WELLINGTON PHILOSOPHICAL SOCIETY.

FIRST MEETING: 12th June, 1889.

A. de B. Brandon, President, in the chair.

New Members.—E. Samuell, Robert Evenden, H. B. Vogel, and F. W. L. Kirk.

Inaugural address by the President, A. de B. Brandon, B.A.

ABSTRACT.

The President thanked the Society for the honour they had done him in electing him to the office of President, and promised that he would fulfil its duties to the best of his abilities. He referred feelingly to the death of Mr. James Coutts-Crawford, F.G.S., one of the original members of the Society, and to the great loss they sustained by the decease of such an able and energetic working member as Mr. Crawford had been. The Society on the 10th instant, he said, completed the twenty-first year of its incorporation with the New Zealand Institute; and he expressed a hope that as an adult it would continue to be as progressive as it had been in its youth. Members would shortly be asked to give their attention to the practical development of the scheme recently proposed by Mr. Maskell, the success of which would of course depend largely upon their exertions. There was, however, no reason to suppose that the result would not be in every way successful; and doubtless before long the medals of the Society would be regarded as prizes to be eagerly sought after. Vol. xxi. of the "Transactions of the New Zealand Institute" had just been published, and, as usual, the subjects dealt with ranged over a very wide field. Having referred in eulogistic terms to papers by Messrs. Maskell and Colenso, the President said,—A short paper on the Apteryx bulleri comes from the pen of Mr. R. Bowdler Sharpe, F.L.S., &c., in which he states that, during an examination of some skins of Apteryges in company with Sir Walter Buller, he became firmly convinced that the ordinary brown Apteryx of the North Island is certainly specifically distinct from the Apteryx australis of the South Island; and he was a little surprised to find, on going over the literature of the subject, that, notwithstanding a similar verdict on the part of such excellent naturalists as Sir James Hector, Sir Julius von Haast, Professor Hutton, Mr. Potts, and others, the North Island bird had not yet received a name. The author then proceeds to say that it has generally

gestion of Dr. Finsch, he names as A. bulleri what was heretofore known as A. mantelli. It is interesting to examine the literature of the subject now in the possession of this Society, to see whether Mr. Sharpe's assertion that the North Island kiwi has no name is founded on fact, and I will proceed to give you some extracts from papers which have from time to time been published in the "Transactions" and by the Geological Survey Department:—1868, "Transactions," vol. ii., p. 67: Mr. T. H. Potts writes, "No. 63, A. mantelli, Kiwi. This is usually known as the kiwi of the North Island." 1871, "Transactions," vol. iii., p. 52: Sir Walter Buller wrote,-

"On the 10th December, 1850, a series of specimens was exhibited before the Zoological Society of London, when Mr. Bartlett pointed out characters which, as he contended, established the existence of two species hitherto confounded under the specific name of Apteryx australis (Proc. Zool. Soc., 1850, p. 276). Mr. Bartlett stated, at this meeting, that, an Apteryx belonging to the late Dr. Mantell having been placed in his hands by that gentleman, he had remarked its dissimilarity to ordinary examples, and that after a careful comparison with a number of other specimens he had come to the conclusion that it was a new species. On comparing Dr. Mantell's bird, however, with the original specimen in the Earl of Derby's collection, he found that they were identical. He accordingly referred his supposed new species to Ap. australis, and distinguished the more common bird as Ap. mantelli—'a humble effort,' as he says, 'to commemorate the exertions of Walter Mantell, Esq., to whom we are indebted for so many valuable discoveries in the natural history of New Zealand.' The characters which distinguish it from Shaw's Ap. australis are—'its smaller size, its darker and more rufous colour, its longer tarsus which is scutellated in front, its shorter toes and claws which are horn-coloured, its smaller wings which have much stronger and thicker quills; and also in having long straggling hairs on

"Mr. Bartlett stated, further, that the Apteryx belonging to Dr. Mantell was collected by his son in Dusky Bay, whence the original bird, figured and described by Dr. Shaw, was also obtained, and that, so far as he had been able to ascertain, all the known specimens of Ap.

mantelli were from the North Island.

"In a 'Report on the Present State of our Knowledge of the Species "In a 'Report on the Present State of our Knowledge of the Species of Apteryx' by Drs. Sclater and Hochstetter, read at a meeting of the British Association in September, 1861, and published for general information in the New Zealand Gazette in May, 1862, the following observation occurs respecting Ap. australis: 'In fact, the species is so closely allied to the Ap. mantelli as to render it very desirable that further examples of it should be obtained, and a rigid examination instituted between the two. For the present, however, we must regard this form of Apteryx as belonging to the southern portion of the Middle Island.'

"Mr. Gould, in the Appendix to his 'Handbook to the Birds of Australia.' p. 568, retains the original name for this species. but remarks.

Australia,' p. 568, retains the original name for this species, but remarks, 'If Mr. Bartlett's view be correct, it is probable that the bird figured by

me is the one he has named Ap. mantelli.

"In my 'Essay on the Ornithology of New Zealand, 1865' ('Trans. N.Z. Inst.,' vol. i.), I stated that only two examples of Ap. australis had been recorded (those noticed above); but Dr. Otto Finsch, in his review of my essay ('Journal für Ornithologie,' 1867, p. 331), observes: 'Our knowledge of Ap. australis, Shaw, is not confined to the two examples referred to by Mr. Buller. The Leiden Museum possesses one also, and there is a very fine energine in the Imperial collection at Vienna.' there is a very fine specimen in the Imperial collection at Vienna.

"Never having seen the four examples of Ap. australis thus mentioned as existing in European collections, I cannot presume to offer any positive opinion respecting them; but having examined a large series of specimens in New Zealand, some forty in number, of all ages, and collected from all parts of the country, I have no hesitation in saying that (excluding, of course, the well-known Apteryx owenii) all of them are referable to one and the same species. Having also carefully inspected the drawings illustrative of the specific distinctions between Ap. australis and Ap. mantelli ('Proc. Zool. Soc.'), and examined the characters on which Mr. Bartlett grounded his new species, I am strongly of opinion that it will be found necessary to drop Apteryx mantelli as a species, and to refer all the examples thereof to the true Ap. australis."

1871, "Catalogue of the Birds of New Zealand," by Hutton, p. 23: "58. Apteryx australis. . . . Greyish-brown streaked with black, feathers soft to the touch. South Island and Chatham Islands (?). 59. Apteryx mantelli, Bart. Rufous-brown streaked with black, feathers barsh to the touch. North Island. Little Barrier Island." 1872. harsh to the touch. North Island, Little Barrier Island." 1872, "Transactions," vol. v., p. 194: Mr. Potts discusses Mr. Buller's views given in vol. iii., and writes, "We have no hesitation immaintaining that the plumage alone presents sufficiently marked characteristics for the retention of the two species;" and refers to the distinction pointed out by Captain Hutton. Mr. Potts then says, "The nut is cracked at a blow. The feathers which clothe the southern bird are produced into soft hair-like points; the hand passed over the plumage against the lay of the feathers encounters an almost downy softness; when compared with a similar test applied to the covering of A. mantelli it might be fairly so termed. The reason is obvious the feathers of the latter species are produced into hair-like points of almost bristly stubbornness. This contrast in the character of the plumage is distinguishable in the young state." 1874, "Transactions," vol. vi., p. 118: Sir Walter Buller writes on Apteryx mantelli as follows: "Dr. Finsch states that 'after careful and repeated examination' of several specimens from both islands he is unable to admit A. mantelli (of the North Island) to the rank of a distinct species; but he proposes to distinguish it from the South Island form as 'A. australis, var. mantelli, Bartl.' This opens up again the old quæstio vexata, 'What is a species?' The amount of difference necessary to constitute a 'species' in the generallyaccepted sense is not capable of definition, . . . and it is sufficient for my argument that Dr. Finsch recognizes constant characters in the North Island bird of a kind to distinguish it as a permanent 'variety.' may add that I had the satisfaction of submitting good specimens of Apteryx australis and Apteryx mantelli to Professor Newton, Dr. Sclater, Mr. Salvin, and Mr. Sharpe, all of whom were decidedly of opinion that the characters relied on were of sufficient importance to warrant the separation of the species." These extracts show beyond doubt that the brown kiwi of the North Island was known as A. mantelli, and the only question at issue was whether it was a species distinct from, or merely a variety of, Apteryx australis. Further, the characters now relied on as distinguishing A. mantelli as a species were known and recognized eighteen years ago, and Mr. Sharpe himself some fifteen years ago pronounced in favour of Apteryx mantelli, the brown kiwi of the North Island, being a separate species. He now comes to the same conclusion, and we can only hope that the change in name is made merely in the interests of science. To me it seems that the change in name is wholly unwarranted, and that Mr. Sharpe's proper course was to have confirmed his former opinion that A. mantelli was a distinct species. It may be suggested that the type-bird from which Mr. Bartlett established and described the species A. mantelli was in reality a variety of A. australis, and not a North Island kiwi; but in Sir Walter Buller's paper in vol. iii. we are informed that Mr. Bartlett had before him a series of specimens, and had also had an opportunity of examining the original typespecimens of A. australis, and there is no suggestion that any specimen of A. australis has been discovered which truly answers to the description of the A. mantelli of Bartlett. In any case, however, the general acquiescence of ornithologists for the last thirty years in assigning the name A. mantelli to the North Island kiwi should have been regarded by Mr. Sharpe as an authority, if not a positive direction, for retaining it when definitely separating the species. I cannot help expressing the opinion that Sir Walter Buller should not readily have allowed his judgment and skill as an ornithologist to be impeached, although the result of the impeachment is to add one more to the list of species in which his name will be handed down to posterity in a Latinized form. In naming their discoveries, explorers, scientific or otherwise, are at times capricious, and had any change of name been at all necessary a more euphonious and characteristic substitute for A. mantelli could have been devised than A. bulleri.—The President commended to the careful perusal of members Mr. Higginson's paper on "Sanitary Sewerage." The future of Wellington could not be foretold, but they all hoped and must assume that there would be a great increase of trade and population; and all works of a permanent nature ought to be constructed with a proper regard to such increase. Unfortunately, any great reform was often met with the objection which might be briefly put as "What we have got is good enough for us: let posterity look after itself." What now existed as sewerage might even be good enough for the present, but it certainly would not be enough for twenty years hence. He suggested, however, that immediate reform was necessary. The difficulty to the reformer lay in the ignorance of the average burgess of even elementary science. He would listen to what you had to say of the importance of reform, but you had an uncomfortable feeling that you might talk Greek to him with the same effect. This difficulty must be met by pressing the subject upon the people till they recognized its value; and he urged members of the Society, who were better able to appreciate the subject, to assist in doing that. In conclusion, the President said he had not ventured to give members a review of the history of science for the past year, but would do so at the end of his term of office.

Sir James Hector moved a hearty vote of thanks to the President for his address. He expressed the pleasure it gave him to find the younger members of the Society coming forward and taking their share in the work. Judging by the address which they had just heard, the Society would have no reason to regret having elected Mr. Brandon President. Touching the paper on the Apteryx, he was delighted to find legal acumen brought to bear on the mysteries of science. What the President had said would be read with great interest by naturalists, by some of whom, no doubt, it would be resented, although on the whole it would do good. Sir James went into the subject at length, and finally expressed an opinion that Mr. Sharpe was not right in his contention that the North Island kiwi had not previously been named, as, according to Gould, Mr. Bartlett had founded A. mantelli not on a specimen collected in the south by Mr. Mantell, as Mr. Sharpe suggests, but on an undescribed and unnamed specimen from the North Island which he discovered in a private collection in England.

Mr. Chapman seconded the motion for a vote of thanks. He said that the kiwi in question was certainly known as "mantelli," and the reason given for the alteration was a mere quibble.

Mr. Maskell warmly supported the motion. With respect to the Apteryx bulleri, he thought it was a question whether in any future Latin dictionary schoolboys would not have to look out "Bulleri," and find it set down as a word identifying any bird, beast, or fish found in New Zealand. Sir Walter Buller had so many things attached to him, and had received so many evidences of the extreme appreciation of his Sovereign and

fellow-citizens, that he might have allowed Mr. Mantell the privilege of keeping this Apteryx. As to drainage, he doubted whether there was any prospect of Mr. Higginson's or any other scheme being adopted. There was a proposal for borrowing now before the city, but no scheme of drainage. He remarked that the smells in the city were certainly very bad.

The motion for a vote of thanks was carried unanimously.

The President thanked members for the vote just passed. Replying to Mr. Maskell, he said he had purposely abstained from mentioning any details of municipal politics, fearing that he might introduce discussion in the wrong place. It would be for Mr. Maskell, as a ratepayer, to examine the proposals put before the public, and see whether they were in accord with his views as a scientific man. If not, he must organize, and see that a proper scheme was brought forward.

A number of photographs exhibited by Mr. McKay, showing the effect of the earthquake of the 1st September last in the Amuri district, were explained by Sir James Hector.

Papers.—1. "On the Occurrence of Mitrasacme montana, var. helmsii," by T. Kirk, F.L.S. (Transactions, p. 445.)

2. "Description of a New Species of Chenopodium—C. buchanani," by T. Kirk, F.L.S. (Transactions, p. 446.)

SECOND MEETING: 10th July, 1889.

A. de B. Brandon, President, in the chair.

New Members.—T. Buckridge and E. Maxwell.

Papers.—1. "On an Entomological Tour on the Table-land of Mount Arthur," by G. V. Hudson, F.E.S. (Transactions, p. 179.)

A collection of the insects taken by the author, arranged according to the elevation at which they occurred, was shown, attention being directed to the gradual darkening in the coloration of the specimens with

the increase of altitude.

Sir James Hector considered that Mr. Hudson had broken new ground, and shown how interesting is the study of the natural history of well-selected areas. The Salisbury table-land was peculiarly interesting, being one of the few surviving remnants of the great plateau out of which the New Zealand mountains had been sculptured during the more recent Tertiary period. The existing fauna and flora now found in the valleys and on the mountain-slopes must have descended from the ancient forms that now inhabited the plateau. On a former occasion the Society had before them in that room the collection made by Mr. McKay of the moa-remains found on the surface of the same plateau-remnant, which included evidence of the nature of the food and mode of nidification of these extinct birds. In 1863 the speaker examined another such remnant of the ancient land-surface, which he named Pigeon Hill, inland from Jackson's Bay, and there found tracks which must have been beaten down through the almost impenetrable scrub-growth by heavy-bodied birds like the moa, and also excavations, which had evidently been resting-places. Small birds like kiwi, kakapo, and woodhen, by the constant use of these tracks had kept them open, though they