture.

Norway, dotted with its innumerable islands and indented by fjords stretching far inland among the mountains, is the very home for cod and such like fish. From 20 to 25 millions are taken every year off the Lofoten district alone. Herrings are very capricious in their visits to the coast, or at least their movements are subject to laws not yet discovered. From 1650 to 1699 they stayed away altogether, and again from 1784 to 1808, both from the Norwegian and the Swedish coasts; a subject now receiving illustration from

the labours of Professor Sars. Their favourite resort in Norway during the seasons of their advent is Bergen, the capital of the south-western district, at no great distance from the beautiful Hardanger Fjord. The herrings, however, when they arrive make up for their absence by the magnitude of their shoals, giving employment to some 6000 boats and 30,000 men. Oysters are found in abundance in the Christiana Fjord; and, as many an English tourist well knows, salmon frequent the rivers and rushing streams, though even their saltatory powers are not equal to such leaps as the Riukan or Voring Voss would require.

In the mackerel fishery, according to the report of M. Hermann Baars, Special Commissioner of Norwegian Fisheries and Navigation, each boat produces from about 1000 to 3000 each night, but by the barrage nets the fishermen sometimes catch 10,000 to 20,000 in a single haul. This fishery has been so much developed the last few years, that it now counts about 2500 boats, which have caught from 30 to 35,000,000 of fish during a season. This immense abundance is preserved in ice and sent to England; and the roe of the mackerel consumed in Norway, as well as the cod roe, are sent to France as bait for sardines. Lobsters are of great importance in the northern districts of Norway. They not only supply highly-prized food for the population, but also an export of commerce amounting to not less than from 700,000 to 800,000 francs a year in addition to crab fish. Oysters are distributed all along the coast from Namsen Fjord to Christiana Fjord. Banks of large extent supply the wants of the country; but through ignorance or negligence many have been destroyed or exhausted. Men are beginning, however, better to understand their value. Existing banks are treated with much more care; oyster culture is becoming more general; and there

is every reason to believe that it will become one of the most important products of the country.

From time out of mind, or at all events from the close of the ninth century, Sweden has been renowned for its fisheries and fishermen. A little more than a thousand years before Professor Nordenskjold commenced his successful voyage, Flosco, a native of that country, set forth for Iceland, or Snowland as it was then called, discovered a few years previously by a roving pirate. During the middle ages there are various allusions to Swedish fisheries, and in 1555 Olaus Magnus published his book entitled, 'Historia de Gentibus Septentrionalibus,' to which we have already referred. In more modern times Cederstrom's treatise which appeared in 1857, and Christoffel's work, published in 1829, may be mentioned as giving information. From the situation of the country and the formation of the coast, indented in every part with innumerable bays and fjords, Sweden offers a natural resort for fish of almost every description frequenting the Northern Waters, except, perhaps, the whale; and her splendid rivers provide a home for many of the principal kinds of those inhabiting fresh water. Sea-fowl in great numbers are found on the Baltic and the coasts of Bothnia; but though their presence is doubtless prejudicial to the development of the spawn, it does not perceptibly affect the vast abundance of supply. Turbot and cod, salmon and mackerel, ling, herrings, lobsters, oysters, and crabs, all find their way from the ocean to the Swedish shores, while the rivers are full of perch, pike, roach, char, salmon, grayling, bleak and eels. No less than sixty kinds of fish are said to be sold in the market of Gothenburg; but this estimate includes different kinds of the same fish. Stroemming, about the size of a sprat, visit the eastern coasts of Sweden, especially of the province of

Bohus during certain parts of the year. Herrings, which, with salmon, form the staple of the fisheries, are found chiefly on the western coasts north of Gothenburg, off the ports of Uddevallen and Stronstad in the winter months. Here also the visits of herrings are subject to considerable fluctuation, and in connection with this subject M. von Yhlen, Inspector of Swedish Fisheries, has carried out some interesting investigations, based on the theory that the occurrence is dependent on a natural law; the shoals of anchovies taking precedence, the smaller shoals of herrings following them, the larger bringing up the rear; and the return of fish in large numbers indicating the advent of another fruitful period of seventy years. Lastly, it may be mentioned that Sweden is not wholly at liberty to dispose of her fisheries as she may see good, at least in one particular direction. By the treaty of 1855, signed at Stockholm between Great Britain, France, and Sweden and Norway, the latter kingdom bound itself not to cede or exchange any rights of fishery or pasturage with Russia, and to make known to the two former monarchies any proposals to that effect which Russia might put forward; and on the other part Great Britain and France guaranteed to defend Sweden and Norway in the event of insistance on the part of Russia. It may be questioned whether this peculiar relic of the Crimean War is not liable to create the very complications it was originally intended to prevent.

In the Russian Empire the fishing is chiefly conducted upon the five great Inland Seas, or Salt Lakes—the Caspian, the Azov, the Baltic, the Black and the White Seas. The navaga frequents the Gulf of Onega and the mouth of the Petchina, while the chimaia prefers the Sea of Azov and the Caspian. Fish being the only food allowed on fast-

days, of which the Russian Calendar contains an exceedingly large number, the demand is very great, the men being hired for the season, and bringing their produce to the *vataga*, or central establishment. Throughout the Oural districts a guardian is appointed over each *yatove* or deep basin; and the most stringent precautions are taken to prevent the fishes from being disturbed, even fires being prohibited at certain periods. In the fresh and brackish lakes of the Caspian, says Count Danilewsky, President of the Russian Commission, everything unites to create an abundance of fish: the quantity of organic matter and the great growth of vegetable life producing insects and infusoria on which the fish are nourished. Both seas are extremely shallow, the Caspian having a depth only of 50 feet, and that of Azov, 6 feet less, whereby a great fertility in plants and animal food is obtained for the inhabitants of the waters. The mouths of rivers, too, separate into many small streams before leaving the lakes, thereby affording convenient spawning-grounds where the young may be well fed and protected from their enemies. There are four species of sturgeons, better known under their commercial name of red fish. Again, certain sorts are used in the manufactories for oil, and other products, viz. the *sandre*, two kinds of herrings, *breme*, *tarane*, and smelts, valued at 175,000*l.* Cod, carp, salmon, and white salmon, may be estimated at 87,500*l.* Salmon is found in the North Sea and the rivers; white salmon in the Volga, the Dwina, and the Petchora in very large quantities; and lastly, *navaga* is found in the White Sea, in the Gulf of Onega, in the Dwina, in the Mezene, and near the mouth of the Petchora.

Turning from Russia and crossing the Atlantic Ocean we arrive at an island the fisheries of which have been the scene

of what is probably the most extraordinary political history recorded of any country whatsoever. About the year 1497 John and Sebastian Cabot set sail from Bristol with a small equipment of five ships and 300 men, furnished by the financialist monarch Henry VII., who had just discovered the penny wisdom and pound foolishness involved in ignoring the dreams of Columbus. On the 6th of June, according to some accounts, they sighted the island now called Newfoundland, destined from that time to be considered, as a public writer recently observed, in the light of a ship moored in the Atlantic for the benefit of British fishermen; though the country was not formally annexed to the Crown of England till Sir G. Peacham took possession in the name of Elizabeth in 1583. This was a proceeding which to men of the present day bears no slight resemblance to an act of unblushing impudence, inasmuch as the French numbered 150 vessels in those parts, the Spanish 120, the Portuguese about one-third of the former number, and the English not so many as the Portuguese. But overweening scrupulosity was not the most marked characteristic of the worthies of Bideford and Barnstaple, and Bristol, who composed the crews of that famous Elizabethan era. To Sir G. Peacham succeeded Sir Humphrey Gilbert, with the illustrious Walter Raleigh as second in command; but that halcyon period soon came to an end, and then commenced what may fairly be pronounced to be the most outrageous political experiment ever tried upon a body of helpless colonists. By a decree of the Star Chamber the immediate government of the island was placed in the hands of an individual dignified with the title of Admiral; and that officer obtained his post neither by nomination of the Crown nor by election of the colonists, nor by any other process known to civilised law, but simply by being the skipper of the vessel which arrived at Newfoundland the first of the season. This

extraordinary system of happy-go-lucky administration, founded apparently upon the principle of "first come first served," gave rise as might be expected to endless struggles between the fishermen and the regular settlers, whose interests were sacrificed upon every occasion. To such an extent did the Government carry out the policy of discountenancing settlement—a policy absolutely unintelligible to modern minds—in order to favour the supposed interest of the fisheries, that no one was allowed to cut wood for firing, within six miles of the port. Nay, one of the most prominent merchants connected with the fish trade in Newfoundland, Sir Josiah Child, went so far as to advocate the entire displanting of the inhabitants of the colony on the ground that, since the growth of the colony, the vessels engaged with cod had declined by more than one-half in a lapse of less than seventy years, and orders were actually issued to put this monstrous decree into execution. After the treaty of Ryswick confusion was rendered worse confounded by the addition of two fresh officials, styled respectively Rear and Vice-Admiral, in the shape of the skippers of the second and third ships arriving for the annual sojourn ; and the affairs of the colonists continued in the utmost depression until in 1728 Captain H. Osborne and Lord Vere Beauclerc restored some sort of order and justice by restraining the autocracy of those ignorant and incompetent despots. Several years later Labrador was placed under the same jurisdiction, and the whole colony was raised to a Crown plantation. Of late the rights of the permanent inhabitants have been suffered to develop themselves with greater freedom from restraint ; but traces of the old restrictive policy are still to be seen in the uncultivated condition of the rich lands lying almost unknown in the heart of the island.

Passing over to the American coast we arrive at another

scene of British adventure and another locality teeming with associations for the student of history in later times. More than two hundred and fifty years ago Massachusetts had already twenty sail engaged in this occupation, and a century and a half later the fishermen of North America left no inconsiderable record in the military annals of that country. At Louisberg they took a fortress defended by 250 cannon; and in the course of two years of the Revolutionary War they captured 733 ships together with property amounting in value to twenty-five million dollars. The records of Marblehead in particular serve as a comment on Gray's well-known line upon the path of glory. In 1772 the voters of that town numbered 1203, in eight years afterwards only 544 were left of them. Nor were the succeeding generation unworthy of their fathers, and the offspring of those fishermen who had perished for the independence of their country manned the frigates of 1812.

Immutable, immemorial China, on the far western coast of the Pacific, with its highly developed industries and long descended customs, the land from which many a product, both of nature and of art, has found its way to western countries, forms an appropriate connection between ancient and modern times. Amongst other occupations fishing received its full measure of attention, and the various forms under which it is practised are far too numerous to be here described, though a few of the principal must be noticed. Rather more than a century and a half ago, the encyclopædia, *Koo Kin Too Shoo Tseih Ch'ing*, in one thousand volumes, was drawn up by Imperial authority, and two articles on fishing are contained in it under the section *Shuh Teen*. A few plates are to be found in connection with the

article ; but most students will probably prefer to consult the French work of M. Dabry de Thiersant, whose abundant illustrations are only equalled in interest by the excellence of the invaluable information conveyed in his text. There are many sorts, both of lines, nets, and modes of capture. The Kuen Keon is a line two or three hundred feet in length, with several branches. It is made of hemp, and is soaked in a strong decoction of oak-bark (ko-chou), or else in the blood of a pig. Pe-Chen-Keon, a line of a somewhat similar character, differs from the Kuen Keon in having its hooks rather smaller, and being suitable for the lesser kinds of fish, more especially eels. Amongst the snares may be noticed the Pan-ta-tseng, a large net in the form of a square, having in its centre a pocket with a bamboo box for the reception of the captives. Four pieces of bamboo, fitted to the corners of the net, meet at the top, and are fixed to the extremity of a lever about ten or twelve feet long, itself reposing upon a strong bamboo which forms the fulcrum of another lever resembling the first, and intended to keep it in equilibrium. This second lever is furnished with leads to counter-balance the weight of the nets, and the machinery is so devised that these heavy nets can be manipulated by the slightest touch. Cormorants are another famous means applied by this ingenious people to the capture of fish, the bird being trained to release his prey at the touch of the rope encircling his neck, with as great certainty as hawks are taught to obey the call of the keeper or the retriever to secure the game. Domestic affairs are conducted with the same strict attention to economy, and consequently attain the same astonishing results among the fishermen as among all other classes of inhabitants throughout the celestial Empire. Although the whole annual family expenses do not average more than about £24, or a little

over 10s. a week, that is to say, the wages of an English agricultural labourer, out of which the head of the family has to make provision for medicine, and to procure what we should consider luxuries, such as tobacco, and a kind of oil (*mien-tse-yeou*) for the preparation of food, yet he can repair his net, set apart something for religious purposes, and spend an appreciable portion of his income upon three annual festivals.

Opposite the Chinese coast stands another mighty empire, in which the fisheries form an element of almost incalculable importance. Somewhere about thirty-five millions is considered to be the number of fish consumers in Japan, and the persons employed in that trade amount to 70,000 in Nagasaki alone. Salmon in particular gives a constant dish to their dinner-tables. Triangular nets are used for its capture, and the take is said to be sometimes 10,000 at a time. With their quaint love of symbolism, the Japanese use this fish to inculcate morality upon their children. When a boy is born, the parents place over the house a paper salmon, made with round head and open mouth, so that the wind blowing in at the aperture expands the entire body. When the feast celebrating the birth of the child is over, the fish is taken and preserved among the household gods. The boy is bidden to imitate the perseverance of the salmon, which never ceases to make its way upwards until it has attained the position it desires.

CHAPTER VIII.

A PRACTICAL CONCLUSION.

Fare you well.

The fool shall now fish for himself.

Beaumont and Fletcher.

Πλείη μὲν γὰρ γαῖα κάκων, πλείη δὲ θάλασσα.

Full is the earth of sorrows ; full the sea.

Hesiod.

YARMOUTH, where, as tradition asserts, the first herrings were caught in the fifth century of the Christian era, is still one of the principal centres of British fisheries ; and fish in many forms, but more particularly in that of the herring, forms the staple, not to say the totality of its commerce. Throughout the eastern counties a peculiar measurement prevails. Four herrings go to a warp, and thirty-three warps, or 132 fishes, are reckoned as a hundred, the buyer getting the benefit of the odd thirty-two ; a method of calculation especially to be recommended to the notice of publishers, with whom the reckoning of thirteen to the dozen goes rather the other way. Perhaps the computation may have originated in a custom still prevalent in some parts of the kingdom, of permitting the fishermen to carry away a certain number of handfuls. A hundred of these "hundreds" make up a "last," each of which therefore contains not 10,000, but 13,200 herrings. When the

weather is fine the smacks enter the haven to discharge their contents; but as the bar becomes dangerous if the wind be at all strong, ferry boats are then employed, and the cargo is conveyed in baskets called "swills," containing about 500 fish apiece. The baskets are carried high up on shore and placed in ranks two deep. A lively scene prevails during the sale, and a good deal of fluctuation is found in the returns. In 1869, for instance, the number of lasts was about 13,500; then it rose rapidly to more than 19,000; then, within four years, it sank to 12,000, and then again it commenced to rise. By the latest returns of the Board of Trade, it appears that the total number of lasts of all kinds of fish was 32,696, a very satisfactory increase when compared with the 31,238 of the previous year.

The work of the crew on board a trawler is distinctively assigned to each hand, each man being supposed to be capable of performing the duties of all those below him. It is the boy's part to cook, to coil the warp, and to steer during mealtimes, unless the weather be particularly rough. Steering and keeping watch form the business of the sixth hand; mending the nets is the additional duty of the fifth, and shooting the nets of the fourth; while the third hand must be able to work the net at all seasons; and the second must be able to determine the position at sea and take charge of the vessel. In addition to these matters, a more important and peculiar knowledge, that of the fishing-grounds, is required for the master, and this can only be gained by experience from season to season.

On the eastern coast, and more particularly in the Yorkshire parts, a good deal of difficulty has lately prevailed with reference to the relations between the smack-owners and the boys. To investigate these matters another Commission was appointed during last year, with the special object of enquir-

ing into the habits of fishermen ashore and at sea, consequent upon the terrible fate which befel poor Henry Papper. From the evidence then collected out of the mouths of all classes of persons connected with the trade—skippers and smackowners, solicitors and salesmen, managers of societies for the protection of fishermen and of associations of proprietors, casuals and apprentices, aldermen and police inspectors—it appears that a very considerable difficulty exists in determining the status and providing for the wants of the younger members of the crew. The system of apprenticeship, by which the masters were bound to provide food and lodging for the boys ashore as well as afloat, is rapidly falling into decay, and in one of our ports the number is less than one-twelfth of what it was two years ago. Great disorders prevail in consequence among the fisher-lads, many of whom live habitually in disreputable houses while ashore, so long as their money lasts. Very serious damage also is caused to the interests of the owners by the habitual desertions of the casual hands, the absence of one member of the crew being sufficient to detain the vessel sometimes for two or three days, thereby causing a loss amounting perhaps to some hundreds of pounds. Violent remedies are employed to obviate this desperate state of affairs, and in one town, which it is not necessary here to specify, literally 20 per cent. of the whole body of apprentices were imprisoned for desertion in the course of less than three years. Such a result, it is clear, inevitably tends to defeat its own purpose, inasmuch as disgrace, the chief element in that kind of punishment, must almost disappear when one person out of every five is subjected to it, much as in certain public schools of a former generation, the boy who had not been flogged was hardly considered to have obtained a respectable footing

among his fellows. Still it is far easier to make objections than to suggest any other process which shall secure to the owners their unquestionable rights. Much carelessness, too, in regard to the lives of those employed in this dangerous occupation, is not unfrequently found even among such as believe themselves to be perfectly blameless on this point. Thus one witness, having affirmed with evident sincerity that smackowners treated apprentices as if they were their own children, went on almost in the same breath to describe the danger attached to the simple process of drawing water in a bucket from the sea while the vessel is in motion, because of the sudden and unexpected strain of the current on the novice's hands; and observed that the youngsters have not got their sea-legs, and soon tip overboard. Another witness again, himself a fisherman, objected strongly to being obliged to give a report on his return to shore of any death which might have occurred on board during the trip because he wanted the time to land his fish. Not that this indifference is universal, or even, perhaps, very general, any more than such terrible cruelty as was practised on board the *Rising Sun*. Yet when we learn from the lips of a competent witness, himself largely representing the special interests of the proprietors, that a skipper dismissed for cruelty would probably be engaged by someone else on the following day, it is impossible to conceive that any great amount of solicitude is habitually given to the welfare of these helpless lads.

To enter upon any lengthy discussion of the relative merits of the parties to this question, and, in particular, to form any judgment upon the action of particular associations or individuals, would be to go outside the province of a history; but none the less should we fall short of the design both of this present volume and of the whole vast

undertaking of which it is an infinitesimal portion, if we omitted to draw attention both to the facts themselves and yet more particularly to the remedies which, as a matter of history, the Commissioners proposed. For enquiry is good, discussion is excellent, illustration is admirable, but the only fruitful and satisfying result of history is improvement in administrative action.

The proposals adopted by the Commissioners were simple, and likely to be effectual. They consisted principally in the recommendation of four important measures: the issuing of a certificate for captains after passing an easy kind of examination specially adapted for their requirements; the imposition of an obligation to keep a rough kind of log; the compulsory requirement of a declaration as to any death which may have occurred during the trip; and the endowment of the officer of the Board of Trade with parental authority in the interests of the apprentices. The first and last of these suggestions, when taken together, seem especially suited to effect their purpose, since they create an authority sufficient to deal with the master of a ship, and an easy means by which that authority may be exercised.

But the space we have measured grows immense, and the time approaches to loose the neck of our smoking steeds. Yet one more flight awaits us, for there is still one kind of fishery—or shall we say a dozen kinds—of which we have made no mention. Down from the heights of the Olympus where the Commissioners sit enthroned in Whitehall Gardens, let us dive at a plunge, like Thetis of the gleaming foot, swift as the flash of thought into the azure depths of the Sicilian sea. A thousand forms of strange beauty are around us; a million insects are at work, building up, as they have done through

uncounted ages, grottoes and stony ferns, and pinnacles, of which each component atom is a gem, and fantastic forms of every hue surpassing the pen of man to describe and almost the heart to conceive ; which, like the walls of Thebes beneath the lyre of Amphion, rise up in a silence unbroken save by the music of the southern wave. We are amid the coral groves, that marvellous aggregation of living animals, so subtly constructed to deceive the sight that none dreamed of the pulses of animal life beating beneath the tree-like rock until the ill-rewarded labours of Peyssonnel revealed to an unappreciative world the true nature of coral, "the daughter of the sea." Surely in so retired a spot, and amid such lovely scenes as these, some respite may be found for the denizens of the waters. Not at all. Not even the repose of coral groves can hope to escape the disturbance of the never-resting industry of man. As we gaze upwards through the translucent wave a huge, strange combination of wood and iron descends, shaped in the form of a cross, with two bars strongly lashed and bolted together, and seven lines attached to it. An immense stone directs its course towards the bottom, and the gentle motion of the vessel drags it against the rocks and with a series of jerks bears off the coral to be the ornament of some bride or matron.

Enough. We have looked over many lands, down into the depths of many an ocean. We have seen our brave toiler of the sea struggling everywhere, and taken note of the riches he reaps for the benefit of others. Is there no other side to the question ? Is there no sight which tells of his own condition, and are there no memorials which we may finally carry away in our minds as illustrative of the lot of the fisherman ? Alas, such a picture exists ; and sad as is the contrast between the tales of national wealth and

the personal sufferings of those by whose labour that wealth is gained, there is nothing we can more profitably impress upon the imagination as a farewell picture. At Hibernia Chambers, London Bridge, close by historic Billingsgate, whither for a thousand years the fish of every sea have made their way, stand the offices of the Society brought into existence for the relief of shipwrecked mariners and fishermen. That admirable Institution, established now for more than forty years out of the thousand, and supported by the subscriptions of fifty thousand fishermen and mariners, has four objects in view ; to board, lodge, clothe, and generally assist all wrecked seamen or other poor persons of all nations, cast destitute upon the coasts ; to help seamen, whether of the Royal Navy or Merchant Service, fishermen, coast-guardsmen, pilots, boatmen and apprentices, subscribers to the Society, towards replacing their clothes and boats when lost by storms or other accidents at sea, and to relieve their widows and orphans, or dependent aged parents ; to award gold and silver medals, and other honorary or pecuniary rewards, for any praiseworthy endeavours to save life from shipwreck on the high seas, or coasts of the colonies ; and to give small gratuities to its old and necessitous members in extreme and special cases. Already more than three hundred thousand persons, including not only mariners, fishermen, pilots and boatmen, but, alas, what is yet more urgently required, the widows, orphans, and aged parents of those whom the sea has claimed, have experienced its benefit in their hour of need. How deep that need must be, may soon be seen from a brief inspection either of that most melancholy of documents, the Annual Wreck Chart published by the Board of Trade, or of the equally significant statistics—oftentimes the blank and passionless records of the most passionate and personal sorrows—

that during the single year 1880, 4804 fishermen and seamen, and 8330 of their bereaved and helpless dependents, received the assistance of this society; or by a glance at that simple and stern account of the ratio between the number of tons of fish obtained, and the number of fishermen's lives destroyed, which is given upon the map of H.R.H. the Duke of Edinburgh. No words can be more forcible, or more appropriate for the conclusion of a work which deals with the history of our fishermen, than those in which the Committee put forward their earnest appeal to the public. "They cannot but urge," they say, "that the dangers and the hardships of our brave sailors—the men that is, to whom, under God, England owes her proud pre-eminence as Mistress of the Seas amidst the Nations of the World—have a peculiar and irresistible claim upon the hearts and the sympathies of a maritime people. It is impossible, the Committee feel, for those not themselves involved in the frightful disaster, fully to realise all the horror and woe attendant on sudden shipwreck—men, women, and children, only saved, if saved at all, from the terror and dismay of impending death, to be cast naked, exhausted, and perhaps grievously injured, ashore; even then, it may be, still to suffer or perish in utter friendlessness, but for the outstretched hand and the speedy relief, ready on the spot, through the watchful agency of this Society." Surely each object of such a society as this must go straight to the heart of a great maritime nation which claims the wide ocean for her home and calls her fisheries by the endearing title of nurseries.

And now, patient reader, having fairly sent round the plate, it is high time to say farewell. Together we have experienced the hardest test which can befall a friendship. All the world admits—and here at least experience con-

firmly the verdict of all the world—that nothing so greatly tries and tires sympathy as fellowship in a long and indefinite journey. Even those heaven-born twins of travel—the Pylades and Orestes of tourists to the youth of a former generation—Lumley Ferrers and Ernest Maltravers, found a few years of desultory wandering almost too much for their mutual forbearance. Their parting was a mixture of fire and of ice. “Is this fair to me?” cries Lumley, for once angry in reality. “Trouble me no more,” replies the haughty Ernest, as his late companion in not unnatural dudgeon turns to leave the room. Let us hope that no such stormy ending may attend the conversational stroll which we have taken together through some ten or twenty thousands of miles and over a range of two or three dozen of centuries

BY THE SAME AUTHOR.

ZENOBIA;
OR,
THE FALL OF PALMYRA.

A Tragedy in Three Acts.

"SOME weeks ago, Mr. J. M. Bellew introduced to the public a new tragedy, by Mr. W. MARSHAM ADAMS, late Fellow of New College, Oxford, entitled, 'Zenobia; or, The Fall of Palmyra.' We have had the pleasure of reading this tragedy, and can speak favourably of it. It is a scholar-like work, full of passages of great vigour and beauty, and sparkling throughout with perfect gems of poesy. A singular unity pervades it. The plot of Paul, detailed in the second act, is carefully prepared in the first, and recoils with tremendous force upon his own head in the last. Each character is distinct, though each displays a wide range of passions. The dignified Longinus, the petulant Mæonius, the passionate Zenobia, the despairing Paul, 'an outcast from both worlds,' the generous but fanatical Heliodorus, preserve their identity through every phase of varying emotion. The incidents are entirely the product of the passions of the characters; and the result is, that the interest continues unflagging down to the very fall of the curtain. 'Zenobia' is a specimen of the legitimate drama, admirably conceived and skilfully executed."—*Once a Week*.

"For many centuries the famous treatise 'On the Sublime' was attributed to Longinus, the rhetorician. His authorship has since been called into question, like many others, by the school of high criticism; but it will in all probability still remain connected with his name. The biographical dictionaries state that his great reputation caused him to be summoned from Athens to Palmyra by Queen Zenobia, that he became her chief counsellor, and that he was put to death in A.D. 273 by order of the Emperor Aurelian, as having instigated her futile war against the Romans. With regard to Zenobia herself, we are told by the same convenient authorities that she was Queen of Palmyra, and had the credit of having brought about the death of her second husband, Odenathus; that she proclaimed herself Monarch of the East, and declared war against the Romans; but that she was conquered and taken prisoner, and carried off to grace the triumph of Aurelian in the Eternal City, where she afterwards lived and died in obscurity.

"Such are the chief fragments of history on which Mr. MARSHAM ADAMS appears to have built up his new tragedy. In a prefatory note he warns the reader, that 'although some of the principal personages of the play are historical, the incidents are to a great extent fictitious.' The creatures of the poet's imagination are the following persons:—A foundling whom King Denathus (or Odenathus) has adopted under the name of Mæonius;* a priest of the Sun, one Heliodorus, compelled by Longinus to conform outwardly to Christianity; and Viola, a daughter of Longinus. In the opening scene Heliodorus is discovered in grief near the ruins of the temple of Apollo, or the Sun, at Palmyra. To him, after a brief and striking soliloquy, enters Paulus, an apostate bishop, who had once been ambassador at the court of King Denathus, but who had been absent from Palmyra for seventeen years at the opening of the drama. The two old friends renew their acquaintance, and unite in expressions of hatred towards Longinus and his Christianity. Heliodorus introduces Paulus to the young foundling Mæonius, whose gratitude for his princely rank as the king's adopted son is not strong enough to conceal his dislike of the old monarch's frequent reprimands, and his rancorous impatience at the prosy tutorship of Longinus. These hot feelings are easily ripened into absolute detestation of the two oppressors, as he thinks them, of his youth, and he readily accepts a small packet of poisons which Paulus offers him as a convenient cure for the tiresomeness of an enemy. After Mæonius has refused to attend the summons of a messenger to the king's presence, Longinus comes on the same errand, and is accused by the young prince of being the lover of Zenobia. The despised messenger returns with an order from Denathus to depose Mæonius forthwith from his exalted station, and to cast him out as a mere foundling, without a father, or family, or position. Stray expressions which fall in an aside from the lips of Paulus allow the reader to divine that this apostate bishop has once been a lover of Zenobia. Altogether, this first scene brings the characters, and their mutual position, well before the mind, and, independently of its great poetic merit, inspires that interest in future events which is one great element of dramatic success. It leaves also a due amount of mystery and unexplained embarrassment around the chief personages, which is not

* Mæonius is a historical character. He was the nephew and assassin of the King Odenathus

cleared up until the tragic close of the play. The youth been the lover of Zenobia, and Mæonius was the illicit offspring of their attachment. To free herself from the persecution of an unworthy seducer, Zenobia had confessed her guilt to Denathus, and by his advice had made Paulus suppose that their infant child was dead, while in fact Denathus generously adopted it, under the name of Mæonius, as his own heir. Ignorant of the circumstances of his birth and education, the supposed foundling is brought up in an equivocal position, and without any of the ties which spring from recognised natural affection. Zenobia is anxious to conceal from every eye, even from Mæonius himself, her maternal love. Denathus is conscious of his heroic generosity towards the son of a wicked rival, and expects from Mæonius a constant gratitude and submission, which the youth knows no true reason for according him. To render the complication still more complete, Zenobia and Longinus have really fallen in love with each other, and are only restrained by their Christian piety from avowing a mutual passion, which their words and looks unconsciously betray to the courtiers and servants around them. The heart of Mæonius is divided between impatience and anger against Longinus and love for Viola, the fair daughter of the learned man. The ruined and disgraced Paulus, abhorring Christianity and Christians with all the concentrated fury of a traitor and an apostate, becomes the evil genius of Palmyra.

"The *dénouement* is brought about by the sudden love which the unchanging beauty of Zenobia excites in the breast of the victorious Aurelian. But we must in fairness leave our readers to discover from the work of the poet himself the masterly details of this tragedy and its end. It is marked throughout, but especially in the last act, by passages of singular beauty and power; and while the framework of the drama reminds us frequently of 'Hamlet,' the diction and imagery are those of a true poet, who might almost, if he had lived at the same epoch, have been deemed not unworthy to contend with Shakspeare himself."—*Tablet*.

"With no great faith in current ability to produce a readable tragedy in blank verse, we confess to taking up 'Zenobia' with some misgivings. We are therefore the more pleased to speak in its favour, and to regard it as possessing something more than the negative order of merit, and as being in many respects a superior composition. There are occasional flashes of eloquence that, if not rivalling Shakspeare, are very Shakspearian in their mode, and do the author infinite credit. The following extract will give our readers an estimate of the literary merit of this work, though it should be read in its entirety to do it justice:—

"*Mæon.* Thou hast spoken well,
But that thy strain demands too high a pitch
For common mortals, and for present need.
"*Long.* Because full liberty not yet hath dawn'd.
Trust me, Mæonius, there shall come a time
When kings shall haste to hear their subjects speak,
Not timid nor compelled, but weighing well
The arguments of all, or high or low:—
High wisdom oft in lowly forms is found:—
When subjects shall confess their monarch's sway,
Equal themselves to monarchs—chief in this
That they may vent the overgathering mind,
Nor dam remonstrance to Rebellion's height;
When the whole people shall the people rule,
And the nice framework be so interknit,
One heart shall beat, one common pulse shall throb.
No head so high, the law may not control;
No state so low, the law shall not defend."—*Examiner*.

"We hope it is Mr. Bellew's intention when in London to read from the works of comparatively unknown authors, as by so doing he may bring to light some hidden star. For instance, in the course of the evening Mr. Bellew gave selections from a tragedy by Mr. W. MARSHAM ADAMS, called 'Zenobia; or, The Fall of Palmyra.' Mr. ADAMS is a scholar, and was at one time Fellow of New College, Oxford. His work is polished, and the versification excellent."—*Era*.

"The plot is ingenious and interesting. We have no hesitation in affirming that we have often seen a poetical drama of fewer merits on the stage."—*Athenæum*.

"A drama of great interest."—*Morning Post*.

"The attraction of the evening (at Mr. Bellew's reading) was a scene from Mr. W. MARSHAM ADAMS' new tragedy of 'Zenobia; or, The Fall of Palmyra.'"—*Standard*.

"'Zenobia' is a real, living work."—*European Mail*.

"The spirit of Mr. ADAMS' tragedy is highly classical. The Fall of Palmyra is a fit subject, and it is here spiritedly dealt with by one who has all the scholarly qualifications, and no inconsiderable dramatic power. There are many passages of great beauty, and the interest is never permitted to flag."—*Westminster Review*.

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