ART. LXII.—Description of a new Species of Lizard of the Genus Naultinus.

By Walter L. Buller, C.M.G., Sc.D., F.R.S.

[Read before the Wellington Philosophical Society, 10th January, 1880.\*]

In continuation of previous notes on the Lizards of New Zealand, I have now to bring before the Society a very beautiful form of Tree-lizard, for which I propose the name of Naultinus sylvestris.

The example on which my new species is founded was obtained in the wooded country of the Wanganui District by Mr. Joseph Annabell, of the New Zealand Survey Department, who kindly presented it to me.

It was alive in my possession for several weeks, and before it died, fortunately for science, gave birth to two young ones, thus enabling me to add a description of the species in this early stage of its existence.

I have already, in a former communication to the Society,† called attention to several remarkable instances of assimilative colouring, for protective purposes, in the members of the genus Naultinus in New Zealand. The bright green tints of one species enables it almost to defy discovery amidst the evergreen foliage of the native shrubs; the marbled-brown skin of another is peculiarly adapted for concealment as it clings to the bark of a tree, or hides in the crevices; whilst a third, which inhabits the sulphurcrusted grounds in the Lake District, is of a uniform bright sulphur-yellow.

The form which I have now the pleasure of describing affords another illustration of this law of protective resemblance to natural surroundings. The peculiar markings which distinguish it from the other species, presenting patches of pale-brown and minute granulations of yellow, so exactly resemble the cryptogamic vegetation covering its usual haunts that it might safely defy detection under the very eye of the naturalist!

Naultinus sylvestris, sp.nov.

The whole of the upper surface blackish-brown, beautifully variegated with pale brown and sulphur yellow, the latter colour being dristributed in irregular patches of minute granulations like the spores of a lichen, the whole being very suggestive of the spreading cryptogamic growths that are found adhering, in flat crusts, to the bark of certain trees. Fronto-nasal scales yellowish brown and shining; the upper surface of the head blackish brown, dusted over in an irregular manner with minute punctæ of dull golden yellow or grey. On the nape the yellow assumes the form of a broad transverse patch, and this colour is continued down both sides of the

<sup>\*</sup> This paper should have appeared in last year's volume of the "Transactions," but the MS. was not received in time, and a mere precis was given at page 314. Being in the author's hands it was unfortunately omitted from the proper place in the present volume,—ED.

† "Trans. N.Z. Inst.," Vol. III., p. 9.

spine to the junction of the tail in irregular blotches, alternating with the dark ground colour, and partly covered or hidden by a peculiar disguise of minute fretwork in pale yellow, disposed in irregular patches and crossing the spine at short intervals. The simulation of the delicate ramifications and microscopic sporules of the lichen is simply perfect. The legs and toes on their outer surface are dark brown dusted and speckled with yellow; the whole upper aspect having a very lively and pretty effect. The colours of the under parts are entirely different. The chin-scales are almost white, and the lower labial scales are black and white alternately. The sides of the face pale vinous freckled with white and crossed diagonally, from the eye to the angle of the jaw, with an irregular facial streak of black; throat and all the under parts yellowish-white, thickly freckled and speckled all over with pale brown and yellow, and washed on the throat and sides of the neck with vinous or purplish brown, this colour deepening on the sides of the body, where it blends with the sulphur-yellow fretwork already described, the latter becoming here more determinate and forming small yellow patches in a dark setting, the whole being prettily varied and mottled with velvety black. The tail again differs from the body, being of a vinous brown, paler on the under surface, and obscurely marbled and streaked with darker brown. Under surface of the feet dull yellowish brown; claws The eyes which are full and lustrous, with prominent overhorn colour. hanging eyebrows, like fringes, are almost black, presenting, however, on a very close examination, a silvery reticulation with an obscure elliptical pupil. On the mouth being opened, the palate, tongue and lower jaw are found to be of a bright orange-yellow, and the throat dark blue.

Head, ·8; body, 2·4; tail, 2·5.

Young:—Uniform colour, a mottled vinous brown, paler on the under parts, and minutely speckled with grey; not unlike, in appearance, the tail of the adult. Chin yellowish-white; facial streak indistinct.

Hab.—Wooded country in the Wanganui District, North Island.

Note.—Very snappish, opening wide its jaws to bite, curling its body round on being seized, and uttering a peculiar hissing sound like that of the singing beetle, *Æmona hirta*.

As already mentioned, the specimen described above was an adult female. It was captured in August, 1879, by Mr. Annabell, who found it clinging to the lichen-covered bark of an ancient totara.

It gave birth to its young on the 5th December following.

I observed that the orbits of the eyes and the ear-openings were infested with the peculiar crimson parasite which attacks the same parts in *Naultinus pacificus*; and I noticed that two of these insects transferred themselves, after the death of the parent, to one of the young lizards, attaching themselves to the inner junction of the hind legs.