A somewhat remarkable adventure with a whale took place in the river Tay, on the east coast of Scotland, in the early part of January, 1884. The appearance of a whale in such a locality—some distance up a river—may, I think, be considered extraordinary, especially at this time when the eager pursuit of man has done much toward reducing the numbers of the larger cetaceans, and has also rendered them shy and wary of approaching such places. It may, however, be explained that during December and January the estuary of the Tay was swarming with young herring, and the whale followed these in and continued to feed on the fish for five or six weeks previous to the attack which resulted in his death. The appearance of a whale on a part of the Scottish coast famous for its whalemen, attracted considerable attention, and several attempts were made to effect its capture by crews of Dundee whale-boats, but the whale constantly eluded those who were pursuing it. On one occasion it came within 400 yards of Broughty Ferry, where it "breached," leaping clear of the water. This action on the part of the whale was like the leap of a salmon, though less active. It rose almost perpendicularly till clear of the water, canting to one side as it fell. It then swam down stream, as if to leave the river, but subsequently returned.

On Monday, January 7, a determined effort was made to kill the whale, which was seen that morning about 10 o'clock off Broughty Ferry. Three boats, one of which was a steam launch, and the others six-oared rowing boats, started in pursuit, heading out toward where it had last been seen. As the steam launch had arrived near to the Newcombe Buoy, the whale came up to blow close by. The men were on the alert, and as the black back rose above the surface the harpooner threw his iron, which was buried in the shonlder of the whale. A flag was immediately hoisted on the funnel of the little steamer to announce to the crews of the other boats that she was "fast." This was encouraging, and the rowers gave way to overhaul the launch, reaching which the boats were taken in tow. The struggle made by the whale after it

*The account here given of the appearance of a whale in the Tay, the attack made upon it, and its subsequent death, has been compiled from newspaper clippings—chiefly from the Edinburgh Scotsman—which were sent me by Mr. T. F. Robertson Carr, of Edinburgh, Scotland. The facts contained in the newspaper accounts have been strictly adhered to.

It may be mentioned as a parallel case to that given here, that in the city hall (Rathaus) of Bremen there is a picture of a whale that was killed in the river Weser, near Bremen, in the seventeenth century. From this it would appear that whales occasionally venture some distance up estuaries when in pursuit of food.
was first struck was far less violent than was expected. For some time it swam along so leisurely that a row-boat could keep up with it, and there would then have been little difficulty in getting in another iron, as the "fish" rose every two minutes or so to blow. The shallowness of the river made it impossible for the whale to go down any distance below the surface, as it would doubtless have done in deeper water, and as it did not run fast the whalemen kept a short line, only seven or eight fathoms being paid out.

After it was struck, the whale headed for Broughty Ferry, and in about fifteen minutes was off that place. The weather was fine, the water smooth, and large crowds of people had assembled to witness the chase. Off Lucky Scaup it was deemed desirable to get in another harpoon. For this purpose one of the rowing boats pulled ahead of the steam launch. As the whale rose to blow at short intervals it was not long before a favorable opportunity presented itself, and as its back came above the water, the large gun at the boat's bow was fired by the harpooner, the "iron" getting well "fast". Up to this time the whale, feeling its way down river toward the sea, had not exhibited any remarkable speed. When struck by the second harpoon, however, it displayed some of its power in a determined effort to escape. It seemed, however, to be somewhat dazed—"gallied" as whalemen call it—for it swam in zigzag directions, occasionally going at quite a moderate speed and then rushing through the water at a tremendous pace. It was thought at this time that the second iron had reached its "life," and that the boats would meet with success, for the whale began to spout blood in considerable quantities, coloring the water in his wake a reddish tinge. The flurry continued for some time, the whale making desperate rushes hither and thither in the vicinity of Lucky Scaup, until it at last seemed to get its bearings on the south side of the channel, and started seaward again, keeping that side of the river. It was now going at so rapid a pace that the last boat to fasten lost its hold and was quickly left far astern. As at the beginning, the steam launch was now the only boat fast, though the second row-boat still held on to the steamer's stern. As there was danger that the launch's harpoon might also draw, the crew of the row-boat, by great exertions, pulled ahead of the steamer, and taking advantage of a favorable opportunity, fired, the iron getting well "fast." The whale, notwithstanding it had been spouting blood for some time, seemed to start off seaward with renewed energy after it had been struck the third time. The whalemen did their best to further disable the "fish," firing rockets at it whenever its back rose above the surface.

In the meantime the boats had been lost sight of by those who were on the river side at Broughty Ferry. When it became generally known that the boats had fastened to the whale it was thought best to send a steam-tug after them to render any assistance which might be required. Accordingly the tug Iron King started down the river early in the after-
noon and overhauled the whale at the mouth of the Tay, not far from
the Buddonness light-house. No time was lost in sending forward the
whale-boat, which the steamer had picked up, and it, too, was soon fast.

Between 3 and 4 o'clock the harpoon line of the steam launch was
got on board of the tug, which then shut off steam. Thus, in addition
to the two boats and launch, the whale had the larger steamer to pull
along. But, despite this weight, it exhibited a wonderful amount of
energy, swimming swiftly about for a time in various directions. The
crews of the boats improved every chance to attack the whale, the keen-
pointed lances being repeatedly thrust into it almost to their sockets.
From the wounds the blood flew in all directions, giving the surround-
ing water a crimson tint. Meantime, instead of succumbing, as one
might expect, it continued the flurries for several hours, sometimes
heading seaward and then retracing its course up the river. In the
course of its struggles the whale rose under one of the boats and lifted
one end, with its crew, entirely out of water, but luckily no damage was
done.

In the meantime the steam launch was sent off to Dundee to procure
a supply of bomb-lances and rockets. By the time, however, that the
launch reached the river's mouth with the new equipment of whaling
implements, night had fairly set in, and the weather being thick added
to the darkness, so that no trace of the whale and its pursuers could
be obtained.

The crews of the tug and whale-boats had done their best to keep the
"fish" inside of the estuary until the launch returned, knowing, too,
that if once outside they would have less chance to kill it; but in
this they failed, and, what made it worse, in the attempt they parted
two of their harpoon lines. This was specially unfortunate, for there
were no more harpoons left on board the boats. Nothing, therefore,
could be done but to let themselves be towed along, and wait for the
"fish" to tire himself out. Heading along the northern side of the Tay,
the whale took a run over the shoal water of the Gaa Bank, and by this
means temporarily shook off the steam-tug, which was obliged to let go,
fearing to bring up on the bank if she held on. Between 6 and 7 o'clock
in the evening the bar of the Tay was crossed and the struggling cet-
cean headed off into the open sea.

The tug had been watching an opportunity to get hold again, and
when deep water was reached, about an hour after she let go, she got
fast to the line. At first the whale headed off toward Bell Rock, on an
easterly course, but after awhile struck off in a northerly direction. It
was evidently somewhat confused as to the course it should take to es-
cape from the land, for after getting almost off Montrose, about mid-
night, it changed to the opposite direction and again started for Bell
Rock. This was passed at a distance of about four miles, and when the
whale had reached a position within six or seven miles of the Carr Rock,
which lies at the mouth of the Firth of Forth, it again changed its
course and swam in a northerly direction up the coast. As soon as day broke the harpoon-gun was loaded with an iron bar four feet long, and this was discharged into the body of the whale. Two marlinspikes were sent after the bar, and these were followed by all the iron nuts and bolts that could be found on board. At first these seemed to have considerable effect, for about 8 o'clock in the morning the whale stopped running fast, settled down level with the water, and rolled from side to side, inspiring the whalemen with the hope that it would soon die. But after a few minutes of comparative inaction the whale started off again with such great energy that it pulled the harpoon line in two at about half-past 8 o'clock a.m., when the boats and tug were nearly half way between Bell Rock and St. Andrews. This was certainly discouraging to the boats' crews to see the "fish," which they had so confidently counted on killing, going off free. They could, however, do nothing, except to steam along after the whale, hoping that it might soon die from its numerous wounds, or that an opportunity might offer to get hold of the end of one of the harpoon lines that trailed behind in its wake. Unfortunately the wind soon began to breeze up sharply from the eastward, and a choppy sea getting up, the chase had to be reluctantly abandoned.

On the return of the tug and boats it was reported that the whale was a humpback (Megaptera sp.), and it was estimated to be 60 to 70 feet long, with fins 9 or 10 feet in length.

But this animal, which had shown such wonderful vitality and powers of endurance, though it escaped from its would-be captors, was mortally wounded, and a short time later its floating carcass was picked up and towed into Stonehaven by some Gourdon fishermen. It was sold at public auction; and, according to there ports, the sale was the occasion of quite a lively competition between Professor Struthers, of Aberdeen University, who wished to obtain the whale for scientific purposes, and Mr. Charles Ferrier, Green Market, Dundee, who wished to secure it for public exhibition. Bidding commenced at £10, and the price rose gradually till it was knocked down at £226 to the latter gentleman. Professor Struthers has arranged with Mr. Ferrier to get the skeleton of the whale for Aberdeen University after it is unclothed.

The tug Excelsior went to Stonehaven for the purpose of removing the carcass. A strong hawser was attached to the tail of the monster, and the Excelsior steamed slowly around to Dundee. The whale was towed underneath the 70-ton crane at Victoria dock. To the uninhibited task of raising the animal from the water to the quay seemed an impossibility, and it was confidently asserted that it would have to lie in the water all night. Those who had the matter in hand, however, quietly proceeded with their operations. The huge tail was first gently lifted, and a big chain coiled around it. An attempt was to be made to lift the fish from the water by the tail. It was freely asserted that it would never stand the strain, but would tear asunder in the
process. On the signal being given, the crane was set in motion. It rose, foot by foot, and when at last it was altogether clear, three ringing cheers were spontaneously given by the spectators. As it hung in mid-air its huge proportions were set off to full advantage, and the spectators had a fine view of the form and appearance. While it was hanging thus suspended, its length began gradually to increase from the mouth downwards. At first it was thought that it was stretching out by its own weight, but a closer examination showed that it was the tongue that was hanging down. The weight was too great, and the tongue fell into the dock. Two lorries were set ready to receive the carcass, and after several attempts it was placed in position. Having been securely fastened, eighteen horses were yoked to the lorries. The "fish" much improved in appearance after being taken out of the water. The fins and tail were white, the glossy skin appearing beautiful in the moonlight. The time occupied in lifting the "fish" out of the water was a little over an hour. While suspended from the crane, ready to be lowered on the lorries, one of the engineers was hoisted up to the index of the crane, and ascertained that the "fish" weighed 16 tons 8 cwt. The whale was exhibited in East Dock street, Dundee, for a few days. It is stated that several scientific gentlemen in different parts of the country are anxious to secure the skeleton.

WASHINGTON, D. C., May, 1884.

114.—CULTIVATING TROUT IN OREGON.

By B. F. DOWELL.

[From a letter to M. McDonald.]

I have just commenced cultivating trout near Portland, Oreg. I have a large spring and a good creek for trout, and I wish to obtain the most approved apparatus for hatching the eggs. I hatched in the Williamson box, last spring, 12,000 eggs, and the young fry are doing very well.

Large fine spotted trout, weighing 6 to 15 pounds each, were caught last month in Applegate Creek, 10 miles south of this place. They were ascending the creek to spawn. I bought several of them which were full of eggs. They are called by the fishermen here Rogue River trout. I think they are of the same species as these in California, which are called the rainbow trout.* I intend to manipulate some of their eggs next year and ship them to my hatching house and ponds at Portland. They are very delicious in flavor and nearly equal in size to the silversides of the Columbia and Willamette Rivers in North Oregon.

JACKSONVILLE, OREG.; June 11, 1884.

*The fish is, in all probability, Salmo gairdneri.—T. H. Bean.