

stretched out straight behind, as the animals swam, and the motion mostly maintained by rapid strokes of the fore limbs. The tail, however, *i.e.*, the fin-like expanse formed by the closely applied and outstretched flat hind flippers, was used with an undulating movement, just as is the tail fin in porpoises.

The seals swam with ease and rapidity from the stern to the bows of the vessel, though it was going $4\frac{1}{2}$ knots at the time, thus going 9 knots at least. In fact they swam with all the ease of a porpoise, and as once or twice they threw their heads and backs out of the water in a forward leap, I should certainly have mistaken them for these animals, had I not seen them almost at rest several times, and with their heads well out of water.

I never before realized the close connection between the seals and whales, and how easily a whale might be developed out of a seal. The Fur Seal is one which on land still bends its hind limbs forwards, as do land mammals. The seals without external ears, like the sea elephants, carry them habitually stretched out behind, as this one does in swimming. Little modification would be necessary in order to turn the otherwise useless hind limbs of the earless seals into the whale's broad tail fin, which probably represents the remains of the seal's webbed hind flippers. We afterwards, in the Straits of Magellan, became familiar with the motions of Fur Seals in the water, and frequently saw them there in shoals, progressing through the water by a series of leaps exactly like porpoises or Rock-hopper penguins.

A bird followed the ship in some numbers, which is apparently intermediate in its habits between the gulls and terns, a delicate beautiful little sea-bird (*Larus novae hollandiae*). The bird was abundant about the ship in Hobson's Bay, and in Port Jackson. At Wellington, in New Zealand, a species very closely allied, but a little smaller in size (*Larus scopulinus*),* hovered round the ship in the harbour.

Sydney, April 7th to June 9th, 1874.—The ship arrived at Sydney on April 5th. Port Jackson is famed for its beauty. It is a broad stretch of water, opening to the sea by a narrow passage, between "heads," as they are called, and running far inland, into branches and bays, in great number. Towards the upper part of the harbour, the vegetation extends down the water, and the little cliffs of sandstone rock with their covering of green are extremely picturesque. Port Jackson is one of the many harbours said to be the best in the world ;

* Howard Saunders, "On the Laridae," Proc. Zool. Soc. 1878, p. 187.