

A WONDERFUL SWIMMING CRAB

RARE FIND NEAR PLYMOUTH

The Nipper and Its Strange Life History

SWIMMING BY ITS JAWS

By a Laboratory Correspondent

A female with eggs of Henslow's Crab, called after its discoverer Professor Henslow, was lately found in Cawsand Bay near Plymouth.

This is a rare find, for though the males are fairly common in the deeper water the females are much less frequent.

It is one of the swimming crabs and swims more strongly than any of its relatives. All swimming crabs have the last pair of legs flattened into paddles and beset with a fringe of hairs which make them good swimming organs. This one has peculiarly large paddles and a very flat body. It can swim with great ease and for some time. It usually lives in fairly deep water and swims up from the bottom to catch the fishes it eats.

Active Habits

The famous naturalist Jonathan Couch, who lived in the little Cornish village of Polperro, has described its habits and how it pursues such active fishes as mackerel and pollack, piercing the skin with its sharp claws and keeping hold until the fish becomes exhausted. It is chiefly the males which have such active habits. The fishermen call it the Nipper Crab.

The female specimen referred to was put in an aquarium, where it lived very happily. Under its tail it carried a large bunch of eggs, nearly ready to hatch, for in a few days two little black specks could be seen in each egg—the eyes of the babies curled up inside. Each egg was about as big as a pin's head. In a fortnight they hatched and the aquarium was full of tiny crabs, all swimming about as hard as they could. The baby crabs are now being reared in the Laboratory at Plymouth.

A crab newly hatched is not a bit like its parent. It is rather less than an eighth of an inch long and is provided with long spines and a forked tail for keeping it up in the water and for balancing. It has large eyes and well-formed jaws, but the oddest thing about it is that it swims by means of its jaws, which are like legs and have long swimming hairs on them. Its true legs are not formed at first.

How Big-Eyes Changes

As soon as it hatches it feeds, finding small moving creatures in the water to eat, and grows till its skin becomes too tight for it. The skin then splits and out comes a larger baby crab.

The young crab which swims by its jaws is called a zoea, and there are five zoeal stages, each one emerging from the last by splitting the skin and each one more developed.

The last zoea has most of the legs present, and when it casts its skin there comes from it, not a zoea, but a different kind of larval crab with big eyes which swims with its tail, the jaws having become real feeding organs.

In its turn Big-Eyes changes to a small crab like the parent. All this time it has been living near the surface of the sea, but now it lives on the bottom, only swimming up occasionally.

NEWS FOR GARDENERS

We hasten to tell all our friends who suffer from a plethora of nettles that a cure has been found.

Spraying with a five-per-cent solution of sodium chlorate at the rate of one gallon a square yard, after the shoots have been cut down, has been proved to be most effective.

Richard Trevithick and His Puffing Billy

EVERYBODY will be delighted to know that a Committee has been appointed to keep the centenary of Richard Trevithick this year, but we note an error in the first notice the Committee sends to The Times.

Richard Trevithick, says this statement, is buried in Dartford Parish Church, but this is not so. He lies on the hill behind the church, in an unknown grave of that cemetery which led to the old rhyme:

*Dartford folk are a curious people,
They bury their dead above the steeple.*

Gundulf's church tower rises 74 feet above the High Street, but looking down on it from the hill behind is the tower set up by Dartford citizens in the middle of the 19th century, in memory of two brave men and a woman who perished here in the horrible reign of Mary Tudor. It is the Martyrs Memorial, set up on the hill made sacred by Chaucer's pilgrims, whose first stopping-place was at the old chantry which stood here.

Where the Witness Stands

The chantry is no more, but the three martyrs of Dartford (Nicholas Hall, Margery Polley, and Christopher Waid) have their monument in the ground chosen by old Dartford as the last resting-place of its people. "Show some token upon me for good," said the poor linen weaver Christopher Waid as he went into the fire, "that they which hate me may see it and be ashamed, because thou, Lord, hast helped me and comforted me"; and the witness stands where the best view of the old town is to be had, and where all who love progress should come, for here lies one of the forerunners of our modern world, a dreamer and founder of the age we live in, Richard Trevithick.

He lies above the Norman tower in the graveyard of St Edmund's Chantry where the Martyrs Memorial stands. The old inn where he lived is still in the High Street with its ancient courtyard and the gallery round. Here Trevithick lived and died. He has a window in Westminster Abbey, and a fine tablet in Dartford Church engraved with his portrait and a picture of his engine, "to perpetuate the memory of one whose splendid gifts spread lustre on this town."

Honour to the Town

Among all the proud records of Dartford is none which brings more honour to the town than the story of the Dartford men who saved poor Trevithick from a pauper's grave.

Poor Captain Dick! He was the most famous of the long line of workmen who have passed through John Hall's Engineering Works, and his comrades must have had a natural pride in their association with this struggling genius.

He had done wonders. About the time Napoleon was terrifying Europe young Richard Trevithick was frighten-

ing the Cornish people with his fiery dragon. Every engine that puffs steam today is a descendant of the little Puffing Billy which ran along the narrow lanes of Cornwall and drove people indoors, crying that the devil was out. Trevithick's first wheels went round by steam on a table in Camborne, and on the first Christmas Eve in the 19th century he moved the first load of passengers ever carried by steam. He drove a steam carriage through Oxford Street before Trafalgar. But he fell on hard times. He fed George Stephenson with ideas but could hardly feed himself with bread. At last he found himself in Dartford, a workman at Hall's, and he lived at the Bull Inn in the High Street, where the old courtyard still has the gallery running round it.

Disappointed But Immortal

He died at the inn just before the dawn of the Victorian Era, a poor, troubled, disappointed man, and yet immortal. They would have laid him in a pauper's grave, but the workmen of Dartford collected to save him from that stain. They carried him to the churchyard on the hill and bore the expense of watching the grave by night to prevent the body being stolen for a surgeon to cut up. A hero was but an anatomy in the days of the body-snatchers.

They must all have wondered at the last thing this wonder-man had set his mind to, for in the last year of his life he was designing an iron column a thousand feet high, higher than any monument standing in England or in Europe. It was to have been a hundred feet wide at the base and 12 feet wide at the top. This colossal structure, the last thing designed by Richard Trevithick, was never made. It would have weighed 6000 tons, but it could hardly have been beautiful, and perhaps we may be grateful that this way of celebrating the passing of the Reform Bill was never carried out.

His Last Known Words

We may remember here one of the last things this genius wrote when, in the midst of his success, it must have seemed to men that he had failed. He had been branded with folly and madness, he said, and even Mr Watt had declared that he should be hanged for bringing in the high-pressure engine. This had been all his reward so far, but he was content. Almost the last known words he wrote were these:

Should this be all, I shall be satisfied by the great secret pleasure and laudable pride that I feel in having been the instrument of bringing forward and maturing new principles and new arrangements of boundless value to my country. However much I may be straitened in pecuniary circumstances, the honour of being useful, which to me far exceeds riches, can never be taken from me.

A hundred years have passed and Richard Trevithick is remembered as one of the benefactors of his race.

A LAMB FINDS A PLAYMATE

This story comes to us from a farmer in New Zealand who has spent many an odd moment watching an unusual friendship grow up on his farm.

LAST spring, when some of my ewes were proudly displaying one lamb, others two, and some three, there was one poor ewe left out of all the excitement, for she had no lamb at all.

The young ones all played together, usually round about the rabbit warren, for the little hillocks were more exciting than the smooth paddock. Here they would race and play I'm the king of the castle, just as if they were children at a party. If possible danger approached, the ewes would run to where their lambs were playing and call them; all except the one poor ewe who had no lamb.

The young ones grew bigger and the weather grew hotter. Soon they did not play quite so much, and finally not at

all, for they were too fat and the heat of the sun was too hot.

Then, one morning, the lonely ewe had a lamb at last—a snow-white lamb. The big lambs came to look at it and sniff it, but when it wanted to play with them they walked away sedately.

Sometimes it ran after them and they knocked it down and walked on, and the little lamb went crying to its mother.

No one would play with it, though it tried again and again. Disconsolate, it lay down by the warren. Out popped a rabbit, sniffed at the lamb, then scuttled away. The lamb bounded after it. The rabbit turned round and ran toward the lamb, and in a minute they were skipping and playing around together.

Since then I have often seen the old ewe lying down in a corner of the paddock while near by a white lamb plays hide-and-seek with the rabbit.

A POUND A HEAD

ALL WE SPEND ON HOUSES

Need For Somebody To Wake Up the Building Trade

A CENSUS OF BUILDING

Figures just published of the Census of Building for 1930 show how little money the nation spends on new houses.

The record reveals an inclusive sum of just under £70,000,000 as the total value in that year of new dwelling-houses, shops, offices, and hotels. We are not told how much of this was for dwelling-houses only, but probably the sum did not exceed two-thirds, or say £48,000,000. As we have 46 million people, this means that in a year we spend only about 20s a head of the population in re-housing.

Need we wonder, therefore, that whether we go north, south, east, or west we find our big towns still loaded with the dingy houses of our mean streets?

This is one of the supreme questions. In it are involved health and that true wealth we call happiness.

The majority of the women of our country are condemned to waste much of their time and strength in wrestling with inefficient houses, often dark, often damp, rarely furnished with good baths or kitchens or adequate storage places.

Replacement and the Repair Item

The Census sums up all this when it reveals that replacement of old houses by new houses is painfully slow.

The total value of the building and contracting work done in 1930 by all but very small builders was 179 million pounds, of which 151 millions related to buildings.

The repair item is quite as remarkable as the new building item. Adding to the 34 millions for repairs 23 millions for small jobbing work, we get a total of 57 millions for a year's repairs. This, be it remembered, to cover not only dwelling-houses, but the multitude of public premises, shops, offices, warehouses, and so on. Yet wherever we go, whether it be in railway station or by-street, we see buildings calling aloud for repair, not to mention the considerable proportion that need to be demolished and rebuilt.

It is thus even with central railway stations such as Euston in London. How, we wonder, can the directors responsible for that great terminus enter it without feeling that for the good name of our industry it is unsatisfactory that an intelligent foreigner should witness so much need for reform.

BRINGING THE WORLD TO CHAOS

Governments Afraid of the Electorates

For ten years in Europe all the economists, all the bankers, all the serious students of affairs, have been persistently urging one line of economic policy, and all the Governments, supported by nearly all the politicians, have been persistently taking the contrary line.

This refusal of the Governments to do what every expert has declared must be done has ended by reducing the world to chaos.

Why have Governments thus, against the direct counsel of their expert advisers, persisted in a policy which has worsened the depression and prolonged the chaos?

It is broadly because, if they had not thus consented to follow the wrong policy, if they had insisted on following the right, they would have been torn from power by angry electorates which were sure that they knew better than the financial experts in financial matters, better than the economists in economics.

Sir Norman Angell in the Halley Stewart lectures