REPORT ON OYSTER-BEDS IN FOVEAUX STRAITS.

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Sir,— H.M. Customs, Bluff, 2nd February, 1906.

Having received your instructions through the Collector of Customs, Invercargill, to proceed with the survey of the oyster-beds in Foveaux Strait, I engaged the s.s. "Despatch" upon the terms submitted to and approved of by you—viz., £6 12s. per diem, the owners to find crew and all appliances.

I had with me Messrs. Whealler and Coupar, as master and engineer respectively, both of whom have had over twenty years' experience in oystering, their local knowledge being of great assistance in locating the beds, also in giving general information in regard to them when discovered, &c.

The Harbourmaster also kindly lent me the Board's station pointer, with which instrument I was

able to locate the positions more accurately on the chart with sextant angles.

Captain Barber, late of the barque "West Australia," also formed one of the party, and he gave valuable assistance in checking bearings and angles.

I found the s.s. "Despatch" suitable in every respect, her steam-power and handiness in moving

from one bed to another greatly facilitating the work.

We commenced surveying on the 16th January, and completed the work on the 30th January, being altogether employed seven days.

A number of days between the dates stated, we were unable to do anything on account of bois-

terous weather.

We found the beds extending eleven miles W.S.W. from Waipapapa to ten miles E.S.E. from Centre Island (with broken intervals between), a distance of twenty-five miles. Oysters were found most abundantly by following the trend of the current. This will be seen by glancing at the chart, and is probably accounted for by the spawn being carried along by the tide and deposited where food is most likely to accumulate. Large quantities of dead shells are to be found on most of the beds, more so on those which have been worked continuously, and upon beds where the current does not run so strong. As oystermen always deposit their cultch—i.e., refuse—upon the bed from which the oysters are taken no doubt it helps to swell the accumulation of dead shell. Oysters also have a dangerous enemy in the shape of a species of starfish, commonly called "five fingers." This fish has a body of about 1 in. to $1\frac{1}{2}$ in. in diameter, with legs or tentacles averaging about 6 in. in length. When the oyster-shell is open for the purpose of feeding, these fish insert a tentacle (probably unintentionally) which, being of a very brittle nature, breaks off, and leaves the oyster exposed, thereby killing it. Large numbers of the above species of starfish are to be found on the beds, most particularly where dead shells are abundant. The depth of water ranges from thirteen fathoms on the easternmost bed to twenty-four fathoms on the westernmost.

I have numbered the beds consecutivly 1 to 12 for the sake of reference, and I may state that the

supply of oysters is inexhaustible.

The following is a brief description of the beds individually, the dates given as to discovery, &c., being approximate:—

Bed No. 1, or East Bed.

Length, 4½ miles, by 2¼ miles wide; average depth, 12 fathoms. Discovered about 1888, and worked during the open season for the first seven or eight years, then, on account of the oysters becoming small, left idle for several years. (I may state that as the oyster-merchants refuse to take small oysters, and as they are unfavourably received by the public, there is no likelihood of those engaged in the oyster-fishing bringing small ones into port.) Oysters found on this bed are now large and of good quality, and are noted for keeping longer than any others. This may be accounted for by the water being more shallow than on other beds. As many as four thousand dozen have been caught by one craft in a day. Small oysters were found on the outskirts, the bed apparently increasing in all directions.

Bed No. 2, or Ruapuke Bed.

Length, 2 miles, by $\frac{3}{4}$ mile wide; average depth, $13\frac{1}{2}$ fathoms. Discovered about 1892. Oysters are of a good quality, although quantities of dead shells are found, and abundance of starfish.

Bed No. 3, or Dog Island Bed.

Length, about $3\frac{1}{2}$ miles, by $1\frac{3}{4}$ miles wide; average depth, 15 fathoms. Discovered about 1898. Oysters of a good quality, and medium size. The bed has been worked occasionally since found.

Bed No. 4.

Length, 2 miles, by $1\frac{1}{4}$ wide; average depth, about 14 fathoms. Discovered about 1880. The oysters on this bed are of a poor quality, and great quantities of dead shells and seaweed were found. No oysters were taken off it for over twenty years.

Bed No. 5.

Length, about $4\frac{1}{2}$ miles, by $2\frac{3}{4}$ miles wide; average depth, 17 fathoms. Discovered in 1885. The bed has been worked occasionally during the open seasons. Oysters are large, and of a good quality, and the bed is more free from dead shells than the preceding ones.