purpose of studying their habits; their wattles were of a light-rose tint, changing into a violet colour towards the base, but after death, when their skins were dried, the wattles assumed a dull orange tint. The parent birds had wattles of the usual rich crimson-lake colour, the base being tinted with violet as in the young birds.

The egg has almost similarly rounded extremities. Length 1.7 inch, breadth 1.1 inch; the under tint of the egg is brownish, mottled with grey and dark brown blotches which are larger and darker at the larger ends.

ART. XXV.—On the New Zealand Frog. By Dr. FITZINGER. Translated from the Zoology of the Voyage of the "Novara," by Professor Hutton.

[Read before the Otago Institute, 14th October, 1879.]

Family Bombinatoridæ.

AUDITORY passage imperfectly developed; transverse processes of the sacral vertebræ triangular, flat; no paratoids. (Fingers and toes not dilated at the tips; maxillary teeth).

Genus Leiopelma, Fitz.

Tympanum, sacs, and auditory tubes wanting; teeth in the upper jaw, and in two faint oblique rows on the palate, behind and between the interior nares. Tongue roundish, more or less margined. Fingers free. Toes half webbed. Projection of the navicular bone small.

L. Hochstetteri, Fitz. Verhandl. d. zool-bot. Gesellschaft zu Wien, Jahrg 1861; XI; pag. 218, Taf. VI.

Body moderately compressed. Eyes rather large; muzzle rather longer than the eye; exterior nostrils rather nearer to the eye than to the end of the muzzle.

A glandular fold between the posterior corner of the eye and the shoulder; a second from the eyes, along the sides of the body to the thighs. Several warts about the corner of the mouth, and a few smaller ones on the back and on the sides of the rump. Two smooth, yellow callosities on the palm of the hand, one on the metacarpus of the thumb, and one near that of the fourth finger. Fingers and toes depressed. Toes connected by the web for about half their length, the free part bordered by the membrane. Projection of the navicular bone faintly elevated. A dark-grey triangular band between the eyes, in front of which is a broadish and lighter oblique stripe; hind limbs with broad cross bands on a yellowish-brown ground. Belly and sides of rump dirty grey-violet, marbled with yellowish-brown; a

light oblique streak running down from the anterior and posterior corners of the eye, and diverging to the rim of the upper jaw. Male without sound-bag.

Coromandel, near Auckland.

ART. XXVI.—Notes and Observations on the Animal Economy and Habits of one of our New Zealand Lizards, supposed to be a new Species of Naultinus.

By W. Colenso, F.L.S.

[Read before the Hawke's Bay Philosophical Institute, 12th May, 1879.]

Having had ample opportunities, during the past year, of observing the habits and manners of these elegant little animals in a state of captivity, and believing all such to be almost wholly unknown, I have thought it desirable to give a pretty full description of the same; seeing, too, that I succeeded better in rearing and keeping alive these lizards than I did with the larger one, Hatteria punctata (or Sphenodon), in 1840.

In the winter of 1878, I received a glass jar from Hampden, in this provincial district, containing three full-grown living green lizards. They were pretty nearly alike in size; two of them were spotted with large irregular-shaped light-green spots, or markings, and one was wholly green. They had been found together, a short time before, in a hole, with a fourth, which was accidentally killed; and, on their capture, were put carefully into a jar, and packed loosely in moss. On my receiving them I found them apparently very well, but unwilling to move or to face the light, seeking to bury themselves more and more in their mossy bed, so I left them alone, believing they were hybernating. Meanwhile, I made many enquiries, by letter, as to their "hole," its linings, etc., but gained little reliable information, save that "in it, and with them, was a lot of stuff like blasting powder;" this, I have reason to believe, was the fæcal debris. I greatly regretted the loss of the fourth, as I think that would have proved to be a green male.

During the winter I looked at them three or four times, but they always acted in the same manner, as if averse to having their quiet sleep disturbed. On again looking at them early in October, I found them wholly altered; they were now desirous of coming to the light, restless, and pawing against the glass, and had increased in number, having four little ones! two being spotted with white, and two entirely green; their lovely little bodies looking as if cased in silk velvet instead of scales; this appearance continued for some weeks. I now lost no time in removing them to more suitable