Notes on the Ornithology of New Zealand.

By Walter Buller, F.L.S., F.G.S.

[The extract from the "Ibis," to which the following paper refers, was communicated to the Wellington Philosophical Society on the 19th June, last; the discussion is a continuation of that commenced in Vol. i. of the "New Zealand Institute Transactions," p. 105. The communication was received too late for insertion in its proper place, in the first section of the "Transactions."—Ed.]

Professor Newton, the editor of "The Ibis," has kindly favoured me with corrected proofs of a paper on New Zealand Birds, forwarded to him by Dr. Otto Finsch, of Bremen, for publication in that journal.

Anything from the pen of so accomplished an ornithologist as Dr. Finsch, cannot fail to be read with delight, and as the paper in question deals particularly with species described by myself as new, it naturally possesses for me a more than ordinary interest.

No one can appreciate more fully than I do the labour and research which Dr. Finsch has bestowed on Polynesian Ornithology generally, contrasting, as it does, with the indifference and neglect with which collections from New Zealand are usually treated by both English and Continental zoologists. Any recognition of their labours, whether in the nature of approval or criticism, is encouraging to local naturalists, who, far removed from the great centres of civilization and learning, and wanting the aid of Libraries and Museums of Natural History, work always at a great disadvantage.

The free discussion of doubtful or disputed points cannot fail to be useful, and I am therefore glad that Dr. Finsch has afforded me an opportunity of further elucidating the subjects treated of in a former paper.

In the article under notice, Dr. Finsch condemns several of my new species, having, as he believes, identified them with forms already known to science. I am quite ready to disclaim the credit of authorship, if it can be conclusively shown that any of my so-called new species are invalid, for I have, in common with Dr. Finsch, but one object in view, namely, the advancement of Ornithological Science. But I have a right to examine the data on which any adverse opinions are founded; and, lest it should appear presumptious in me to combat some of the conclusions of an ornithologist of far greater experience than myself, and one possessing, in the Continental Museums, better opportunities for comparison and research, I would here mention that I enjoy at least one important advantage over the best closet naturalist,—that of being able to make field observations and to study the objects themselves in a state of nature. Dr. Finsch has himself remarked in a former paper (*Journal für Ornith.*, 1867, p. 342) when treating of my *Gerygone assimilis*, "it is difficult, and scarcely safe to decide on this new species from skins alone," and it is moreover probable that in one or two instances he has been unconsciously misled by specimens forwarded to him wrongly named, and purporting to be typical examples of my new species.

I beg to submit the following remarks on Dr. Finsch's paper, which will be found appended hereto, together with the original article (from "The Ibis") which evoked it.

I.—Platycercus alpinus, Buller.

Dr. Finsch disallows this species on the ground that the differences which characterize it are "by no means specific, and only indicate the young bird." Here, at once, we have an illustration of the mistakes into which even the most careful closet naturalists are apt to fall, from a mere comparison of dried specimens. I have obtained the young of *Platycercus auriceps* from the nest, and caged it to maturity. From the first the frontal band and thigh spots were crimson, and the only perceptible change was in the general tints of the plumage. On the other hand, I have known a caged specimen, coloured as in my *P. alpinus*, which was, to my certain knowledge, more than five years old, and in which there was no indication of a change from orange to crimson. It is clear, therefore, that the peculiarities in the coloration of my bird are not attributable to immaturity. But, as already pointed out, there is also a very manifest difference in the size: *P. alpinus* being much smaller than *P. auriceps*, as the latter is less than *P. pacificus*. Apart from this, Dr. Haast (to whom I am indebted for my first examples) writes thus on the habits of the bird:—"I send specimens of both (i.e., the crimson-fronted and the orange-fronted). These two kinds occur always together, but in some localities the first, and in others the second is predominant. You find both kinds in all seasons; therefore we cannot suppose that the orange-fronted is the young of the other. In its habits it is not so bold as the crimson-fronted bird;" and in a subsequent letter he remarks, "the last named species is a much smaller bird than the two former [*P. pacificus* and *P. auriceps*], and its habits are also different."

Admitting that the differences which characterize this bird are constant, and that they are sufficiently obvious to mark a distinct race, my position is established. Whether the aberrant form is to be regarded as a "species" or as a well-defined "variety" in which the distinguishing characters are constant, need not be here discussed, for it at once raises that *quæstio vexata*, "What is a species?" On what I take to be the true definition of a species, *P. alpinus* is clearly entitled to rank as specifically distinct from the other members of the group.

Since the date of my notice in "The Ibis," I have discovered that this bird is not restricted to the South Island exclusively, the caged specimen referred to above having been obtained in the Wellington province. Nevertheless it is extremely rare in the North Island. Nor does it appear to be confined in its range to the higher elevations, and the specific name I have given is perhaps not quite appropriate. It was suggested by the following note from my excellent friend Dr. Haast, who has the credit of the discovery:—"We shot this pretty bird in the Oxford Ranges, and among the forest vegetation in our Alps, at an elevation of 2500 feet.

Dr. Haast's remarks on the peculiar local distribution of *P. auriceps* and *P. alpinus* apply also to the two species that are common in the North Island. *Platycercus auriceps* largely predominates in the northern portions of the Island, and *P. pacificus* in the southern, although both species are to be met with in every district.

II.—Nestor occidentalis, Buller.

Dr. Finsch remarks of two specimens forwarded to him by Dr. Haast, and identified as *Nestor meridionalis*, that they "most probably" represent my new species, because they were obtained from the "same locality," viz.,—the West Coast of the South Island, but Dr. Finsch is perhaps not aware that the region thus indicated is very extensive, ranging through 7 degs. in latitude, for a distance of five hundred miles, and that in limited areas of this district, without doubt, are several birds which have never been found elsewhere.

The only two specimens of this Nestor that I know of (both of which are in my own collection) were obtained in 1863 by Dr. Hector, in a remote part of the West Coast country to which probably no other explorer has ever penetrated. I submit, therefore, that Dr. Finsch's opinion resting on such insufficient data is by no means conclusive.

The following notes from so accurate an observer as Dr. Hector are far more to the purpose, for they contain the evidence of a field naturalist on a very material point :—

"The range of this bird is very limited. It frequents the precipitous wooded cliffs in the neighbourhood, of George Sound. I never met with it in the forests of the low lands. It is more active in its habits and more hawk-like in its flight than the common Nestor. It often sweeps suddenly to the ground; and its cry differs from that of the common Kaka, in being more shrill and wild."

Dr. Haast forwarded me specimens of a large Nestor from the West Coast which he considered new, as it differed consideraby from the typical *Nestor meridionalis.*

After examining these specimens very carefully, I abstained from characterizing the bird as new till I could obtain the opinion of an eminent ornithologist in England, to whom I forwarded examples. His reply has not yet been received, but if Dr. Finsch's remarks apply to this bird, we may consider that it is identical with *Nestor meridionalis.*

Dr. Haast was nevertheless fully impressed with the belief that this bird was distinct from the common species, as will appear from the following interesting notes which accompanied one of his specimens :—"I send you another skin of our Alpine Parrot. Even judging from its habits alone, it is quite distinct from the Common Kaka. It is never found in the Fagus forest, whilst the other never goes above it into the sub-alpine vegetation. Near the glacier sources of the Waimakariri, where I was in the latter part of March, I saw them frequently in the Alpine meadows—4000 to 5000 feet high—feeding on the large red berries of *Coprosma pumila* and *nivalis*, two dwarf plants lying close to the ground. We found these berries in the gullets of those we opened. They evidently had their nests with young ones among the crags of the nearly perpendicular rocky walls (about 6000 feet above the sea), and I repeatedly observed them flying backwards and forwards, as if feeding their young. After the first day's shooting they got exceedingly shy, and could not be approached within gun shot." Mr. Fuller, the taxidermist to the Canterbury Museum, also states, as the result of very careful observation, "that the manner of flight is quite different from that of the common Kaka, for they soar after the manner of the Kea (*Nestor notabilis*).

III.—Gerygone assimilis, Buller.

Dr. Finsch condemns this species, because a specimen received from Dr. Haast, and labelled "*G. assimilis*," agrees in every respect with "*G flaviventris.*"

I am not aware that I ever met with *Gerygone assimilis* in the South Island. At any rate I demur to being held responsible for wrongly named specimens, which I have never had an opportunity of identifying. I am not surprised that Dr. Finsch, on receiving the *supposed* example of *G. assimilis*, was "at once convinced that the skin of this species is not distinguishable from that of the true *G. flaviventris*," especially, as he adds that the specimen agrees in every respect with the description and figure given by Mr. Gray—("Voy. Erebus and Terror").

There is an appreciable difference in size between the two species.

IV.—TURNAGRA HECTORI, Buller.

Dr. Finsch is no doubt right in his identification of my bird with *Otagon tanagra*, Schlegel. The description of the species appeared in a German work, in 1865, but without any habitat being assigned to it; and it was noticed in Dr. Günther's "Zoological Record" for the same year; but I believe I am right in stating that no description of it had appeared in English before the publication of my article in "The Ibis."

The genus *Turnagra* was established by M. Lesson, in 1837. Our oldest known species was originally placed by Mr. Gray in his genus *Keropia*, and was distinguished as *K. crassirostris*. The generic title was afterwards altered to *Tanagra*, and again to *Otagon*. But ultimately Mr. Gray referred the species to the genus *Turnagra* ("Gen. of Birds, 1841"), and I have deemed it right to follow his classification. The names *Tanagra capensis*, Sparrm, *T. macularia*, Quoy. and Gaim., and *Otagon turdus*, Bonap., are all synonyms of our well known *T. crassirostris*, the Piopio of the South Island.

Prof. Schlegel has retained Bonaparte's genus OTAGON, and adopted the rejected generic title of *Tanagra*, specifically to distinguish the new form. According to our nomenclature this would of course be *Turnagra tanagra*, which appears to me a very objectionable combination.

The merit, however, of being the first to notice the existence of this new species belongs to Prof. Schlegel, although he was apparently unaware that it came from New Zealand. I am quite satisfied in having been instrumental in adding it to our List of Native Birds.

V.—ANAS GIBBERIFRONS—Müller.

I am under an obligation to Dr. Finsch for setting me right with this species. It is remarkable, however, that a bird known to inhabit Australia, and having so wide a distribution should have been entirely omitted in the recent handbook edition of Mr. Gould's great work on the Birds of Australia. My *Anas gracilis* sinks into a synonym of *A. gibberifrons* which is now added to the list of New Zealand birds.

While on the subject of Ducks I would add that a further addition has been made to our Avifauna in a species from Waikato, sent to me by Captain Hutton, which I have identified as the *Nyroca australis*, Gould. (See ante, p. 78.)

VI.—PODICEPS CRISTATUS—Linn.

The example from which I took my original description of *P. Hectori*, did not disclose the white on the secundaries and scapularies, owing probably to the condition of the dried skin; but specimens which I have since received agree with Dr. Finsch's description. My *P. Hectori*, like Gould's *P. australis*, must therefore be held synonymous with *P. cristatus*, Linn. But it is probable that we still have in this country a distinct race of the Crested Grebe, distinguishable by the under parts being of a uniform dark rufous grey, instead of silvery white, stained on the sides with chestnut, as in *P. cristatus*.

I treated this bird as *P. Hectori* in another state of plumage, but I cannot discover that *P. cristatus*, in any condition, presents this peculiarity, which is constant in all specimens from certain localities. Dr. Hector considers this dark-breasted Grebe (of which there are specimens in the Colonial Museum, at Wellington), a distinct bird, and states that it is found on the Wakatipu Lake, accompanied by young, and possessing the double crest and red ruff which characterizes the adult bird; while in brackish lakes by the coast, where old and young birds, and also eggs were obtained, none but white-crested birds were ever shot.

If this dark-breasted bird should hereafter prove to be a distinct species, I must claim from naturalists its recognition as the true *Podiceps Hectori*.

[*Extract from* 'THE IBIS,' *for* SEPTEMBER, 1869.]

Remarks on some Species of Birds from New Zealand. By Dr. O. FINSCH, C.M.Z.S., &c.

IN a large collection of birds which I lately received from Dr. Julius Haast, the well-known explorer of New Zealand, I was very much pleased to find some of the species lately described as new by Mr. Walter Buller, in his 'Essay on the Ornithology of New Zealand*,' or in his paper in 'The Ibis' for the present year (*anteà*, p.p. 37—43). A careful examination showed me at once that some of those so-called new species are by no means new to science; therefore it will, perhaps, be a matter of some interest to the readers of this Journal, as well as to ornithologists in general, to become acquainted with the results of my studies.

PLATYCERCUS ALPINUS, Buller, Ibis, 1869, p. 39.

Two specimens, male and female, from the Southern Alps, and marked as types of Mr. Buller's supposed species, are not distinguishable from the old known *P. auriceps*, Kuhl., either in size or colouring. Mr. Buller characterizes the new species by the orange frontal band, and by the orpiment-orange (instead of crimson) thigh-spots; but these slight differences are by no means specific, and only indicate the young bird. In my Monograph of the family Psittacidae (vol. ii. p. 286) I described such a younger bird, from a specimen in the Bremen Museum, which corresponds in every respect with *P. alpinus*, Buller.

NESTOR MERIDIONALIS, (Gmel.)

Two specimens from the west coast of the South Island, the same locality from which Mr Buller described his new *N. occidentalis* (*suprà*, pp. 40, 41), and most probably belonging to this species, I cannot distinguish from the true *N. meridionalis*. There are slight differences in the shade of their colouring, as well as in their size, but it must be remembered that all the species of *Nestor* vary very much, as I have already remarked in my Monograph, wherein everybody will find a full account of this subject. In any case, *N. occidentalis* needs a more minute description of its distinctive characters before it can be enumerated in the list of so-called good species.

I take this opportunity of adding an interesting notice respecting the systematic place of the genus *Nestor*, which Dr. Haast was kind enough to send me. He writes to me, "Your arrangement of the genus *Nestor* in the system is quite right. These birds are indeed honey-eaters; their tongues are armed on the point with papillæ as in the *Trichoglossinæ*." It is of great value to receive a positive statement as to the structure of the tongue in *Nestor*, the subject having hitherto been doubtful. Mr. Gould (Handb. B. Austral. ii. p. 551) declared that the tongue was not "furnished with a brush-like termination," whereas the correct figure of *N. norfolcensis*, given by Herr A. von Pelzeln (Sitzungsb. kk. Acad. Wissench. Wien, xli. 1860, p. 322, cum. tab. capit.), shows the papillæ very exactly. This new fact given by Dr. Haast sets all doubt at rest, and the position of the genus *Nestor* among the *Trichoglossinæ* now becomes evident.

GERYGONE ASSIMILIS, Buller, Essay, p. 9.

Mr. Buller separated this new species from *G. flaviventris*, more on account of the difference in the construction of their nests than from any shown by the birds themselves. I therefore expressed my doubts (Journ. f. Orn. 1867, p. 342) whether it was possible to distinguish the bird exactly. A specimen of *G. assimilis*, from Dr. Haast, convinced me at once that the skin of this species is not distinguishable from that of the true *G. flaviventris*. The specimen agrees in every respect with the description and figure given by Mr. Gray (Voy. 'Erebus' and 'Terror,' Birds, p. 5, pl. iv. fig. 1), except that the yellow tinge on the belly is paler; but the specimen is marked as a female.

TURNAGRA HECTORI, Buller, Ibis, 1869, p. 39.

The editor of 'The Ibis' has already suggested that this species is probably identical with *Otagon tanagra*, Schlegel (Nederl. Tijdschr. voor de Dierk. iii. 1865, p. 190). I agree with this supposition; for a careful comparison of the descriptions cannot admit of the slightest doubt as to their referring to the same species.

ANAS GRACILIS, Buller, Ibis, 1869, p. 41.

This is undoubtedly identical with *Anas (Querquedula) gibberifrons*, Salomon Muller (Verhandelingen, Land en volkenkunde, 1839–41, p. 159), as the comparison of a typical specimen of *A. gracilis* received from Dr. Haast with specimens from Timor in the Bremen Museum shows. The species has a wide geographical distribution. Timor (Sal. Muller, Wallace), Flores (Wallace), Celebes (Forster), Northern Australia (Leyden Mus.), South Australia (Leyden Mus., Haast), New Caledonia (Leyden Mus.).

* Translated by me in the 'Journal fur Ornithologie' for 1867, pp. 305—347.

PODICEPS HECTORI, Buller, Essay, p. 19; Finsch, Journ. f Orn. 1867, p. 345.

The distinctive character of this species, from our *P. cristatus* (Linn.), was declared by Mr. Buller to be the absence of white on the wings and shoulders. The collection contains a Grebe, which Dr. Haast mentions in his letter as a typical *P. hectori*. This specimen is partially moulting, as is especially shown by the fact that all the remiges are not fully grown, but are almost hidden by the tectrices. By unfolding the wings carefully, one can see the white distributed in the same style as in our *P. cristatus*, with which the specimen agrees in every respect. I therefore cannot regard *P. hectori* as distinct from our *P. cristatus* (*P. australis*, Gould).

LARUS (BRUCHIGAVIA) MELANORHYNCHA, Buller, Ibis, 1869, p. 43.

If this species is not identical with the badly described *Larus anderssoni*, Bruch (Journ. f. Orn. 1853, p. 102), from New Zealand, which Professor Blasius (*op. cit.* 1865, p. 384), declared to be nothing else than *L. scopulinus*, it certainly will be a good species. I, at least, cannot refer the fine specimen, received from Dr. Haast under the name last mentioned, to any of the known species, and take it for a good species, distinguishable by the slender black bill, tinged with a reddish tinge at the basal portion, and by the great extent of white on the remiges.

On some New Species of New-Zealand Birds. By WALTER BULLER, F.L.S., C.M.Z.S., &c.

[*From* 'THE IBIS,' *for* JANUARY 1869.]

Fam. CERTHIIDÆ.

1. XENICUS HAASTI, sp. nov.

Upper surface pale olivaceous-brown, darkest on the crown; tinged on the back and on the outer margin of the quills with olivaceous-green; wing-coverts black, forming a conspicuous triangular spot; under parts pale fulvous; bill and feet dark brown; irides yellow.

Length 3·5 in.; wing from flexure 2; tail ·75; tarsus 1; middle toe and claw 1; hind toe and claw 1; bill, along the ridge ·375, along the edge of lower mandible ·625.

In structure this species approaches *X. longipes*; but the claw of the hind toe is more strongly developed, exceeding the toe in length. It is an inhabitant of the Alpine heights of the South Island; and I have named it in honour of its discoverer, Dr. Julius Haast, F.R.S., who forwarded me specimens for examination.

Dr. Hector found it frequenting the stunted vegetation growing among the loose mountain débris in the interior of the Otago Province: and Mr. Buchanan, the artist to the Geological Survey, met with it on the Black Peak, at an elevation of 8000 feet. There, where the vegetation is reduced to a height of only a few inches, it was constantly to be seen, fluttering over the loose rocks, or upon the ground, in its assiduous search for minute insects and their larvæ. Dr. Haast has favoured me with the following interesting notes on its habits:—"It lives exclusively amongst the large taluses of débris high on the mountain-sides. Instead of flying away when frightened, or when stones are thrown at it, or even when shot at, it hides itself among the angular débris of which these large taluses are composed. We tried several times in vain to catch one alive by surrounding it and removing these blocks. It reminded me strongly of the habits and movements of the lizards which live in the same regions and in similar localities."

Fam. LUSCINIIDÆ.

2. SPHENŒACUS RUFESCENS, sp. nov

Upper parts, sides, and tail dark rufous-brown, brightest on the crown and hind neck; the feathers of the shoulders and sides centred with black. Quills dusky-black, margined with rufous-brown. Streak over the eye, throat, breast, and abdomen pale fawn-colour; sides of the head and ear-coverts marked with black. Bill light brown, with the ridge black; feet dark brown.

Length 7·25 in.; expanse 7; wing from flexure 2·5; tail 4·25; tarsus 1; middle toe and claw ·875; hind toe and claw ·75; bill, along the ridge ·5, along the edge of the lower mandible ·625.

This species is larger than *S. punctatus*, more strongly built, and of handsomer plumage. The specimen from which the description is taken was forwarded to me by Mr. Charles Traill, a gentleman greatly devoted to conchology. He obtained it on a small rocky isle, a satellite of Chatham Island, during an expedition there in pursuit of his favourite science, but was unable to give me any information respecting its habits or economy, though he stated that he obsered it flitting about among the grass and stunted vegetation, and succeeded in knocking it over with a stone.

Fam. TURDIDÆ.

3. TURNAGRA HECTORI,* sp. nov.

Upper surface olivaceous-brown; tail and coverts bright rufous, with an olivaceous tinge on the two middle rectrices; throat pure white; breast and abdomen ashy-grey, darkest on the former; abdomen and under tail-coverts tinged with yellow; sides olivaceous-brown, washed with yellow. Bill and feet dark brown; irides yellow.

Length 11 in.; wing from flexure 5·25; tail 5; tarsus 1·25; middle toe and claw 1·25; hind toe and claw 1; bill, along the ridge ·875, along the edge of lower mandible, 1.

I have honoured this fine species with the name of my esteemed friend Dr. James Hector, F.R.S., Director of Geological Surveys, who has done much to advance the cause of science in New Zealand.

It differs from *T. crassirostris*, not only in plumage, but in its superior size and more strongly-developed bill. Its notes also are far more varied and musical. Its range is confined to the North, while *T. crassirostris* is found only in the South Island. They are in fact the representatives of each other in the two islands, and furnish another example of a remarkable law in the local distribution of the birds of New Zealand, many of those inhabiting one island being represented by closely-allied forms in the other, each, however, being specifically distinct. Cook's Straits, a neck of sea only eighteen miles in width, completely divides the range of one set of species from that of the other.

Fam. PSITTACIDÆ.

4. PLATYCERCUS ALPINUS, sp. nov.

This Alpine form differs from its near ally, *Platycercus auriceps*, both in size and in the tints of its plumage. Our three species of *Platycercus* present a distinct gradation in size and colouring. In *P. pacificus* the frontal spot, ear-coverts, and thigh-spots are deep crimson, while the general plumage is dark green. In the smaller species, *P. auriceps*, the frontal band is crimson, and the vertex golden, while the general plumage is a warm yellowish-green. In *P. alpinus*, which is smaller again than the last-named species, the frontal band is orange, and the vertex pale yellow, while there is an absence of the yellow element in the plumage, which is of a cold pure green, much paler on the under parts. The thigh-spots moreover are much smaller than in *P. auriceps*, and are orpiment-orange instead of crimson. On comparing the bills of the two species the difference is very manifest, that of *P. alpinus* being fully one-third less than that of *P. auriceps*.

Length 8·5 in.; wing from flexure 4 25; tail 4·5; tarsus ·625; longest fore toe and claw ·875: bill, following curvature ·5, along edge of lower mandible ·25.

Dr. Haast, from whom I received several specimens of this bird, met with it in the forests of the Southern Alps, at an elevation of from 2000 to 2500 feet; and Mr. Travers sent me for examination other examples obtained by him in the high wooded country of the Nelson Province.

5. NESTOR OCCIDENTALIS, sp. nov.

Upper surface dark olivaceous-brown, tinged with yellow on the wing-coverts, each feather margined with dusky black; feathers of the nape dull red, margined with yellow and black, and forming a narrow nuchal collar; uropygium, tail-coverts, and abdomen dark arterial-red, the feathers of the latter banded with a brighter tint; ear-coverts pale orpiment-orange; feathers projecting over the lower mandible tinged with red; throat, neck, and breast dark olivaceous-brown; lining of wings and axillary plumes bright scarlet, obscurely barred with black, and tipped with golden-yellow; quills and tail-feathers russet-brown, the former toothed with yellow on their inner vane; bill and feet dark olivaceous-gray.

Length 16·5 in.; wing from flexure 10·5; tail 6; tarsus 1; longest fore toe 2·25; longest hind toe 2·125; bill, following curvature 2·25, along edge of lower mandible 1·5.

Apart from the difference of plumage, this species is appreciably smaller than the common one, while the bill is more slender and has the upper mandible produced to a finer point.

Dr. Hector discovered this bird in the densely wooded country on the west coast of the South Island, and he generously gave me the only two specimens which his collection contained. These differ very slightly in the details of their colouring, and there is scarcely any perceptible difference in their size.

Fam. SCOLOPACIDÆ.

6. GALLINAGO PUSILLA, sp. nov.

Upper surface dark rufous-brown, variegated with irregular spots of fulvous and black. These markings are most conspicuous on the back and scapulars, the feathers on

* [May not this species be identical with that described in 1865, by Professor Schlegel (Nederl. Tijdschr. voor de Dierk. iii. p. 190) under the name of OTAGON TANAGRA?—ED. "IBIS."]

these parts being margined outwardly with pale fulvous, and marked with a large subterminal spot of black. Under parts fulvous. Sides of the head and breast with numerous spots of rufous brown, of which there is also an irregular line from the base of the upper mandible to the anterior edge of the eyes; sides and flanks variegated with crescentic marks of rufous brown. Bill greyish brown; feet pale brown.

Length 8 inches; expanse 13; wing from flexure 4; tail 1·5; tarsus ·75; middle toe and claw 1·125; hind toe and claw ·3125; bill, along the ridge 1·75, along the edge of lower mandible 1·5.

The example from which the description is taken, was forwarded to me by Mr. Charles Traill, with the following note:—"Found on a small rocky islet off Chatham Island."

Fam. ANATIDÆ.

7. ANAS GRACILIS, sp. nov.

Upper surface dusky-brown, with greenish reflections; the feathers of the back and scapulars narrowly margined with fulvous-white; the outer portion of the upper wing-coverts pure white, forming a conspicuous bar across the wing; the secondaries velvety black, narrowly tipped with fulvous, and a speculum of shining green occupying the outer vane of the three middle ones. Crown and nape blackish-brown, minutely marked with fulvous-white; throat, fore neck, and sides of the head fulvous-white, the latter marked with sagittate spots of brown. Under parts light fulvous-brown, with obscure spots of a darker shade, especially on the breast and sides, each feather having a broad central mark of blackish-brown. Throat and abdomen more or less tinged with bright ferruginous. Bill dark brown; outer portion of the lower mandible yellow. Feet pale brown.

Male.—Length 17 inches; expanse 25·5; wing from flexure 8; tail 4; tarsus 1·25; middle toe and claw 1·75; bill, along the ridge 1·5, along the edge of lower mandible 1·75.

Female.—Length 15·5 inches; expanse 23·5; wing from flexure 7·5; tail 3·5.

As will be apparent from the above measurements, the female is somewhat smaller than the male. The general tints of the plumage are paler; but in other respects the sexes are precisely alike.

The form of this Duck is remarkably slender and graceful, the contour of the body being almost as elongate as that of a Gannet. On dissection I found the skin very tender, and the flesh extremely delicate, with fat of a bright yellow colour.

I obtained my first specimens (male and female) in the Oroua Stream, near its junction with the Manawatu River, in the Province of Wellington. I observed that on being disturbed from the marsh, where they were apparently feeding, they rose high in the air, and came down suddenly into the creek with a rapid, oblique, and rather awkward flight. On the water they kept near to each other, and I killed both at one shot. I afterwards saw a pair on the wing, in one of the freshwater lagoons of the Upper Manawatu, the white bar being very conspicuous; and more recently I obtained a fresh specimen from Hawke's-Bay Province.* The species is evidently rare.

Fam. LARIDÆ.

8. BRUCHIGAVIA MELANORHYNCHA, sp. nov.

Pure white; back and upper surface of wings delicate ash-grey. First four primaries white, variegated with black, the first primary narrowly margined on its outer and marked diagonally on its inner vane; on the next the black increases, and forms a broad subterminal bar, which is enlarged on the two next, and decreases on the two succeeding ones, all being tipped with white. The fifth quill, which is ashy, has merely a subterminal interrupted bar of black. Bill black; feet blackish-brown.

Length 14 inches; wing from flexure 11·5; tail 5; tarsus 1·5; middle toe and claw 1·75; bill, along the ridge 1·5, along the edge of lower mandible 1·75.

This bird may be readily distinguished from *B. scopulina* by its black bill and dark feet, those parts being blood-red in the other—and, on near inspection, by the different character of the markings on the primaries. All my specimens were obtained in the South Island.

Wanganui, New Zealand,
June 10, 1868.

* P.S. Oct 3, 1868.—Referring to this species I have recently received the following interesting note from Dr. Haast:—"In a collection of Australian skins just arrived from South Australia, and collected by Mr. A. Fuller, there is a specimen of your ANAS GRACILIS. I looked at once in 'Gould,' but could not find any mention of it; consequently this bird, so far as Australia also is concerned, is new to science. I compared the skins very carefully, and there is not the slightest difference; in fact it is almost impossible to say which is which. You can state this fact upon my authority."

ERRATUM.—Page 386, for "*Platycercus pacificus*" read "*P. Novæ Zelandiæ.*"