assume the black plumage. After watching the young birds in captivity, it would not surprise me to find that the brown birds are males, for they seem to be hardier and to feather quicker than the black ones. Then, again, we very often note the young brown one warbling very quietly to itself, but have not noticed the black ones doing it."

[Accompanying the beautiful photographs of the nests of Black Butcher-Birds, Mr. Cornwall sent a picture of the nest of the Helmeted Friar-Bird (*Philemon buceroides*). The nest was built in a tree near the main street of Cairns, and was constructed of a great quantity of twine of many kinds, besides braid, tape, wool, cotton, silk, wadding, &c., &c.—EDS.]

## From Magazines, &c.

The Journal of Agriculture (Victoria) continues to give coloured plates of useful insectivorous birds. Part 10 (November) contains an excellent drawing of the familiar Yellow-rumped Tit (Acanthiza chrysorrhoa) by Mr. C. C. Brittlebank. The accompanying letterpress is by Mr. C. French, F.L.S., F.E.S.

Our member, Mr. James R. M'Clymont, M.A., has contributed some "Notes on a Few Birds, Chiefly Migratory and Nomadic, Observed in the Vicinity of Hobart" to *The Zoologist* (15th-August, 1904). The Pallid Cuckoo (*Cuculus pallidus*), together with some of its foster parents; the Spine-tailed Swift (*Chætura caudacuta*), and the Swift-Lorikeet (*Nanodes discolor*) are those chiefly mentioned, with interesting and original field notes. With regard to the Swifts, Mr. M'Clymont suggests that the use of the spines on the tail-tips is to enable the bird to cling to "some perpendicular surface of great hardness, such as of a precipitous cliff."

Genera Avium.—A specimen sheet of the letterpress of this work, embracing eight pages, has been received. To say that the forthcoming book is to be illustrated by drawings by M. Keulemans is sufficient to give it authoritative standing, but when it is borne in mind that Mr. P. Wytsman is editor, and that amongst the contributors are numbered such men of standing in avicultural science as Mr. Ernst Hartert, of the Zoological Museum, Tring, no further recommendation is necessary. Passeres: Fam. Eurylæmidæ form the subject of the specimen sheet. The descriptions are clearly and concisely given (in English), and all information is brought up to date. The issue of the book is limited to 300 copies, and the price will be based on a charge of 2d. per page of letterpress, 1s. 3d. for each plain plate, and 2s. 6d. for each coloured one.

EULACESTOMA NIGROPECTUS.—This bird, first obtained by Captain Armit and Mr. Guise during an expedition up Mount Maneao, in February, 1895 (virtually what was then called, owing to the enterprise of some Melbourne newspaper proprietors, The Argus expedition), has a coloured plate by Keulemans devoted to it in the July number of The Ibis. Dr. Sclater says that the description given in the article is "fairly accurate" of the male of the pair which now figure in the Tring Museum. The specimens figured were obtained by Mr. A. S. Meek on the Aroa River, British New Guinea, on 31/5/03. Other specimens had been recorded. As the Australian Shrike-Tit, according to Dr. Bowdler Sharpe, of the British Museum, belongs to the "sub-family Pachycephalinæ of the family Laniidæ, that bird, which is arranged by Dr. Sharpe in the same sub-family, is probably one of its nearest allies."

WINTER WHITENING OF PLUMAGE OR FUR.—Whilst naturalists are agreed as to the protection afforded by a white covering—colouration, as some people incorrectly have it—of birds and animals in the winter, it has remained for Captain G. E. H. Barrett-Hamilton (Proc. Roy. Irish Acad., xxiv., 1903, pp. 313, 314), to suggest how large a part fat may play in alteration of pigment cells. To use the words of *The Ibis*, he "considers that the temporary cessation of metabolism of fat and absence of pigment may be parts of the same process; whilst animals are, as a rule, lightest in colour where the accumulation of fat is greatest." The theory is rather a startling one, and is worth further study. There is much to be said for and against it—against seems to preponderate, more particularly when one remembers that according to some highly accredited scientists the feather cells after full development are really dead.

The Ibis.—The July number (8th series, vol. iv., No. 15) opens with an admirable coloured plate by J. G. Keulemans of some birds from Cape Colony. In the article which accompanies this Dr. R. Bowdler Sharpe, LL.D., &c., continues his description of birds from Deelfontein, Cape Colony, and so far has described 123 species. Some valuable observations, supported by statistics, as to the "Decrease in the Weight of Eggs as Incubation Advances" are contributed by Mr. Hugh S. Gladstone, M.A., F.Z.S., &c. Amongst the miscellaneous matter in the volume is mentioned the fact that Dr. Finsch, who has done valuable ornithological work, has resigned his appointment at the Leyden Museum, to take charge of the ethnographical branch of the Museum of Brunswick. Signor T. Salvadori, in this issue, questions the nomenclature of Messrs. Hartert and Rothschild of a bird from New Guinea which they called Eafa maculata. His impression is that it belongs to the Dicæidæ.

Wekas Breeding in Captivity.—Mention is made in The Avicultural Magazine (September, 1904) of a paper by Mr. Blaauw, which he read before the last Zoological Congress in Berlin, on the subject of rearing the Weka Rails (Ocydromus australis) of New Zealand, at Gooilust, Holland. A pair of Wekas was kept for some years in the park in an enclosure with growing plants. In the spring of 1900 the birds made a large nest of all kinds of vegetation under a beech, and both birds sat in turns on a clutch of three eggs. After 28 days two young were hatched. They were an almost uniform chocolate-brown colour, with black eyes and bill and reddish legs The first day they remained in the nest, but on the second day they began to follow their parents, who diligently fed the chicks on all kinds of worms and insects. In seven weeks the young were fully feathered and resembled the adults, but the black marks of the plumage were less clearly defined, and the general colour was darker.

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Bird-Lore.—The July-August number continues the series of admirable coloured plates of the Warbler family. The species delineated are all extra-Australasian, hence have hardly any claim on us at all. The photographs of Red-eyed Vireos accompanying the first article have an interest of their own. Some were taken just after sundown-in one plate five and in another 20 minutes' exposure being given. As might be expected, the automatic movements of a living body (when asleep) affect the definition of the plate. Mr. Francis H. Herrick, who supplies both plates and article, has some valuable notes on the genus. A very readable article on "Lake Erie Terns" lacks the precise definition of species which should always accompany bird papers. Otherwise, both it and the illustrations are good—though the photo. of the flight of Terns is not to be compared with those of some of other sea-birds obtained by members of the Aust. O.U. A summary of bird laws in Japan must be reserved for future notice. The usual Audubon Societies' notes and leaflets accompany this issue, and prove how zealous bird-lovers in America are as to preservation of species.

CHARACTER OF BIRDS' WINGS.—Dr. A. G. Butler reports in the Avicultural Magazine (vol. ii., No. 11, pp. 319, 320) a suggestion he had before made. This is that "every Museum should make a collection of the expanded wings of all birds; not only to enable the systematic ornithologist to see, at a glance, all sexual characters and all important generic differences which an open wing brings to light, but to enable him to describe his birds correctly.

I am quite sure," (he says) "if they will do this, that many unsuspected characters of importance will be brought to light.

. . . I am equally certain that it will enable them to

distinguish with ease the sexes of many species which have hitherto been doubtfully, or even incorrectly, determined by collectors and taxidermists." The suggestion seems well worth adopting. For an exemplification of what such a mode of examining the wings really means one has only to refer to *The Ibis* (July, 1903, pp. 446–451), where extended wings of male and female Lapwings are figured and fully described. Mr. F. W. Frohawk, M.B.O.U., F.E.S., in this article, says:—"During flight the sexes may easily be distinguished by the great difference of wing formation," and a glance at the illustrations given shows marked differences.

THE INTERNATIONAL CATALOGUE OF SCIENTIFIC LITERATURE.— An undertaking which shows how, on proper occasion, scientists can work together is presented by this work. No part of it has yet been forwarded for review, hence it is necessary to fall back on information gathered from other sources. The Auk (vol. xxi., 1904, pp. 494-501) contains a good summary of what has been done and is doing in the matter. There it is explained that "the supreme control of the Catalogue is vested in an international convention, which is to meet in London in 1905, 1910, and every tenth year afterwards, to reconsider, and, if necessary, to revise the regulations for carrying out the work The materials are to be furnished by of the catalogue, &c." regional bureaux, which already number 30. Volume N of the series is devoted to ornithology, and embraces "New Genera and Species," "Geographical Distribution," &c. Structure, development, physiology, ethnology, variation, and ætiology, geographical distribution, and "taxonomy and systematic" are the headings under which presently available information is ranged. A hasty glance through one or two of the numbers shows that it is a work which every naturalist would be the better for possessing.

"Tasmania, Ornithologically Considered," is the title of an article by Mr. Frank M. Littler, F.E.S., contributed to The Zoologist (September, 1904). The article, which is based on the writer's own field observations, written in a pleasant and popular style, deals with the more common bush birds, while at the end is a systematic list of all the known Tasmanian birds. Mr. Littler is inclined to the opinion that, as the knowledge of the Australian ornis extends, Malurus cyaneus, M. gouldi, and M. elizabethæ will be grouped under one specific name. If so, then the same rule will apply to a dozen other Australian genera. Another of Mr. Littler's notes states:—"In no list can I find mention of any member of the family Certhiidæ being found in Tasmania. I have met with both the White-throated Treecreeper (Climacteris leucophæa) and the Brown Tree-creeper (C. scandens) in some of the heavily timbered forests in the

north-eastern portion of the island—forests consisting mainly of big timber." Mr. Littler would promote the interests of the ornithology of his island were he to, say on his next holidays, procure these birds for complete identification. The pleasure of such a trip would be enhanced by the anticipation that the reputed Tree-creepers may be new to science, if not sub-specific to the mainland forms quoted by him.

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THE BRUSH TURKEY.—Continuing his notes on this bird having bred at the London Zoo, Mr. Bertling records that, "being somewhat doubtful as to the cock's parental diligence," he opened the mound to see how matters stood (Avicultural Magazine, August, 1904, p. 294 et seq.) The eggs were placed, as recorded by other observers, larger end uppermost. He found, after a few minutes' search, "a pretty chick, which winked and blinked on having the bright sunshine suddenly turned on to it." After describing the colouration Mr. Bertling goes on to say something as to the habits of the young birds, noticing that they have the same digging propensity as the adults, and that "their pugnacity was evinced at an early stage." After waiting a fortnight, and no further young appearing, the "mound" was stripped, with most unsatisfactory results. From Mr. Bertling's investigations he concludes "that the young ones do not chip round the upper part of the egg when emerging . . . . but appear to give a violent wriggle and shatter the whole shell, although they still remain encased in the inner membrane, which is not torn open for some hours afterwards." The cock bird behaved peculiarly when a dead chick was in the mound, and the description of his ways and some other phases of Brush Turkey life will furnish matter worth studying.

KING OR LEAST SWAMP QUAIL.—The Avicultural Magazine (September, 1904) contains an interesting article by Mr. D. Seth-Smith, F.Z.S., on "Painted Quails" (Excalfactoria), which he has kept and bred successfully in captivity in England. The dark Australian form (E. lineata) has been separated as a subspecies only from the Asiatic form (E. chinensis). Mr. Seth-Smith is of opinion that the sub-specific separation is possibly correct, because hybrids of the two species are perfectly fertile. There is a marked difference between the young in down of the two varieties. The predominating colour of young of the typical E. chinensis is very dark brown. On the back are two very distinct stripes of sandy-buff, running from nape to tail. The head is sandy-buff, with two distinct stripes of very dark brown; throat pale yellow, and under parts yellowish. In E. lineata there can just be traced the buffish lines, which, however, are entirely absent on the back, which is wholly blackish. The throat is yellow, as in E. chinensis, but the under

parts are considerably darker in the Australian bird. Mr. Seth-Smith says:—"The point which I think is worth especial notice in this connection is the difference which exists in the colour of the newly-hatched young of *E. chinensis* and *E. lineata*." It was observed that the male *E. lineata* showed no parental affection towards the chicks, whereas the males of *E. chinensis* brood their offspring to the same extent as the females. *E. lineata*, as a rule, had three nests a year, and one pair hatched four broods in 1900. Young birds of this species can run at once, and resemble animated fluffy balls, about one inch in length. It is noted that the two forms interbreed freely, and newly-hatched chicks are intermediate between the two. The hybrids are perfectly fertile. The article under notice is accompanied by a good illustration from a drawing by Mr. H. Grönvold of "Newly-hatched Painted Quails."

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BIRDS ON MARCUS ISLAND.—" A Monograph of Marcus Island," being an interesting account of its physical features and geology, with descriptions of the flora and fauna of a mid-ocean islet, by Mr. Wm. Alanson Bryan, B.Sc., has been issued in pamphlet form "From the Occasional Papers of the Bernice Pauahi Bishop Museum (Honolulu), vol. ii., No. 1, 1903." The island, which is an ancient triangular-shaped atoll with an estimated area of 740 acres, between 60 and 70 feet above sea level in its highest part, and densely scrubbed, is situated in the North Pacific, 4,500 miles west by south from San Francisco, or about 1,200 south-east of Yokohama. For a time it was disputed territory between the Governments of the United States and Japan, but by amicable agreement it was left to America. The Japanese used it as a "birding" station, the Americans for its

guano deposits. The pages of the pamphlet devoted to "Aves" are particularly interesting to Australians, 10 or 12 familiar sea birds or Waders being mentioned, the field notes on the Sooty Tern (Sterna fuliginosa), Noddy (Anous stolidus), Red-tailed Tropic-Bird (Phaeton rubricauda), and Frigate-Bird (Fregata aquila) being specially entertaining. The pleasant reading of the pages is interrupted by a doleful note of a by-gone bird colony. In referring to a fine Albatross (Diomedia immutabilis) Mr. Bryan states: - "The story of the Marcus Island colony of Goonies (Albatrosses) is one of death and extermination. beginning of the operations of the Japanese company on the island Goonies were fairly abundant. Not being able to find guano by their crude methods, they developed a scheme whereby they were able to make a marketable commodity by killing the birds and boiling them down in great kettles. The resultant, consisting of the flesh, bones, and viscera, was barrelled and shipped to Japan, where it was used as a fertilizer. The long wing feathers of all the birds were pulled out and carefully

preserved to be shipped to America and Europe and sold as 'Eagle feathers,' which were in great demand for trimming on ladies' hats. The feathers from the breast were plucked off and sold by the pound. A profitable business was thus developed, with the deplorable result that within six years the entire colony of these splendid birds has been exterminated."

## Review.

The Australian Museum Special Catalogue (No. 1), "Nests and Eggs," by Alfred J. North, C.M.Z.S., &c., &c., has reached its fourth part, which deals with the genus *Malurus* and the families *Turdidæ*, *Sylviidæ*, and *Timeliidæ*, including in all 80 species.

Probably the unfortunate ill-health of the author may have somewhat delayed the publication of the present part, which concludes vol. i. of the work. (It is to be regretted that, in consequence of the inadequacy of funds, Mr. R. Etheridge, jun., the Curator, has announced it will be some time before a further instalment can be issued.)

The work continues its high standard of excellence as regards both typography and plates. The sketches of the birds by the late Mr. N. Cayley are noticeably artistic. The letterpress indicates not only much original work, but patient research among the literature and the collections of others. The pages (311-316) referring to the cave-dwelling Rock-Warbler (Origma rubricata), mostly from Mr. North's personal observations, are exceedingly interesting, and their value is enhanced by plates of "Nesting Haunts of the Rock-Warbler" and "Nest of Rock-Warbler (in situ)" from photos. taken by the author himself.

Notwithstanding all this excellence, as an up-to-date reference the work is faulty. Reading between the lines one cannot fail to notice how skilfully the author has avoided references to the useful labours of certain contemporary authors. If, as a "Special Catalogue," the data of many species are not up to date, the value of the work in this aspect must suffer severely.

To begin with the beautiful genus *Malurus*—it does not signify whether we call these charming little birds Superb Warblers or Wrens. Australians—students or tyros—will read their histories with genuine delight. The author, with his intense love for "priority," goes back to 1782, and states that *M. cyaneus* (Ellis), a specific name hitherto (for more than half a century) attributed to the familiar Blue Wren of the mainland, must now be restricted to the Tasmanian species, while the former is to be known as *M. superbus* of Shaw, 1790. But, as the author of the "Special Catalogue" is such a "stickler" for priority it is all the more imcomprehensible why he has ignored the following references to other *Maluri*, and has suppressed all more recent knowledge of a large and distinct Blue Wren (*M. elizabethæ*) from King

Island, Bass Strait, figured in a coloured plate (No. X.) of The Emu, vol. ii. (1902-3), which species was previously described in The Ibis, p. 10 (1901). Against the name M. leucopterus (White-winged Wren) the author has placed a query, and states :-"The accompanying remarks apply to the birds figured and described by Gould in his folio edition of 'The Birds of Australia,' vol. iii., part 25. With that writer, however, I agree in questioning very much the propriety of referring them to the Malurus leucopterus of Quoy and Gaimard." Would it have not been well to refer to the specimens of black Malurus with white wings in the Western Australian Museum, one of which was figured in The Emu, vol. i., plate vi. (1901-2), together with a copy of the drawing by Quoy and Gaimard of M. leucopterus. Mr. North, without committing himself, could have ventured an opinion whether he thought it was a rediscovery of Quoy and Gaimard's species or a new bird, M. edouardi, as described in the Victorian Naturalist, p. 203 (1901). Had Mr. North already not drawn attention to it (vide Rec. Aust. Mus., vol. iv., pp. 209, 210)? If, as he has stated in the paper cited, the black and white birds are the real leucopterus (Q. and Gaim.), the blue and white bird should have been called cyanotis (Gould). In a coloured plate (X.) in The Emu, vol. ii., was figured for the first time a species of Mr. North's own creation, M. assimilis, and yet, although he has given references for all plates of the other Maluri mentioned by him he has not noticed the plate of M. assimilis. Is this because there appears on the same plate two other new *Maluri*, the work of a contemporary? No less an authority than Dr. Bowdler Sharpe considers M. elizabethæ (Campbell) and M. whitei (Campbell) to be good species (vide Emu, vol. ii., p. 230). Regarding the rare M. pulcherrimus, notwithstanding there have been three mounted and "exhibited in the bird galleries (of the Australian Museum) in the main hall for the past thirty years" (p. 224), the author dismisses the beautiful species with very brief remarks. It seems unfair that he should not have, even if only by way of addendum, quoted the honorary ornithologist to the Western Australian Museum, Mr. A. W. Milligan's, more recent interesting, if not critical, notes as given in The Emu, vol. iii., pp. 14, 15 (1903), where also appears a fine photo.-plate (No. III.), depicting the country frequented by these birds.

In the Proc. of the Roy. Soc. S.A., vol. xxii., p. 176 (1898), Mr. G. A. Keartland mentions finding the Emu-Wren in North-West Australia. Mr. North does not give that locality as a habitat of *Stipiturus malachurus*. Probably he considers that the species seen by Mr. Keartland must have been the Rufouscrowned Emu-Wren (S. ruficeps, Campbell), belonging to that district, which was figured in *The Ibis*, plate vii. (1899), but which has been ignored by the author of the "Special Catalogue." But the excuse for the omission may be that its "nest and eggs" have not yet been discovered; nor have the nest and eggs of Mr.

North's Desert-Bird (*Eremiornis carteri*) "a beautiful coloured plate" of which also appeared in *The Ibis*, part xiv. (1902), from the same locality, and mentioned at length in Mr. North's work.

The chapter on the curious Bristle-Birds (Sphenuræ) is very interesting. But there is no mention of Mr. Milligan's S. littoralis, discovered by himself in South-Western Australia, and described in The Emu, vol. i., p. 67 (1902). This new species has been recognized by the British Museum (see Sharpe's "Hand-

List of Birds," but not by the Australian Museum.

The remarks on the various tiny Tits (Acanthizæ), or Thornbills, as they are termed, are very complete so far as they go. While for A. ewingi the author furnishes his own reference (Proc. Linn. Soc. N.S.W., 30th March, 1904) for the reinstatement of this long-lost species, he omits to refer to previous information regarding the reinstatement of the Tit by Colonel Legge (see "Some Rectification in Tasmanian Ornis," Emu, vol. iii., p. 179, 7th January, 1904), not to mention the "Proceedings of the Australasian Ornithologists' Union" in session at Hobart, November, 1903, when specimens of A. ewingi, in the flesh, were laid on the table for examination (Emu, vol. iii., p. 159).

Mr. North mentions having received A. ewingi in the flesh from Tasmania in March, 1902. Why he withheld this interesting information for two years, and till after the Hobart session of the Aust. O.U., is not explained. Re the extension of locality to Western Australia of A. tenuirostris, first chronicled by Mr. A. W. Milligan in The Emu, vol. iii., p. 68 (1903), instead of quoting this direct record Mr. North quotes second-hand part of a letter from Mr. A. Zietz (Adelaide Museum), who, writing to Mr. North, states:—"I have received here for examination from the Perth Museum an adult male of A. tenuirostris." When taking leave of the Acanthizas, on page 289, Mr. North rightly deprecates "encumbering the ornithological literature of many species with useless synonyms, which are neither flattering to the describers of them nor of interest to the student or general reader." But here is a genuine bit of "hair-splitting" by the author of the "Special Catalogue" himself. He proposes names for two new species on very doubtful grounds-viz., A. zietzi and A. mastersi; while he has missed three new species proposed by other authors-viz., A. magnirostris, Campbell (Emu, vol. ii., p. 202, April, 1903); A. robustirostris, Milligan (cf. vol. iii., p. 71, July, 1903); and A. pallida, Milligan (cf. vol. iii., p. 112, October, 1903).

It is difficult to find acceptable distinctive vernacular names for some of Australia's peculiar birds. There is some objection to the term "Thornbill" being applied to the Acanthizas, as the former is already applied in America to a number of Humming-Birds. "Squeaker," which is a vernacular for the Leaden Crow-Shrike (Strepera) in Western Australia, has been substituted for Xerophila, while "Spinetail" for the Orthonyx may be

confused with "Spinetail" for the Swift (Chætura).

Mr. North's "distributions" have been exceedingly carefully recorded, but he has inadvertently omitted Western Australia from the range of so common a bird as Megalurus gramineus (Grass-Bird), and New South Wales from the range of Calamanthus albiloris (fuliginosus).\* He has, however, endeavoured to appropriate priority of Sericornis magnirostris (Large-billed Scrub-Wren) for Victoria (compare Campbell's "Nests and Eggs," p. 247, 1900). Although Pomatorhinus ruficeps (Chestnutcrowned Chatterer) is found in North-Western Victoria, it has never been found south of "The Divide," as Mr. G. A. Keartland's field note indicates. P. superciliosus is evidently the species intended. Mr. Keartland, to whom Mr. North must be greatly indebted, has contributed quite a fund of field observations to the "Special Catalogue." Here is a very graphic, if not exciting, one on page 328, which might be entitled "Egg-collecting Under Difficulties." Writing about the Cinnamon-coloured Ground-Thrush (Cinclosoma cinnamomeum) of the great interior, Mr. Keartland states:—

"During the journey of the Calvert Exploring Expedition in Western Australia, I took my first clutch of these eggs, under rather peculiar circumstances. I was staying behind collecting, when Mr. C. F. Wells called out that he had discovered a nest of this Ground-Thrush containing two eggs. He offered to mind my camel whilst I waited for the return of the bird. My camel became restive, and Mr. Wells called me to 'Come on.' I secured the eggs; but the nest, which was simply a few acacia leaves placed in a slight depression under a low bush, fell to pieces on being lifted. I wrapped one egg in my handkerchief, and had placed it in the quart-pot on my saddle, when 'Warrior' (the camel) tried to get away. I mounted with the egg in one hand, my gun in the other, and the reins in my teeth. The camel bolted after the caravan, which was about a mile away on the opposite side of a boggy clay-pan. Instead of following the track, he tried a short cut, with the result that he floundered through the mud, and nearly lost his rider, but on nearing the team he became steady, and the eggs were safely packed."

## Notes and Notices.

Anent "Lighthouses and Bird Observations," and continuing Mr. Superintendent Johnston's reminiscences (from page 64) on King Island, he writes:—"A few years ago numbers of 'Grey Duck' visited us, appearing the end of December and leaving again in March. A peculiarity about these Ducks was that when shot at in the small lagoons they never rose, but fluttered ashore and took to the scrub, consequently a good dog scored against the gun. Early in January 12 of these Duck struck the Cape Wickham lantern as one bird. The keeper on watch got 8 on the balcony and 4 more were picked up at the base of the tower in the morning. Of late years they have been very scarce."

<sup>\*</sup> Rec. Aust. Mus., vol. iii., p. 14 (1897).