OCTOBER, 1875.

The monthly evening meeting was held on the 12th October, the Lord Bishop of Tasmania in the chair.

A. B. Crowther, Esq., who had previously been nominated by the council, was, after a ballot, declared duly elected as a Fellow of the Society.

The Secretary brought under notice the usual returns for the past month, viz. :—

1. Number of visitors to Museum, 1,194.
2. Ditto to Gardens, 3,532.
3. Time of leafing, flowering, etc., of a few standard plants in Botanic Gardens during September.
4. Plants received at Botanic Gardens.
5. Books and periodicals received.
6. Presentations to Museum and Library.

Metcorological Returns.

1. Hobart Town, from F. Abbott, Esq., table for September.
2. New Norfolk, from W. E. Shoobridge, Esq., ditto.
3. Mount Nelson, from Marine Board, ditto.
4. Swan Island, from ditto, table for August.
5. Port Arthur, from J. Coverdale, Esq., ditto.

The presentations were as follow :—

1. From Mr. King—A large Tiger Cat *(Dasyurus maculatus.)*
2. From Mr. J. G. Lindsay—Specimen of Lewin's Water Rail *(Rallus brachipus)*, caught in a garden at Launceston.
3. From Mr. R. B. Dyer—A Fish washed on shore at Battery Point.

With reference to this presentation Mr. ALLPORT said it was known as the "Frost Fish" *(Lepidotus caudatus)* in New Zealand, and derived its trivial name from the fact that numbers were frequently found on some of the beaches after a frosty night. It is said to be the best edible fish of New Zealand, being seldom sold at less than 2s. 6d. per lb. The specimen is the first recorded as found in this colony. [For description of the "Frost Fish" see "Catalogue of Fishes of New Zealand," by F. W. Hutton, F.G.S., pages 13 and 109, plate 3, fig. 19.]

4. From Mr. G. Peacock, Sorell—An albino variety of the common Pipit Lark *(Anthus Australis)*.
5. From Justin Browne, Esq.—A sample of virgin Olive Oil from a plantation at Adelaide.

[The great purity of this oil, and its freedom from any disagreeable taste or odour, were noticed by several of the members.]

Donations to Library :—

1. From the Royal University of Norway—"Contributions to Fauna of Norway," "On Giants' Caldrons," "On Egyptian Inscriptions," "List of Norwegian Insects."
2. From the Meteorological Department, India—Bengal Meteorological Reports, 1867 to 1874 ; ditto Administration ditto, 1870 to 1875 ; Report of Midnapore and Burdwan cyclone.
3. From His Highness the Maharajah of Travancore—"Magnetic Observations taken at Trevandrum and Augustia Malley Observatory," Vol. I., 4to.
4. From the Hon. J. Whyte, Esq., M.L.C.—A copy of Governor Collins's "History of the Colony of New South Wales, from its first settlement in January, 1788, to August, 1801," published in 1804, one vol. 4to.

The SECRETARY observed that presentations of this nature were most acceptable. Books of every kind bearing on the earlier history of this or of the neighbouring colonies were much wanted, and as the Society was

quite unable to procure them by purchase the liberality of such members as could present them would always be very gratefully acknowledged.

Attention having been called to the Herbarium recently arranged by the Rev. W. W. Spicer, of New Town, the following letter to the Secretary, from Mr. Spicer, was read :—

"Jutland, New Town,
"Oct. 9th, 1875.

"Dear Sir,—Some months ago I undertook to arrange and classify the collection of dried plants presented to the Royal Society by Dr. J. Milligan. My task being completed I now return the collection to the Museum. I found the specimens to be well preserved as regards freedom from mould and the ravages of insects ; but they were in a state of thorough disorder, the species being in many cases mingled together, and no care having been taken to keep them under their respective natural orders.

"The collection consists of 468 species and varieties, comprised in 244 genera and 69 orders (a small proportion this of the whole of our native Flora, which, as at present known, contains nearly 1000 species, ranged under about 420 genera and 93 orders), but the plants included in it have a special value, having had the advantage of passing under the inspection of Baron von Mueller, and many of them, I believe, having served as types to Hooker and Bentham, in working out the Flora of Tasmania and the Flora Australiensis. I should on this account propose that this collection of our indigenous plants, though small, be kept separate from all others ; any future additions being made supplementary to it. . I hope myself to add a good many before the end of the summer . . . . . But why should not an appeal be made to all who are interested in biological investigations to contribute to the Society what they can spare from their private collections ? Many, no doubt, would be glad to do so, for the sake of the scientific purposes involved, were their attention drawn to the subject. There are two or three botanists of note in the north of the island. A gentleman in Hobart Town has offered me a number of dried plants which have been for a long period in his house, and are of no service to him. I mention this circumstance as leading one to hope that other collections now hidden away in dusty closets might be brought to light, if it was known that the presentation of them to the Society would be acceptable. And if it was thought expedient to extend the appeal beyond the limits of Tasmania, I should imagine that Melbourne, Sydney, and New Zealand would be willing to aid us in forming a Herbarium more worthy of a Royal Society than the one we at present possess. Such an appeal, moreover, might be made to embrace other objects generally included in the desiderata of a Museum.

"In arranging Dr. Milligan's plants I have followed the scheme employed by Baron von Mueller in his "Census of the Plants of Tasmania, 1875 ;" and to a great extent, though not entirely, I have adopted his nomenclature. I have also placed within the upper cover of each fascicle that portion of the Census which relates to the orders contained in it, marking with a cross the species to be found therein, so that the student may ascertain at a glance the presence or absence of the plant he is in search of. I have been careful also to preserve the labels and other notes which I found in the original sheets. It has happened occasionally that the name I have bestowed differs from that given at first ; in such cases I have thought it better to leave the original title intact, and then future botanists can determine which is the more correct.

"With regard to the remaining botanical specimens in the museum, Mr. Roblin has brought them together, and I have given them a cursory examination. Speaking roughly the different collections (of which there are nearly thirty) amount to about 2000 species, of which some 1200 to

1500 are worth preserving. Many of these are valuable, while of others it may be said, the wonder is they ever found a lodging here at all! Not a few again, though well preserved have lost much of their value from the fact of their localities and other 'indicia' not having been preserved. · · · · · Taken as a whole I think that the following may probably be made available, viz.: 200 Tasmanian, 300 Australian, and 900 European.

"If the Society cares to have them arranged I shall be very happy to take the collections in hand, and to put them in what order I can.

"I remain, etc. etc.,

"W. W. SPICER."

The SECRETARY remarked that the letter had already been read before the Council, and the Council, fully recognising the great importance of the work done, had requested him to convey to Mr. Spicer their warmest thanks for his valuable services, and further to say that they most gladly accepted his very kind offer to classify and arrange the remaining plants in the museum. (General applause.)

The Rev. JULIAN WOODS observed that Mr. Spicer, whose reputation as a botanist required no comment, had laid the Society under a great obligation. The Society was now fortunate in having such a Herbarium, as it could be truly called a type collection—such a collection indeed as no other colonial society with which he was acquainted, possessed. He thought the suggestion thrown out as to an appeal for contributions of various kinds might be acted upon with great hopes of success. On former occasions he had spoken of the richness of the library in scientific works. There were some works however which might be advantageously exchanged. He had noticed in the Public Library a work which might thus perhaps be acquired, and which, though comparatively valueless where it is, would be an acquisition to our library. He referred to De Candolle's Prodromus.

The SECRETARY mentioned that his attention had been called to a paragraph in a recent Edinburgh paper which he thought was of sufficient interest to be brought before the Society as it referred to the apparently successful growth of the Blue Gum and other Australian trees as far North as the Isle of Arran, in the Frith of Clyde. Mr. Grant had suggested that the circumstances of the gum flourishing in such a latitude might be owing the local influence of the Gulf Stream. The writer says:—"This winter has been sufficiently severe, and having visited Arran this week I give you the result. The Blue Gum *(Eucalyptus globulus)* unhurt, but the leaves a good deal browned; two varieties of the Weeping gum unhurt, but the points of the twigs slightly nipped; the Beef Wood *(Casuarina equisetifolia)* a good deal nipped; *Acacia dealbata*, untouched; *Acacia melanoxylon*, slightly browned; *Accacia stricta*, slightly nipped; the great Australian bush fern *(Dicksonia antarctica)* untouched; the silvered Tree Fern of New Zealand untouched; the fine Australian Palm *(Corypha Australis)*, which grows in its native country to the height of fifty feet, untouched; a fine Myrtle *(Myrtus communis)* ten feet in height, untouched. Almost all these plants are standards. None of them had any protection save a few fern leaves around their roots."

E. C. NOWELL, Esq., the Government Statistician, read an elaborate and carefully prepared paper "On the Vital Statistics of Tasmania, with especial reference to the Mortality of Children."

The BISHOP expressed the great gratification with which he had listened to Mr. Nowell's paper. As a member of the Statistical Society of London, and a former secretary to the statistical section at one of the meetings of the British Association, he took great interest in statistics

in general; but the subject of the present paper was one which must be of importance to the community at large. His Lordship proceeded to comment upon several portions of the paper, especially in reference to the comparative number of children to adults in Tasmania, and in the other colonies, etc. The writings of Dr. Hall, and papers such as that before the meeting, might have very important results, as the question of making Hobart Town the naval station of the colonies may rest upon the proofs which we can give as to the salubrity of our climate.

Mr. Stephens doubted if, in the matter of the public health, 1875 was a desirable year for statistical purposes. He had never known so unhealthy a year throughout the island. Epidemics of various kinds were continually occurring in different localities. Possibly they might, to some extent, have been influenced by local circumstances, but the state of the weather, whether wet or dry, did not appear to have any influence, either in promoting their occurrence or otherwise.

Mr. Nowell had no doubt that local circumstances exercised great influence, and mentioned instances within his knowledge in which two cases of diphtheria had occurred in a family from imperfect drainage, and the health of the father had also suffered from the same cause.

Dr. Agnew knew the cases referred to by Mr. Nowell, and these were certainly not due to imperfect drainage. The father too had suffered from a mere local affection which could not have been induced by imperfect drainage. He had, however, been informed by Dr. Butler that the outbreak of diphtheria at Brighton was undoubtedly due to local causes. There, a great number of the inhabitants took their drinking water from a pool of the River Jordan (which was then not running) into which the drainage of many of the houses found its way from the high banks in the immediate vicinity; with this drainage of course human excreta and various other impurities were mixed.

Mr. Barnard had listened with great pleasure to the paper, but expressed the difficulty which he in common with every one must feel in commenting upon papers which dealt so largely with figures. He suggested that papers of this kind should be printed and circulated among the members before being read. By this means only could a proper discussion be obtained, as it was impossible when masses of figures were in question to deal with them without previous study. As to the death rate of the colony, it was worth noting that the very salubrity of our climate might affect it unfavourably, because many invalids, attracted by this very salubrity, come here in the last stage of illness, and thus the deaths were increased, although it was evident that the climate was not in fault. He thought that good use might be made of the paper by the Immigration Board if they would disseminate in proper quarters the valuable information it contained. It might assist in determining the selection of this port as a naval station, which was a matter of considerable importance, as the presence of ships of war would probably lead to the local expenditure of about a hundred thousand pounds annually.

Mr. Rule would only make one remark in reference to a point which had been casually alluded to during the discussion, viz., the establishment at Hobart Town of the naval station. No doubt in a pecuniary point of view this would be very beneficial, but he feared that morally speaking it would be anything but an advantage.

The Rev. Julian E. T. Woods read a paper by F. M. Bailey, Esq., of Brisbane, a corresponding member of the society, "On the Queensland Grasses."

The Bishop observed it was interesting to note that so many of our Tasmanian grasses were found in Queensland. The opinion of so competent an authority as the writer as to the great nutritive value of many of the

Queensland grasses might, perhaps, be acted on, and lead to the introduction of some of them to our own pastures. The fact of these grasses growing side by side in Queensland, would argue that they would do equally well in Tasmania. Some of those with very deep roots might be valuable as feed in summer time, when the shallow-rooted species were burned up and destroyed by the heat.

Mr. M. ALLPORT, in moving the usual vote of thanks for the papers and presentations, said that after the remarks of his Lordship, he (the mover) need not impress upon the meeting the value of the papers read, or the desirability of publishing them. But with regard to the presentations to the Museum, one called for special mention; namely, the presentation of time and skill by the Rev. W. W. Spicer, expended in the arranging our heretofore neglected botanical specimens. The society has been most fortunate in securing the services of Mr. Spicer in this direction; while the Rev. J. E. Tenison Woods has been devoting himself to our fossils and shells; thus rendering these collections of real service to those who wish to learn anything of our indigenous productions. The meeting should also remember, while thanking Mr. Bailey for his paper on Queensland Grasses, that the Society is in this case also indirectly indebted to Mr. Woods, as but for him the writer would not have been numbered amongst the corresponding members.

The vote having been passed, Mr. NOWELL and the Rev. J. E. T. WOODS returned thanks, the latter suggesting that in the future published lists of the Fellows, asterisks should be placed before the names of those who had furnished papers to the Society.

The suggestion was adopted by the meeting, and the proceedings then terminated.