ART. XXXIX.—Notes on the New Zealand Delphinidæ. By Captain F. W. Hutton, Director of the Otago Museum.

[Read before the Otago Institute, 4th July, 1876.]

## A. Head beaked.

## DELPHINUS NOVÆ-ZEALANDIÆ.

D. novæ-zealandiæ, Quoy et Gaimard, "Voyage 'Astrolabe," Zool., I., p. 149, Pl. 28, Fig. 1. D. delphis, Forster (nee L.), "Descriptiones," etc., p. 280. D. forsteri, Gray, "Voyage 'Erebus' and 'Terror," p. 42, Pl. 24 (copied from Forster). D. fosteri, Hector, "Trans. N.Z. Inst.," Vol. V., p. 158, Pl. III.

Beak at least half the length of the gape. Pectoral fins shorter than the gape. Teeth,  $\frac{43}{44} = \frac{44}{47}$ . Above, brown; below, white; the white extending above the eye; caudal, dorsal and pectoral fins dark, the dorsal and pectorals with a large white blotch. Length, about six feet.

Habitat: The North Island of New Zealand as far as Cook Strait, Tasmania, and the sea between Norfolk Island and New Caledonia. Forster gives the habitat as the Pacific Ocean.

A careful comparison of the descriptions and figures of Quoy and Gaimard, with those of Forster, leaves no doubt as to the identity of *D. fosteri*, with *D. novæ-zealandiæ*.

## B. Head not beaked.

## CLYMENIA OBSCURA.

Delphinus obscurus, Gray, "Spic. Zool.," Vol. II., Pl. 2, Figs. 2, 3; Quoy et Gaimard, "Voyage, 'Astrolabe,'" Zool., Vol. I., p. 151, Pl. 28, Fig. 3. Clymenia obscura, Gray, "P.Z.S." 1866, p. 215, and 1868, p. 147, Fig. 1; Hector, "Trans. N.Z. Inst.," Vol. V., p. 160.

Head not beaked; dorsal fin falcate; pectorals longer than the distance from the muzzle to the eye. Teeth,  $\frac{24}{24} - \frac{28}{26}$ . Back and fins blackish, muzzle and belly white; a white band from below the dorsal fin sloping obliquely downward and backward towards the tail. Length, about five feet; teeth, five in an inch.

Habitat: Not uncommon in Cook Strait. The original type is from the Cape of Good Hope, but in his synopsis of the whales and dolphins, Dr. Gray gives the South Pacific as the habitat. Dr. Gray has referred D. cruciger, Quoy et Gaimard, and D. bivittatus, Lesson ("Voyage, 'Coquille'"), to this species, but they are certainly distinct, having white pectoral fins. They come from Cape Horn.

Tursio metis.

T. metis, Gray, "Zool." 'Erebus' and 'Terror," p. 38, Pl. 18 (skull); Hector, "Trans N.Z. Inst.," Vol. V., p. 162; Hutton, "Ann. Nat. Hist.," 1875, p. 357, and Fig.; "Trans. N.Z. Inst.," Vol. VIII, p. 180.

Beak rather less than one-third of the gape. Pectorals equal to the distance between the muzzle and the eye. Teeth,  $\frac{2}{2}, \frac{2}{1}, \frac{2}{2}, \frac{3}{3}$ . Above and upper jaw, dark slate-blue, passing gradually into white below; fins, slate-blue; length, seven to ten feet; teeth, two to three in an inch.

Habitat: West Coast Sounds to Cook Strait.

This species was founded by Dr. Gray on a skull brought home by the Antartic expedition of the "Erebus" and "Terror," without a habitat. Subsequently in his supplement to the "Catalogue of Seals and Whales," he gave West Africa as its habitat, probably by mistake. In 1872 Dr. Hector determined a skull found in Dusky Bay as belonging to this species, and the subsequent capture of specimens by Captain Fairchild showed that he was right, and that the skull had been correctly referred by Dr. Gray to Tursio.

ELECTRA CLANCULA.

Lagenorhynchus clanculus, Gray, "P.Z.S.," 1849, p. 2. Electra clancula, Gray, "Synopsis of Whales and Dolphins," p. 7, Pl. 35 (skull), Hector, "Trans. N.Z. Inst.," Vol. V., p. 160, Pl. (not good).

Head not beaked; dorsal fin truncated; pectorals slightly longer than the distance from muzzle to eye. Teeth,  $\frac{31}{31} = \frac{33}{32}$ . Above, pale grey. Lower jaw, throat, and belly white, the white on the belly being divided by a transverse band of grey just behind the pectoral fins; nose and forehead white; a white band from beneath the dorsal sloping obliquely upwards and backwards towards the tail; sides of the head, a transverse band just behind the blow-hole, and pectorals, dark slate-gray; the dark band behind the blow-hole shading off gradually behind; length, four to five feet; teeth, five in an inch.

Habitat: Abundant all round the coasts of New Zealand; South Pacific Ocean.—(Gray.)

In the "Trans. N.Z. Inst." Vol VI., p. 89, Dr. Gray gives D. superciliosus, Lesson, as a synonym of this species. Previously, in his "Catalogue of Seals and Whales," he had given it doubtfully as a synonym of Clymenia obscura. But it is evidently quite distinct from either C. obscura or E. clancula, for it is a beaked species, and looks like a Tursio. It was observed by Lesson off Cape Horn.

ART. XL.—On the New Zealand Earth-worms in the Otago Museum.

By Captain F. W. Hutton, C.M.Z.S.

[Read before the Otago Institute, June 6th, 1876]

Plate VII.

I am not aware that any earth-worms have been as yet described from New Zealand, except Meyasolex antarctica, Baird ("Pro. Lin. Soc.," Vol. XI.,