long. The feathers that cover the whole body are of an exceedingly beautiful milk-white colour. The thighs, legs, and toes are about ten inches long, and are covered with large scales of a bluish-black colour. It has four toes, one behind and three before, the middlemost of which is nearly three inches long; the claws are black, and there is a small web between the two outermost toes. It feeds upon small fish, and frequents the sea marshes and salt pools.

Captain Wood observes that in the north-west parts of Greenland there is a sort of fowl which the natives catch with springes and snares, chiefly for the sale of their skins and feathers, which, being thick, they dress and make garments of, like furs, wearing the feathers outward in the summer time, and inward in the winter. He says two or three of his men killed 1,500 of them in one day. From this account one would imagine snares would be as unnecessary here as in the bird island of America, mentioned by the Earl of Cumberland, who says there are such incredible numbers of birds found in it that there needs no artifice to take them, for a man may catch with his hands alone almost enough to serve a whole fleet.

The *Blue Gaulding* is from its bill to the end of the tail about eighteen or twenty inches, and from the extension of each wing about a yard. The part of the bill towards the head is of a bluish colour, and black towards the extremity; it is very sharp, and about two inches and a half long; it has a greenish skin about the eyes, and a tuft of thin, small, longish feathers upon the head; the neck is about six inches long, covered with thin feathers of a bluish-black colour, the whole body of the bird being nearly the same colour, except the breast, belly, and under the wings, which appear somewhat lighter.

The legs are covered with geeenish scales, and are about seven or eight inches long; it has four toes, one behind and three before, the middlemost of which is about two inches long, and it has black, crooked, sharp claws.

They feed on shrimps, young crabs, spiders, and field crickets, and frequent ponds and watery places.

[This description tallies fairly well with that of the Night-Heron (Ardea nycticorax) a bird which, like the Great White Egret, has a very large range.—T. C.]

From Magazines, &c.

JOURNAL OF THE SOUTH AFRICAN ORNITHOLOGISTS' UNION, vol. i., No. 1 (Second Series), is a pretentious issue, rivalling in its general appearance its model, *The Ibis*. The Southern Union is to be congratulated upon its ability to publish such a first-class journal locally.

WILD DUCKS POISONED.—Ararat.—Large numbers of Wild Ducks are being destroyed by farmers in the Dunkeld and Glenthompson districts by means of poisoned wheat. The birds have developed a taste for wheat, and settle on newly-sown fields in thousands. To save the crops poisoned wheat is being used to destroy the birds.—The Argus, 29/6/07.

POISON AGAIN!—Tunbridge.—Sportsmen generally complain of the scarcity of Wattle-Birds this season, and news has lately

come to hand of a great mortality among the Wild Ducks in the Lake district.—Examiner (Launceston), 17/7/07.

* * *

ADDITIONS TO THE AVIFAUNA OF THE COUNTY OF CUMBERLAND (N.S.W.)—In the "Records of the Australian Museum," vol. vi., part 5, Mr. A. J. North, C.M.Z.S., publishes a list of 13 species of birds (additions chiefly due to climatic influence) supplementary to his previously published lists.

* * *

NORTH-WESTERN BIRDS.—According to *The Ibis* (April, 1907) Dr. Ernst Hartert has contributed supplementary notes in the *Novitates Zoological*, vol. xiii., p. 754, on *Ametrornis woodwardi*, *Collyriocincla woodwardi*, and *Gymnorhina tibicen longirostris*, the two former being figured. The birds were collected by Mr. Tunney and described as new by Dr. Hartert in the previous volume of *Nov. Zool.* (xii., p. 194).

* * *

In the Examiner (Launceston) of the 9th July there appears an interesting account of "An Ascent of Mount Roland," by Mr. H. Stuart Dove, A.O.U. The account is chiefly descriptive, and his only bird note is:—" Upon the plateau (of the Mount) grew also stunted individuals of the evergreen bush, and amid these a party of Yellow-breasted Parrakeets (Platycercus flaviventris) were calling 'Too-sack! too-sack!' vociferously."

* * *

Bulletin of the British Ornithologists' Club.—Volume xx. contains the report of the Migration Committee of the B.O.U. on the movements in England and Wales of a number of common migratory species during the spring and early summer of 1906. The amount of information this volume contains, especially interesting to bird-migration students, should be as widely read as possible. Mr. J. L. Bonhote, M.A., whose address is care of the Zoological Society, Hanover-square, London, W., is still the energetic secretary of the Migration Committee.

* * *

THE HABITS OF THE BIRDS-OF-PARADISE AND BOWER-BIRDS OF BRITISH NEW GUINEA.—Under this title *The Ibis* (July, 1907) contains a very popular article by Dr. Colin C. Simson. During November and December, 1905, Dr. Simson took an excursion through the uplands (3,000 to 6,000 feet above sea level) of the Owen-Stanley Range. He records having observed many species of the rarer Birds-of-Paradise, found several nests, and was fortunate in photographing the playground and garden of the Orange-crested Bower-Bird (*Amblyornis*). Photo-reproductions of the bower are given with Dr. Simson's article.

BIRD-LIFE IN THE NAGAMBIE DISTRICT (VICT.)—In The Victorian Naturalist, vol. xxiv., No. 4, Mr. C. F. Cole recounts the experiences of an enjoyable (barring mosquitoes) week's camp-out on the Goulburn, where he and his companion identified 67 species of birds. One note is of especial interest:—"One day (7th March), about noon, a large flock of beautiful Bee-eaters (Merops ornatus) made their appearance at the camp, apparently collecting after their breeding season preparatory to moving north, for next morning not a single bird was to be seen or heard."

A CONFIDING LYRE-BIRD. — A Walhalla correspondent writes:—"The contractors for the new south road rising on to the Moondarra Plateau from the Thomson River have a constant visitor to inspect their works—a full-grown male Lyre-Bird (Menura victoriæ), which has become so tame that it hops up to the face to feed on the grubs and worms disturbed by the men working. On Friday morning last it paid no fewer than ten visits to the scene of operations, and the men guard their pet very jealously. Anyone interfering with it would receive a warm time at their hands. The bird whistles beautifully, sitting on the bank near, and seems to have no fear of his friends. He has several dancing-beds in the vicinity, and is a beautiful bird, with a tail about 2 feet or over in length. None of our bushmen has experienced one so tame, as they are usually very shy.—The Argus.

GOULDIAN FINCHES IN THE FIELD.—A bird-trapper's experience:—"On an average for every 100 Gouldians we take from the nets, 80 per cent. are black-heads, 15 per cent. red-head cocks, and only 5 per cent. red-head hens. It will be clearly seen that red-head hens are in the minority. Now, the ten red-head cocks have to find mates somewhere, and as there are so few red-head hens, they have nothing else to do but to pair up with the black-heads, and this is what they do. In pairing up in this manner it seems of little or no consequence whether it be a red-head cock and black-head hen or vice versâ. We have seen many cases where they have been mixed—perhaps there have been two red-heads and three black-heads. We have many times caught the adults of the two varieties, together with their brood, and in most cases the young were of both kinds."—Avicultural Magazine (April, 1907).

SYNCECUS AUSTRALIS IN NEW ZEALAND.—Through *The Avicultural Magazine*, June, 1907, Mr. Robin Kemp, Umawera, Hokianga, N.Z., announces this very interesting discovery. The editor (Mr. D. Seth-Smith, F.L.S.) identified the species from a skin sent to him by Mr. Kemp. Mr. Kemp, who resides on the

North Island, states that "the species is not what one can call numerous here, but it is to be seen occasionally in pairs or quite small parties." It is known that the Brown or Swamp-Quail readily breeds in captivity in Australia. Have cage birds been taken to and liberated in New Zealand, or have wild birds emigrated across the Tasman Sea? Judging by the wide range the bird enjoys—from New Guinea to Tasmania—emigation has probably occurred. In any case the New Zealand Government would do well to rigidly protect the Quail (say for 10 years) till they are numerous enough to hold their own against shooters.

TASMANIAN FAUNA.—The letter of "Onlooker" in to-day's Examiner will awake a sympathetic echo in many breasts. Much has been done in other countries, much even in the other States of our Commonwealth, in the matter, by the reservation of large bush areas for the preservation of native animals, while in New Zealand the Government has, with far-sighted wisdom. set aside the magnificent tract of 600,000 acres as a national park and heritage to the people for ever. In this splendid range of mountain and forest, river and lake, the native fauna are strictly protected—no shooting or collecting allowed—and it is high time that our animals, which have an equal interest with those of New Zealand, should have a tract of bush country in which to roam without danger of gun or snare. We have species in this State which are found nowhere else in the world; surely it is our duty to see that measures are taken for their preservation ere it is too late.—H. STUART DOVE.—Examiner (Launceston), 16/7/07.

YELLOW-RUMPED FINCH.—"Within recent years, at least, few birds have caused quite such a sensation in the avicultural world as the Yellow-rumped Finch, the Munia flaviprymna of Gould." Thus writes Mr. D. Seth-Smith, F.Z.S., in The Avicultural Magazine (May, 1907) regarding "The Yellow-rumped Finch and its Relationship to the Chestnut-breasted Finch (M. castaneithorax)." Mr. Seth-Smith had several examples of the former bird under observation, one of which developed an abnormal phase of plumage. "The throat had darkened considerably, and there were distinct traces of a dark pectoral band," while in another example "the throat has darkened very considerably, the pectoral band has commenced to develop, and there is a dark spot on the flank." The birds were probably over two years old. Mr. Seth-Smith concludes the M. flaviprymna in its sandy-coloured plumage "is merely a desert form of M. castaneithorax." Members of the A.O.U. should read Mr. Seth-Smith's article at length, which is accompanied by four clearly etched figures.

"THE BIRDS OF THE WEDDELL AND ADJACENT SEAS, ANTARCTIC OCEAN" is an article by Mr. Wm. Eagle Clarke in The Ibis (April, 1907) that will interest Australian readers. It is an instalment (the third) of the ornithological results of the voyage of the Scotia (Scottish National Antarctic Expedition), dealing with the bird-life observed in the Antarctic southward of the 60th parallel of south latitude. The following Australian seabirds are mentioned at length: -Oceanites oceanicus (Yellowwebbed Storm-Petrel), Priocella glacialoides (Silvery-grey Petrel), Ossifraga gigantea (Giant Petrel), Daption capensis (Cape Petrel), Halobæna cærulea (Blue Petrel), Prion banksi (Banks Dove-Petrel), Diomedea exulans (Wandering Albatross), and Phæbetria cornicoides (Sooty Albatross). The last-mentioned is especially interesting because a second Sooty Albatross was described as far back as 1867 by the late Capt. F. W. Hutton. The Hutton Sooty Albatross, Mr. Clarke is of opinion, should take "full specific rank." It is the common New Zealand form, and breeds at the Auckland and Antipodes Islands, also on Macquarie Island.*

EGGS OF CACOMANTIS INSPERATUS.—The eggs of the Brush Cuckoo of Gould's folio edition of "The Birds of Australia" were unusually common last season on the highlands of the Milson's Point railway line. Mr. A. A. Johnston took no less than seven eggs in as many nests of Rhipidura albiscapa. One nest 4 feet from the ground, that he had to lift the bird off, revealed no eggs of the Brush Cuckoo and one egg of Rhipidura albiscapa. This was on the 24th November, 1906. The nest of this pair of birds he took again on the 9th January, 1907, when it contained two eggs of the White-shafted Fantail and one egg of the Brush Cuckoo. On the 5th January, 1907, he took a nest of Malurus lamberti with two eggs, also an egg of the Brush Cuckoo, which is the first time I have known the egg of this Cuckoo to be found in the nest of this species. Four fresh eggs were taken from a nest of the same pair of birds on the 16th January, and two eggs of Lambert's Superb Warbler from the third nest of this pair of birds on the 29th January, 1907, also an egg of the Brush Cuckoo. On the 18th November, 1906, Mr. Johnston took a nest of Myiagra rubecula, containing two eggs of that species, also an egg of the Brush Cuckoo.—A. J. NORTH, Records of the Australian Museum, vol. vi., part 5.

BIRDS OF THE GULF OF CARPENTARIA REGION.—In *The Ibis* for July, 1907, Mr. Collingwood Ingram, F.Z.S., contributes an article of importance to Australians "On the Birds of the

^{*}See Sooty Albatross, "Nests and Eggs Australian Birds," pp. 937, 938 (Campbell).—Eds.

Alexandra District, Northern Territory of South Australia." Alexandra is a station about 200 miles inland from the Gulf. In the year 1905, with commendable enterprise, Sir William Ingram (father of Mr. Collingwood Ingram) arrranged that Mr. W. Stalker, an experienced naturalist, should visit the locality, with a view of making an extensive collection of its birds and The mammals were presented to the British mammals. Museum,* while a fine series of birds was handed over to Mr. Collingwood Ingram to work out. After giving Mr. Stalker's general description of the country—timber chiefly coolibar, gedgea, mulga, &c., in other parts white gum and bloodwood-Mr. Ingram enumerates 91 species, 5 of which he has separated as "distinct geographical races"—namely, Artamus gracilis, A. florenciæ, A. phæus, Ptilotis forresti, Mirafra rufescens. In reviewing the Alexandra collection as a whole Mr. Ingram was struck by the exceptionally pale and greyish colouration (due, no doubt, to the arid climate) of many of the forms, and its resemblance to the avifauna of North-West Australia. In addition to the above-mentioned new species, the following are recorded for the first time for the Northern Territory, namely: —Petræca goodenovii, Rhipidura albiscapa, and Ephthianura Regarding Acanthochæra (Acanthogenys) rufigularis, aurifrons. and Entomophila rufigularis, there seems to be some little confusion in Mr Ingram's record about these two species. Does he wish it to be inferred that both were found at Alexandra?

* * *

Lyre-Birds.—Mr. A. H. Mitchell, of Queen's College, says:
—"In Friday's issue of *The Argus* 'Pycnoptilus' incidentally makes a statement *re* the Lyre-Bird which I think is inaccurate, viz., 'The *Menura* is only known to frequent gullies where the hazel grows, as their food consists of certain grubs that live at the roots of this tree.'

"My observations of the Lyre-Bird extend over a wide area, including the district around Drouin, Warragul, Poowong, &c., Bruthen, Buchan, Lake Tyers, Orbost, the bulk of the Timbarra and Gelantipy districts, with the whole of Croajingolong and

Omeo, Glen Wills, and surrounding country.

"I have not been able to associate the Lyre-Bird with any particular tree or scrub, the hazel least of all. In the above-mentioned areas, only in the South Gippsland portion (Poowong, &c.) does the hazel occur plentifully; in all the other parts it is rare, and sometimes absent. In 1904 I took an egg from a nest at an altitude of more than 5,000 feet, on the northern slope of Mount Wills, where the timber was almost wholly snow gum—certainly no hazel occurred there. On the lower slopes of the

mountain they had their feeding grounds, mostly in the scrub wattle.

"On the upper parts of Big River and Wild Horse Creek (heads of the Mitta Mitta, under the Bogong), I saw dozens of dancing birds, and acres of the ground were scarified by these birds in searching for food, and only at rarest intervals was the hazel seen, and then but very small and dwarfed specimens.

"Around Buchan and all over Croajingolong the same is true. I would very much like to know what their food consists of, and if any solutions are offered as to the reason why the Lyre-Bird has never been seen in the Otway forests, where the conditions are practically identical with all the southern and middle parts of Gippsland."—" Nature Notes," The Argus, 28/6/07.

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AN IDEAL BIRD SANCTUARY.—During the past six weeks Dr. L. Cockayne, F.L.S., has been engaged in making a botanical survey of Stewart Island, N.Z. In the course of a conversation with a reporter, Dr. Cockayne dropped speaking of his botanical researches to talk of birds over the length and breadth of New Zealand. He said :-- "Our unique birds are fast vanishing, and to the ordinary town dweller are virtually unknown, but on Stewart Island, in many parts, they are really as they were in the pre-European, and, for the matter of that, in the pre-Maori days. These birds are a national asset, just as much as are the scenery of New Zealand and its marvellous vegetation, and it seems to me that here is a chance for the colony to show that it is in earnest in its desire to protect its birds, and that the whole of Stewart Island should be made a sanctuary for bird life. This is not merely a matter of sentiment, but is also distinctly one of \pounds s. d. If it were known the world over that the birds of Stewart Island were sacred from the gun of the pot-hunter, and there could be seen a fauna which exists nowhere else on the face of the globe, and which could be seen freely by all who visited the island, then the tourist attractions of that spot, and of the colony, would be largely increased.

"All over the ranges south of Paterson's Inlet, the large Kiwi is as plentiful as it was on the West Coast of the South Island before misdirected energy turned loose the stoats and weasels. Over the shrubs and sedges of wet lands the Fern-Bird flits in great numbers. Everywhere one rests one is greeted by a friendly Maori-Hen, flocks of Godwits soar above the waters of the inlet, the lovely Pigeons can be seen high in the pine trees banqueting on the berries of the miro. The bushman's friend, the Robin, will almost feed out of one's hands. The Kaka is very plentiful, the Tui and the Moka-Moka fill the forest with melody, and a keen eye will discover an abundance of the smaller birds—the Rifleman, the Wren, and so on. On the shores sea-birds of

The Stewart Island many kinds are excessively numerous. Shag, with its beautiful white breast, can, in Stewart Island, be no enemy of the fisherman. One hears the Morepork at night, and to finish my by no means exhaustive list, the White Heron (Egret) is still said to be found in one spot, at any rate."—N.Z. Herald, 25/2/07.

THE CALL-BIRD.—Under this imaginative title a writer (W. H. Sherrie) contributes an article to The Argus of 1st June, He says, truly enough:—" There is nothing in what may be termed the instinctive phenomena of Nature that is more mysterious and startling to the imagination than the common enough habits of wild birds, and more especially those of the migratory order. The more one studies the habits of birds the more wonderful the perfectly natural seems. It is the nature, for instance, of the Nightingale to spend the greater part of the year in the jungle fastnesses of the Gold Coast country, and other regions unfamiliar to the majority of mankind; to visit certain parts of Europe in the spring for breeding purposes; and to arrive and depart with a regularity that is positively mechanical in its consistency." But there is a savour of uncertainty when it is stated that on "the same day of the same month of each year the advance guard of the Nightingale tribe may be looked for in England; and their legion of followers may be expected to come in more straggling order when the sanc-

tuary for the season has been located by the scouts."

"There is much in common between the Nightingale and the Snipe families. They each have their 'call-bird,' which stands in the same relation to the order as the 'scout' does to the bee The 'call-bird' of the Snipe makes its wonderful journey to Australia-probably all covering the 10,000 miles from Siberia in the course of two or three weeks-generally about the middle of our spring, and may continue right on to the interior of the continent before landing. There may be two or three or more of these birds. They seek flat, moist country, where there is swamp and grass and reeds and the conditions are specially adapted for their curious methods of feeding by suction. The strangest thing about the Snipe is the mysterious manner in which the 'call-birds' are followed by the rest of the family or not according to what has happened to the leaders. The average eager sportsman who goes forth with the object of achieving the inglorious distinction of securing 'the first Snipe of the season,' and having the marvellous feat duly recorded in the local newspaper, probably knows nothing of what is involved in the enterprise. The man who has studied the habits of the bird, no matter how eager he may be to shoot some of the spring visitors before his neighbours succeed, will always restrain his ardour in regard to the first few members of the family

This is not because the naturalist in him is stronger than the sportsman; the reason is more sordid than that. he is a tyro he knows that to kill the 'call-bird' is to destroy all prospect of further sport, so far as Snipe-shooting is concerned, for the year in that particular district. He knows-and this is one of the most marvellous of the natural instincts of the Snipe-that if he kills the 'call-bird' the family of which it is but the forerunner will not arrive that season."

The writer goes on to suggest that there must be some sort of telepathetic current between the single "call-birds" and the main flock. He is quite oblivious of the fact, indicated by the title of his dissertation, that the Snipe already arrived on the feeding grounds-Quail and Plover also behave similarly-call out in answer to the calls of other birds passing in the night, and so attract them to the spot. In the same way, when an outward migration is in progress, the calling of flocks passing overhead attracts other flocks en route to join in with them.

Review.

["Nests and Eggs of Birds Found Breeding in Australia and Tasmania," by Alfred J. North, C.M.Z.S., &c.]

THE Trustees of the Australian Museum have issued part ii. of volume ii. of this work. It is a continuation of the Order Passeres, and contains the greater portion of the large and important Family Meliphagida, commenced towards the latter end of the preceding part, and the Families Nectariniidæ, Zosteropidæ, Dicæidæ, and Pardalotidæ. The figures of eggs, which are of the natural size, were reproduced by the heliotype process at the Government Printing Office, from photographs of the specimens taken under the direction of the Government Printer, Mr. W. A. Gullick, and the supervision of Mr. A. E. Dyer. As in the previous parts, the illustrations of birds are reproduced from drawings made by the late Mr. Neville Cayley, who was also responsible for hand-colouring the plates of eggs in the coloured copies.

The get-up of this work in every branch continues its highclass excellence. The only thing regrettable is the persistent omission of important references. Some of these omissions, in justice to ornithological students, should be mentioned. Although an active member of the Field Naturalists' Club of Victoria since its inception, in dealing with the nest and eggs of the Helmeted Honey-eater (Ptilotis cassidix) Mr. North has overlooked the historical finding of the first authenticated nest and eggs of this fine species at the first "camp-out" of the Field Naturalists' Club, November, 1884. [See Southern Science Record, 1885; also Proc. Aust. Science Ass., vii., p. 621, 1898.] The author of "Nests and Eggs" has also overlooked

the original description from first-hand data of the nest and eggs of the Wattle-cheeked Honey-eater (Ptilotis cratitia). [See Victorian Naturalist, xvi., p. 111, 1899.] He has likewise missed the species Ptilotis carteri, originally described before the Field Naturalists' Club, 13th March, 1899. Subsequently a coloured plate of P. carteri appeared in The Emu, vol. iii., pl. xvi., 1903-4. To this there is also no reference, nor is there to the critical remarks on the species by Mr. M. A. Milligan (Emu, vol. iv., p. 153). Further examples of "omissions" can be cited, but time and space forbid. It is to be regretted that a work which in future years must, from the source whence it emanates (the Australian Museum), be regarded as the embodiment of all knowledge of Australasian ornithology up to its date of publication, should be deficient in any way. As the book now appears the compiler neither does justice to himself as a thorough investigator in the branch of science in which he deals (which hardly anyone can doubt) nor to those whose published records at least deserve—if not reliable—to be confuted.

Correspondence.

SOME FIELDS OF RESEARCH.

To the Editors of "The Emu."

DEAR SIRS,—Ornithology embraces not only the study of the external structure and habits of birds, their nidification, &c., but also of everything that relates to them even remotely. In this connection may I call attention to some fields of research which as yet have been barely touched upon amongst us.

- (1.) The internal anatomy of our native birds. Let every opportunity be taken by our field workers to study the bony skeleton, muscles, nerves, vessels, and viscera of all the specimens they secure. Make themselves first familiar with the arrangement of these structures in such common birds as Starlings and Sparrows, and then take careful notes of the differences that appear in other birds. Especial notice should be taken of individual abnormalities as distinct from specific ones.
- (2.) The pathology of our birds. An absolutely untouched field lies open here. Every tumour or unusual growth, even those occurring in domestic birds, such as poultry, should be carefully and quickly preserved, say in 5 per cent. formalin, and accompanied by full notes. Any epidemic, especially amongst wild species, should be as far as possible investigated, and postmortem examinations made. If an infectious disease, communications should be entered into with some interested bacteriologist, and cultures taken for bacteria. Plague, for instance, in some countries has been known to attack birds such as