The St Ives Pilchard Seine Fishery in 1850

For most of the period for which records exist, the pilchard seine industry was the main fishery in Cornwall, with annual catches at St Ives frequently exceeding the whole of the rest of Cornwall combined. The largest recorded catch in a single day taken at St Ives was in 1847, when over 57,000,000 pilchards were caught.

Pilchards are a smaller relative of the herring, shoaling in vast numbers and migrating north to Cornwall, and coming into shallow water between August and November when the seine fishery took place. This industry reached its peak during the 1800s, requiring significant investment in labour and equipment and a considerable amount of coordination to ensure that catches of this size could be efficiently processed and packed as quickly as possible.

The St Ives pilchard fishery was a substantial commercial operation, and became an important tourist attraction. However it started to die out in the late 1800s because the pilchard shoals stopped coming inshore, and it had died out by the early 1900s.

There are some photographs and paintings which provide a visual record of these events, but the best description of the industry is provided by the author Wilkie Collins. Collins, who was a close friend of Charles Dickens and perhaps best known for his books ‘The Woman in White’ and ‘The Moonstone’, embarked on a walking tour of Cornwall in 1850 with his artist friend, Henry Brandling. The account of his journey, ‘Rambles Beyond Railways; or, Notes in Cornwall taken A-foot’ was published in 1851.

When Collins and Brandling visited St Ives, the pilchard fishery was in full swing. Collins’ compelling eye-witness account perfectly captures the excitement and spectacle of this amazing industry, and brings it vividly to life.

His opening sentences are recorded opposite, and over the following three panels he describes the main sequences of events: ‘Shooting the Seine Net’, ‘Tucking the Pilchards’ and ‘At the Salting House’.

“The St Ives Pilchard Fishery in 1850”

If it so happened that a stranger in Cornwall went out to take his first walk along the cliffs towards the south of the county, in the month of August, that stranger could not advance far in any direction without witnessing what would strike him as a very singular and alarming phenomenon. He would see a man standing on the extreme edge of a precipice, just over the sea, gesticulating in a very remarkable manner, with a bush in his hand; waving it to the right and the left, brandishing it over his head, sweeping it past his feet - in short, apparently acting the part of a maniac of the most dangerous character.

It would add considerably to the startling effect of this sight on the stranger, if he were told, while beholding it, that the insane individual before him was paid for flourishing the bush at the rate of a guinea a week (or £800 today). And if he, thereupon, advanced a little to obtain a nearer view of the madman, and then observed on the sea below (as he certainly might) a well-manned boat, turning carefully to right and left exactly as the bush turned right and left, his mystification would probably be complete, and the right time would arrive to come to his rescue with a few charitable explanatory words.

He would then learn that the man with the bush was an important agent in the Pilchard Fishery of Cornwall; that he had just discovered a shoal of pilchards swimming towards the land; and that the men in the boat were guided by his gesticulations alone, in securing the fish on which they and all their countrymen on the coast depend for a livelihood.”
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"The first sight from the cliffs of a shoal of pilchards advancing towards the land, is not a little interesting. They produce on the sea the appearance of the shadow of a dark cloud. This shadow comes on and on, until you can see the fish leaping and playing on the surface by thousands at a time, all huddled close together, and all approaching so near to the shore, that they can be always caught in some fifty or sixty feet of water.

With the discovery of the first shoal, the active duties of the "look-out" on the cliffs begin. Each fishing-village places one or more of these men on the watch all round the coast. They are called "huers," a word said to be derived from the old French verb, huer, to call out, to give an alarm. On the vigilance and skill of the "huer" much depends. He is placed at his post, where he can command an uninterrupted view of the sea, some days before the pilchards are expected to appear; and, at the same time, boats, nets, and men are all ready for action at a moment's notice.

The principal boat used is at least fifteen tons in burden, and carries a large net called the "seine," which measures a hundred and ninety fathoms (350m) in length. It is simply one long strip, from eleven to thirteen fathoms in breadth (20-25m), composed of very small meshes, and furnished, all along its length, with lead at one side and corks at the other. The men who cast this net are called the "shooters," and receive eleven shillings and sixpence a week, and a perquisite of one basket of fish each out of every haul.

As soon as the "huer" discerns the first appearance of a shoal, he waves his bush. The signal is conveyed to the beach immediately by men and boys watching near him. The "seine" boat (accompanied by another small boat, to assist in casting the net) is rowed out where he can see it.

Then there is a pause, a hush of great expectation on all sides. Meanwhile, the devoted pilchards press on - a compact mass of thousands on thousands of fish, swimming to meet their doom. All eyes are fixed on the "huer;" he stands watchful and still, until the shoal is thoroughly embayed, in water which he knows to be within the depth of the "seine" net. Then, as the fish begin to pause in their progress, and gradually crowd closer and closer together, he gives the signal; the boats come up, and the "seine" net is cast, or, in the technical phrase "shot," overboard.

The grand object is now to enclose the entire shoal. The leads sink one end of the net perpendicularly to the ground; the corks buoy up the other to the surface of the water. When it has been taken all round the fish, the two extremities are made fast, and the shoal is then imprisoned within an oblong barrier of network surrounding it on all sides. The great art is to let as few of the pilchards escape as possible, while this process is being completed. Whenever the "huer" observes from above that they are startled, and are separating at any particular point, to that point he waves his bush, whereon the boats are steered, and there the net is "shot" at once. In whatever direction the fish attempt to get out to sea again, they are thus immediately met and thwarted with extraordinary readiness and skill. This labour completed, the silence of intense expectation that has hitherto prevailed among the spectators on the cliff, is broken. There is a great shout of joy on all sides - the shoal is secured!

Shooting the Seine Net

When a shoal of pilchards was spotted, the huer would raise the alert by shouting "Hevva! Hevva!", and would direct the boat to shoot the seine net around the shoal.

The seine net is shot off Porthminster Beach

The old pilchard seines worked

Fishing pilchards with same net. Stanhope Forbes

Seine boat and net
The “seine” is now regarded as a great reservoir of fish. It may remain in the water a week or more. To secure it against being moved from its position in case a gale should come on, it is warped by two or three ropes to points of land in the cliff. While these operations are in course of performance, another boat, another set of men, and another net (different in form from the “seine”) are approaching the scene of action.

This new net is called the “tuck;” it is smaller than the “seine,” inside which it is now to be let down for the purpose of bringing the fish closely collected to the surface. The “tuck” boat then slowly makes the inner circuit of the “seine,” the smaller net being dropped overboard as she goes, and attached at intervals to the larger. To prevent the fish from getting between the two nets during this operation, they are frightened into the middle of the enclosure by beating the water, at proper places, with oars, and heavy stones fastened to ropes. When the “tuck” net has at length travelled round the whole circle of the “seine,” and is securely fastened to the “seine” boat, at the end as it was at the beginning, everything is ready for the great event of the day, the hauling of the fish to the surface.

Now, the scene on shore and sea rises to a prodigious pitch of excitement. The merchants, to whom the boats and nets belong, and by whom the men are employed, join the “huer” on the cliff; all their friends follow them; boys shout, dogs bark madly; every little boat in the place puts off; crammed with idle spectators; old men and women hobble down to the beach to wait for the news. The noise, the bustle, and the agitation, increase every moment. There they stand, six or eight stalwart sunburnt fellows, ranged in a row in the “seine” boat, hauling with all their might at the “tuck” net, and roaring the regular nautical “Yo-heave-ho!” in chorus! Higher and higher rises the net, louder and louder shout the boys and the idlers. The water boils and eddies; the “tuck” net rises to the surface, and one teeming, convulsed mass of shining, glancing, silvery scales; one compact crowd of tens of thousands of fish, each one of which is madly endeavouring to escape, appears in an instant!

The noise before was as nothing compared with the noise now. Boats as large as barges are pulled up in hot haste all round the net; baskets are produced by dozens: the fish are dipped up in them, and shot out, like coals out of a sack, into the boats. Ere long, the men are up to their ankles in pilchards; they jump upon the rowing benches and work on, until the boats are filled with fish as full as they can hold, and the gunwales are within two or three inches of the water. Even yet, the shoal is not exhausted; the “tuck” net must be let down again and left ready for a fresh haul, while the boats are slowly propelled to the shore, where we must join them without delay.

As soon as the fish are brought to land, one set of men, bearing capacious wooden shovels, jump in among them; and another set bring large hand-barrows close to the side of the boat, into which the pilchards are thrown with amazing rapidity. This operation proceeds without ceasing for a moment. As soon as one barrow is ready to be carried to the salting-house, another is waiting to be filled ... the uninterrupted succession of men hurrying backwards and forwards with their barrows, through a narrow way kept clear for them in the throng; ... such a moving picture of bustle and animation, as not even the most careless of spectators could ever forget.”
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At the Salting House

The pilchards were built up into a stack of alternative layers of fish and salt and allowed to cure, a process known as bulking the fish.

“Having watched the progress of affairs on the shore, we next proceed to the salting-house, a quadrangular structure of granite, well-roofed in all round the sides, but open to the sky in the middle. Here, we must prepare ourselves to be bewildered by incessant confusion and noise; for here are assembled all the women and girls in the district, piling up the pilchards on layers of salt, at threepence an hour; to which remuneration, a glass of brandy and a piece of bread and cheese are hospitably added at every sixth hour, by way of refreshment. It is a service of some little hazard to enter this place at all. There are men rushing out with empty barrows, and men rushing in with full barrows, in almost perpetual succession.

But now, while we have a chance, while the doorway is accidentally clear for a few moments, let us enter the salting-house, and approach the noisiest and most amusing of all the scenes which the pilchard fishery presents. First of all we pass a great heap of fish lying in one recess inside the door, and an equally great heap of coarse, brownish salt lying in another. Then we advance farther, get out of the way of everybody, behind a pillar, and see a whole congregation of the fair sex screaming, talking, and - to their honour be it spoken - working at the same time, round a compact mass of pilchards which their nimble hands have already built up to a height of three feet, a breadth of more than four, and a length of twenty. Here we have every variety of the “fairer half of creation” displayed before us, ranged round an odoriferous heap of salted fish. Here we see crones of sixty and girls of sixteen; the ugly and the lean, the comely and the plump; the sour-tempered and the sweet - all squabbling, singing, jesting, lamenting, and shrieking at the very top of their very shrill voices for “more fish,” and “more salt,” both of which are brought from the stores, in small buckets, by a long train of children running backwards and forwards with unceasing activity and in bewildering confusion. But, universal as the uproar is, the work never flags; the hands move as fast as the tongues; there may be no silence and no discipline, but there is also no idleness and no delay. Never was three-pence an hour more joyously or more fairly earned than it is here!

The labour is thus performed. After the stone floor has been swept clean, a thin layer of salt is spread on it, and covered with pilchards laid partly edgewise, and close together. Then another layer of salt, smoothed fine with the palm of the hand, is laid over the pilchards; and then more pilchards are placed upon that; and so on until the heap rises to four feet or more. Nothing can exceed the ease, quickness, and regularity with which this is done. Each woman works on her own small area, without reference to her neighbour; a bucketful of salt and a bucketful of fish being shot out in two little piles under her hands, for her own especial use. All proceed in their labour, however, with such equal diligence and equal skill, that no irregularities appear in the various layers when they are finished - they run as straight and smooth from one end to the other, as if they were constructed by machinery. The heap, when completed, looks like a long, solid, neatly-made mass of dirty salt; nothing being now seen of the pilchards but the extreme tips of their noses or tails, just peeping out in rows, up the sides of the pile.”

The fish remained in salt (more properly referred to as “in bulk”) for five or six weeks. They were then washed, packed carefully in large barrels, or hogsheads, and pressed to extract the oil. Most of the catch was then exported to Italy and Spain. Wilkie Collins reports that in 1850, the year he visited, St Ives exported 27,000 hogsheads, each containing 3,000 pilchards. A remarkable trade.