

ABSTRACT OF PROCEEDINGS, AUGUST, 1904.

PRESENCE OF H.I.M.S. LIGURIA'S OFFICERS.

The monthly meeting of the Royal Society of Tasmania was held in the Society's rooms on Tuesday evening, August 9, the Lieutenant-Governor, Sir John Dodds, K.C.M.G., presiding. A party of officers of the Italian warship *Liguria* was present, in response to an invitation.

His Excellency, in opening the meeting, said:—Ladies and gentlemen,—As the members are aware, the Royal Society of Tasmania was the first scientific society of which her late Majesty, Queen Victoria, became patron in these southern lands. Its foundation was the work of that great Arctic explorer, Sir John Franklin, and it is fitting, therefore, that members of this society, having become aware that there is a distinguished gentleman, with his ship, in our port, and who has taken an active part in Arctic exploration (having reached a point nearer the North Pole than even Nansen), should accord him a hearty welcome to our shores. I therefore express, on your behalf, and on behalf of the citizens, the pleasure we all feel at his visit, and the gratification it affords members of this society at seeing present, at this meeting, gentlemen who are officers of that ship of the Royal Navy of Italy. I most cordially welcome them on behalf of the inhabitants of this State. I understand that the ordinary business of to-night will be curtailed somewhat, so that some Tasmanian views may be exhibited to our distinguished visitors. (Applause.)

The Secretary (Mr. Alex. Morton) read the following communication from the aide-de-camp to the Duc d'Abruzzi, commander of H.I.M.S. *Liguria*:—His Royal Highness desires me to express his hearty thanks to you, and to the members of the Royal Society of Tasmania, for your kind invitation, and his regret at being prevented attending the meeting. Some of the officers will be pleased to be present, and desire me to forward to you their kindest thanks for the invitation."

New Member.

The Rev. A. Brain, M.A. (St. George's), was balloted for, and unanimously elected a member of the society.

Federal Meteorology.

Mr. H. C. Kingsmill read a paper on federal meteorology. He said the meteorological department of the State had

survived a good many changes. Now that another change was in contemplation, namely, its transfer to the Commonwealth, he thought it opportune to bring the subject before the society, with the object of considering how the interests of this State, and of meteorology in general, were likely to be affected by the change. What was there to be transferred? He answered by first giving a history of what had been done. Meteorological observations in Tasmania were begun by Sir John Franklin, in 1840, who sent home for instruments, and Captain Ross arrived in Hobart in August, 1840, in command of the *Erebus*, an observatory was built near Government House, and instruments for magnetic observations, a transit instrument for obtaining the time, clocks, and meteorological instruments were set up. Lieut. Ray was put in charge of the observatory, which was called "Rossbank." There he took observations for eight years, Sir John Franklin, himself, helping in the magnetic observations. When the Imperial Government handed affairs over to representative government in Tasmania, the meteorological work was carried on by its members. Among those were Mr. Henry, at Tamar Heads; Mr. Belstead, Westbury; Mr. M. E. Shoobridge, New Norfolk; Dr. Storey, Swansea; and Mr. F. Abbott, Hobart. They established climatological records, from which the permanent characteristics of the climate could be obtained, rendering valuable service. Subsequently, at conferences in Sydney and Melbourne, it resulted in an intercolonial scheme of meteorological observation being formed. With regard to Tasmania, it was unanimously resolved, on the motion of Dr. Hector, now Sir Jas. Hector, that the evidence before the conference shows the paramount importance of obtaining the co-operation of Tasmania in Australasian meteorology, and Mr. Ellery was deputed to secure the co-operation of Tasmania, "being regarded as of the utmost importance in advancing our knowledge of the movement and behaviour of storms, and of meteorology generally, in this part of the world." The Hon. W. Moore, in 1881, replied, stating that his Government was desirous of aiding the proposed interchange of daily weather telegrams with the Australian colonies, and would pass, free of charge, over the land lines of telegraph, all such messages. As the result, Commander Shortt, after receiving a course of instruction at the Melbourne Observatory, was appointed meteorological observer for Tasmania. The premises in the military barracks, Hobart, where the Observatory

is still located, were then made available for the use of the meteorological observer. Under Captain Shortt, the work of the Observatory took shape in its present form. The work was of a threefold character. There was, first, what may be described as a climatological survey, a description of the permanent features of the climate. The materials for this were obtained from local observers all over the island, as well as from the records of the instrumental readings taken at the Observatory. There has been no lack of good observers, persons willing to devote time and trouble to this work, provided that they are encouraged by knowing that their labours are not thrown away, but are turned to good account by being properly edited. All that they require is some guidance, and to be provided with the requisite materials and instruments. A great deal has been said from time to time about advertising Tasmania. There is no more effective advertisement to put into the hands of intending investors, or settlers in the country, than well-prepared climatological statistics, and it must be remembered that there are a great many varieties of climate in this little island. The second division of the work was the interchange of telegrams with the other States, and the preparation and publication of weather forecasts. It will be easily seen that this branch of the meteorological service is brought into close relationship with the Post and Telegraph Department, and that the transfer of one to the Commonwealth almost necessarily involves that of the other. The Minister responsible for a Federal Meteorological Department would naturally be the Postmaster-General of the Commonwealth. The third branch of work at the Observatory was the time service. Captain Shortt had charge of all this work until his death in 1892, when H. C. Kingsmill was appointed his successor. In order that the Government might have expert advice regarding the whole of the work, astronomical as well as meteorological, Mr. Kingsmill recommended that the Government should obtain a report on the astronomical work from an officer of the Royal Navy, chosen by the admiral commanding the Australian squadron, and that the services of Mr. Wragge be asked for from the Queensland Government, to make a report on the meteorological portion of the work. These recommendations were approved, and carried into effect.

The astronomical report was made by Captain Purey-Cust, who spent a month at the Hobart Observatory, testing all the astronomical instruments, and checking the calculations of the Government meteorologist. These calculations principally referred to the determination of the

meridian of the transit instrument, by means of observations of the Southern Pole star. This piece of work is done in Northern observatories by the North Pole star. It may be interesting to some of the members of this society to know that we have in the Southern Hemisphere a Pole Star, which is much nearer to the Pole than the celebrated North Star, although being of the sixth magnitude, it is not visible to the naked eye. Captain Cust's report was made a Parliamentary paper. It contains much valuable information respecting the conditions necessary for maintaining the time service with the degree of accuracy necessary for the guidance of shipping. The following is an extract from his letter to Sir Edward Braddon, Premier, June 14, 1894:—"The question of the correct time signals by the dropping of the ball is of extreme importance to the shipping world. . . . At present, I am confident that the time is ascertained at the Observatory with the requisite accuracy, but with the numerous defects of the small transit instrument alluded to in my report, it requires constant and very careful management. . . . I should like to suggest another important subject for shipping, namely, a daily reliable weather forecast. I believe that all the meteorologists in the colonies attach the greatest importance to the Tasmanian observations, Tasmania forming the extreme outpost to the southward of Australia." In May, 1895, Mr. Wragge obtained leave from the Queensland Government to visit Tasmania. He remained here for two months, and suggested many improvements in the organisation of the service, for which Parliament provided a portion of the necessary funds. An arrangement was also made for obtaining a daily weather forecast from Mr. Wragge for this State. He continued to send it with unfailing regularity for more than six years, at no cost whatever to Tasmania. When, through adverse circumstances, he was no longer able to continue sending, this portion of the work was undertaken, and is now carried on, by the local meteorologist. The advent of the Commonwealth has made a better organisation possible—such, for example, as exists in the United States of America, where there is a strong central weather bureau, which is in touch with the whole of that great country. The Americans are a practical people. They recognise that to be forewarned is to be forearmed, and in no country in the world is the expenditure on meteorology on such a liberal scale. For Australia, the cost of a central bureau need not exceed the cost of the efforts now made by each State separately, and it is to be hoped that the provision in the Commonwealth Constitution for bringing the State Observa-

tories under its wing will not be allowed to remain a dead letter. (Applause.)

Discussion on the paper was postponed till the next meeting.

Views of Tasmania.

Mr. J. W. Beattie then exhibited (mainly for the benefit of the Italian naval officers present) a magnificent lot of photographic slides of Tasmanian scenery, and which excited frequent applause on the part of all present. Mr. Nat. J. Hamman manipulated the lantern. The first picture was a portrait of Abel Tasman, who discovered Tasmania in 1642, and then his two ships, the Heemskirk and Zeehan, followed by beautiful views of Hobart, Brown's River, Huon-road, Huon district, Hartz Mountains, the Peninsula, New Norfolk, and the Upper Derwent the Lakes, and the Lakes country. West Coast, East Coast, and Launceston, ending with pictures of the last group of the Tasmanian aboriginals, King Billy and Truganinni.

The Mayor moved a vote of thanks to Mr. Beattie, who was not only a remarkably skilled photographer, but an artist—(applause)—and who had done more than any other one man to advertise Tasmania. (Applause.) He included in the vote of thanks Mr. Kingsmill, who had read an able paper.

The following letter, under date July 28, 1904, from the secretary of the Royal College of Surgeons of England, was read:—"Dear Sir,—In reply to your letter of the 27th of May, I am desired by the president to inform you that the skull of William Lannee, to which you refer, is not in the possession of this college. Some correspondence upon the subject took place with Dr. Crowther; and from his letters it appears that he intended to present the skull to this college, but that, owing to an agitation which arose in Tasmania regarding the disposal of the remains of William Lannee, he was obliged to give up the skull, of which he had obtained possession. The president accordingly much regrets that he is unable to comply with the request of the trustees of the Tasmanian Museum. If the skull had been in the museum of the college, the president would gladly have sent a cast, as requested, and would have been most pleased to receive in return the casts of the other Tasmanian aboriginals mentioned in your letter.—(Signed) J. Forrest Cowell, Secretary. To Alex. Morton, Director of the Tasmanian Museum."

The opinion was expressed last evening that in all probability the skull never

left Tasmania. It is to be hoped, therefore, that whoever has possession of it will hand it over to the Tasmanian Museum.

Eisenback Social Equality Theory.—Mr. Target and Mr. A. O. Green offered some remarks on the paper dealing with this subject, which was read some time ago by Mr. R. M. Johnston. Mr. R. M. Johnston briefly replied.

Federalisation of the Meteorological Department.—The next subject of discussion was Mr. H. C. Kingsmill's paper on this question, read at a previous meeting of the society. To facilitate discussion, Mr. Kingsmill briefly outlined the chief heads under which he had treated the subject in his paper. He was followed by Mr. Target, who pointed out the practical usefulness of meteorological observations. He concluded by moving that a deputation of the council of the society wait upon the hon. the Premier, and ask him to urge the Federal Government to take over the Meteorological Department, and, meantime, to take such steps as may be necessary to prevent its falling into disuse. Mr. A. O. Green also touched upon the practical importance of meteorology, and, further, pointed out that it would be very regrettable if any intermission in the meteorological records were allowed to occur. It was folly to reduce the department to a mere skeleton, just on the eve of handing it over to the Federal Government. He concluded by seconding the motion. The secretary, Mr. Alex. Morton, also spoke to the motion, and mentioned that captains of the large English steamers had frequently expressed the opinion that the time observations taken at Hobart were the most accurate with which they were acquainted. The Chairman supported the motion, which was carried unanimously.

The Secretary then read the following paper, prepared by Colonel W. V. Legge, R.A., entitled "Note on Stone Knives of the Tasmanian Aborigines—Found at Cullenwood Estate.": "These knives were found in a bank, or small tract of rising ground, about 100 yards from one of the broad, deep reaches of water which are characteristic of the Break o' Day River. The site was ploughed up somewhere about the year 1856, and since then has lain fallow. The specimens were discovered in digging post holes for a fence, and were from 8in. to 15in. beneath the surface. This depth may be accounted for on the sup-

position that they were turned under by the plough, and the depth being increased by the action of worms during the process of their workings, over a period of 50 years. The bank in question was, no doubt, a camping-ground of the East Coast tribes during the summer, and was used by them as a fishing station, where they captured their fish in the deep reach of the river, and procured the large fresh-water mussel so common on its banks. There are no flints about this bank; but around a smaller lagoon, half a mile distant, there are plenty of the same character as those found. Some years ago other specimens were found on a rising piece of ground, about half a mile to the south of this lagoon. The choice of these banks as camping-grounds may have been for safety purposes, so that a look-out could be maintained from them; but this theory is perhaps not very tenable, when we consider that there is supposed to have been but one tribe affecting this district. As winter resorts they would naturally have been chosen to avoid the severe frosts, which grip all low-lying flats on the Break o' Day plains with a band of iron. The sub-soil in the bank I write of consists of a remarkable brown clay, which has not been met with in any other part of the district, and a specimen of which is enclosed for the inspection of any geologist at the meeting."

Remarking on Colonel Legge's paper, Mr. R. M. Johnston stated that the Tasmanian natives derived a great part of their food from shell-fish, which in many cases accounted for the heaps of shells near the sea shore. The natives in all cases fed upon the kind of shell-fish which was most plentiful at any particular spot.

The secretary also read the following paper, which he had prepared, dealing with some Tasmanian aboriginal waddies, or throwing sticks:—

Since the last meeting I have had brought to me a very interesting ethnological specimen of a Tasmanian aboriginal waddy, or throwing stick. The Tasmanian aboriginal—the last aboriginal passing away in 1876—anything from an ethnological point relating to this now extinct race is always of more than ordinary interest. The only weapons used by the aborigines of Tasmania in fighting were the spear and the waddy. The waddy was a short piece of wood, about two feet long, seldom reaching to three feet, notched towards the grasp, and slightly rounded at the point, and was made of the tea-tree (*leptospermum*) and of the young wood of (*pittosporum* bicolor). For the specimen now exhibited the Museum is indebted to Mr. H. Stannard, of the Ouse, who on presenting it, informed me that a party, on digging a ditch in the Brown Marsh, near Lake Echo, came across, about three feet from the surface, three or four of these waddies. My theory as to how these waddies got in that position is that at some time this marsh was one of our lakes, and swarming with wild water fowl. The natives out hunting, throwing these waddies at the wild fowl, would, owing to the heavy nature of the wood, find them sink, many being lost in this way. In my opinion many of these very interesting throwing sticks may be found by careful observers. The thanks of the members of the society are due to Mr. Stannard for the presentation of this interesting relic of a now extinct race, and his promise to forward the other specimens to the Museum.

The secretary also read a paper prepared by W. D. Campbell, A.K.C., L.S., L.F.G.S., etc., Assistant Geologist, West Australia, entitled "Notes on the aboriginal dancing boards of Western Australia."

The motion was passed amid applause, and the meeting terminated.