

## AUGUST.

The usual monthly meeting was held on Tuesday, August 10th, Mr. T. Stephens, M.A., F.G.S., Vice-President, in the chair.

The SECRETARY (Mr. Morton) read apologies from Sir James Agnew Colonel Legge, and Messrs. James Barnard and A. G. Webster.

## ORIGINAL RESEARCHES.

The SECRETARY read a communication from the Royal Society, New South Wales, offering its medal and £25 for the best communication containing results of original research or observations upon scientific subjects, to be sent in by May 1, 1896, and May 1, 1897.

## TIMBER FOUND BENEATH ALLUVIAL DRIFT.

The SECRETARY read a paper by Colonel Legge, R.A., on "Timber found beneath Alluvial Drift at Swansea," abridged as follows:— Driving from Bicheno to Swansea travellers crossing the Lyne Sugar Loaf Range come suddenly in view of the large level tract of country lying south of the hills stretching from Cranbrook towards the ranges bounding St. Paul Valley on the east. This tract is mainly formed by the coast range, from St. Patrick Head to Bicheno, suddenly swerving inland at the latter place, and joining the highlands east of St. Paul, lying some distance from the East Coast. About Swansea the ranges approach the coast again, following the shore southwards. The country thus hemmed in is alluvial, forming what may be styled the basin of the Swan River, the Cygnet, and the Wye. On existing maps these mountain features scarcely appear. The surface of this basin is mostly level, with occasional gentle rises of about 100ft. The soil is chiefly dark chocolate, apparently the result of denudation and drift from the extensive valleys on the highlands at the back. On the Cambria estate, lying mainly at the foot of the "Lookout," locally the soil is rich and deep; and on that portion between the main road and Oyster Bay is an extensive lagoon, which seems in former times to have joined the Meredith River by an extinct water-course, visible in the form of a sinuous depression, on the course of which a deep dyke has recently been cut by Mr. Meredith to drain the lagoon. In its shallowest part this ditch attains a maximum depth of about 12ft., and it was at the bottom the log was found across the drain. The wood is almost black, like Irish "bog oak," resembling ebony in texture. When cutting the sawdust was very fine. From its appearance the wood is probably one of the eucalyptus; if so it throws an interesting light on the antiquity of this genus, as it must have been buried many thousands of years. Where the log was met with, the first 3ft. or 4ft. consisted of chocolate soil, merging into a yellowish clay loam, deepening again about 10ft. into peaty substance. Further up the dyke a thick bed of shingle, intermingled with stones of rounded form about as large as a mouse's head, took the place of clay. This was probably the bed, while the bottom, where the log was found, was no doubt muddy. Towards the lagoon the material excavated is dark peaty soil, continued to the edge of the necross. From the whole appearance of the surrounding land the alluvial deposit is one of great age, rendering the discovery of great interest, not only on account of its antiquity, but in connection with the capability of the particular species of tree to withstand decay throughout such a lengthened period.

Mr. R. M. JOHNSTON said he had examined the wood superficially; he would not, however, be prepared to say what it was unless by a microscopic examination. It was a highly lignified specimen, and he had met with similar woods on the West Coast. Woods of this kind commonly occur in drifts in other parts of the colony.



## THE FAN-TAILED CUCKOO IN TASMANIA.

The SECRETARY read the following paper, also by Colonel Legge, on finding of a fan-tailed cuckoo in Tasmania, in which it was stated that the writer observed a beautiful adult example of *Cuculus flabelliformis* (fantailed cuckoo) near Apsley, East Coast, the country passed through being gum, she-oak, and Oyster Bay pine bush; the cuckoo lodged on a branch by the road side, affording a good view of its plumage. Such a late occurrence of this migrant was worthy of record; it was improbable that it would winter here; for several summer visitants have been observed in this sheltered region late into the winter, and this cuckoo probably made a prolonged sojourn through the mild climate. *Cuculus flabelliformis* inhabits most parts of the continent, from Cape York to Victoria, and westward to West Australia, and far inland beyond the Murray. It arrived here about the end of September or beginning of July, and left at the end of March and throughout April. Mr. O. Adams saw one at Piper River on July 24, 1887.

## SOUTHERN STONE PLOVER.

The SECRETARY read some notes upon the discovery of the Southern stone plover (*Ædicnemus grallarius*) in Tasmania, in which he showed that the bird had a very wide distribution over the Australian Continent. The body is nearly the size of that of a hen pheasant, and the flesh of excellent eating. The habits of the bird resemble those found in Ceylon. It inhabits sandy plains, crowns and sides of grassy hills and flats, between the mountain ridges particularly. Occasionally it is met with in pairs, and sometimes in small flocks. It is shy, and runs with great rapidity, but when not inclined to fly it squats down on its legs by the side of a stone or log, and remains so close to it that it may be almost trod upon before rising. One of the birds was sent by Mr. McCluskey, Spring Bay, and the other by Mr. F. Morris, Swansea. The bird was excellent for the table, and he trusted it would increase and multiply. The plumage of the specimens submitted would seem to indicate that they were in too good a condition to have been blown over.

Mr. B. SHAW, who had shot over every inch of the country where the birds were taken, said he did not remember having ever heard of or seen the plover under discussion.

## PROOFS OF GLACIATION AT LOW LEVELS.

The SECRETARY, for Mr. T. B. Moore, F.R.G.S., read a paper on this subject, based on observations made by him on the King River, between Pine Cove and Strahan, where he found large ice-worn boulders striated and grooved in the deep gorge of the river near the upper landing. The boulders were composed principally of silurian sandstone; the planed surfaces, grooves, and striæ were fairly distinct, proving beyond doubt that the transportation of the boulders by ice was of very recent date.

Mr. R. M. JOHNSTON said on a future occasion he would take an opportunity to give his reasons for not accepting the conclusions arrived at by Mr. Moore. He read a few notes which he himself had made on discoveries of evidences of glaciation in Tasmania by geologists over 20 years ago.

## NEW GUINEA STONE ADZES.

The SECRETARY submitted six stone adzes, which, he said, were the finest specimens he had ever seen. They were of a kind of greenstone,



the heaviest being  $10\frac{3}{4}$  in. in length and  $10\frac{1}{2}$  in. in girth. The adzes were from the Fly River, New Guinea, and were presented to the Museum by the Rev. James Chalmers with other valuable and interesting ethnological specimens.

#### COMPLIMENTARY.

The CHAIRMAN, in moving the customary votes of thanks to the writers of the papers submitted, took the opportunity of commenting upon some of them. Regarding the specimen of wood submitted by Colonel Legge, he said he would not be at all surprised to find that it was some resinous sort of pine and not a eucalypti. The ornithological papers by Colonel Legge and Mr. Morton were most interesting to lovers of natural history. Mr. Moore also deserved the thanks of the Society for his paper, which was valuable, considered as the result of careful observations.

The meeting then concluded.