

By the south pole of the sun is to be understood that point on the sun's circumference, where a circle passing through the poles of the heavens and the sun's centre, intersects the sun's circumference on its southern side.

By the vertex of the sun, is to be understood that point of the sun's circumference, where a circle passing through the zenith of the place of observation and the sun's centre, intersects the circumference on its upper limb.

This latter is more easily understood by persons who may not have paid much attention to astronomical subjects.

All that is required for the purpose of observing this eclipse, is to note accurately the contact of the limbs, at beginning and ending, with a chronometer, whose error, or apparent or mean time at the place of observation, is very accurately known; and that the observer may not be fatigued with long watching, the times of these contacts, given in the commencement of this paper, may be relied on to within very small limits. For obvious reasons, the observation at the ending will be the most valuable and the most easily made. Telescopes of very high power are not required for the purpose.

J. H. K.

MINUTES OF THE TASMANIAN SOCIETY.

April 2, 1845.

READ a paper by the Rev. J. P. Gell "On the first Discovery of Tasmania by Tasman, in 1642." (Printed at page 321, vol. ii of the *Tasmanian Journal*.)

Lieut W. H. Breton, R.N., exhibited numerous specimens of a fossil *Isocardium?* found on Grass-tree-hill, near Richmond. Mr. Breton observed that the sandstone formation in which these shells occurred appeared on both sides of the summit of the hill, and that he had not found it in any other part of the colony. Some of the specimens were very large, and Mr. Breton stated that he had sent a number of them to the geological society of London.

The secretary read an extract from the address of the president of the Royal Geographical Society, on the progress of discovery in Australia.

A letter from Joseph Milligan, Esq. was read, wherein he de-

scribed some of the islands in Bass's Strait, more especially with reference to their geology.

Mr. R. C. Gunn exhibited a specimen of *greenstone* from the summit of Brady's Look-out, a conical hill on the top of the western mountains. This rock was highly magnetic, with polarity, and was a powerful loadstone—acting upon any common needle suspended by a thread.

May 7, 1845.

Lieutenant M. C. Friend, R.N., F.R.S., read a paper on an improved Pluviometer. (Printed at page 328, vol ii. of the *Tasmanian Journal*.)

Mr. James Grant produced thin sections of various kinds of wood cut by a machine made by himself. They seemed admirably cut for the purpose of microscopic examination, and to observe their structural character.

Dr. W. Paton drew attention to the fact that a severe frost which destroyed all the fruit in certain localities at Norfolk Plains for the last three years, happened about 1st November in each year.

C. S. Henty, Esq., observed that an old resident at George Town (Mr. Manifold) had informed him that a severe frost had occurred there every year, for the last twelve years, between the 1st and 9th December.

Mr. Ronald C. Gunn exhibited specimens of a fossil *Helix* from the (freshwater?) limestone at Risdon, near Hobart Town, where a second species is said to be occasionally found. The one now produced was abundant, and certainly did not appear to agree with any known existing shell in Tasmania; although the formation is usually considered a recent one, and is so described by Mr. J. B. Jukes at page 11, vol ii. of the *Tasmanian Journal*.

Specimens of Rock from Portland Bay and Mount Macedon, Port Phillip, were exhibited; as also a Varnish prepared from the resin of the *Xanthorrhæa arborea* (or largest grass-tree) dissolved in alcohol.

Some beautiful lithographic drawings of fossil teeth of the *Diprotodon* from Mount Macedon, Port Phillip, were shown. They were drawn on stone by Mr. G. A. Gilbert of Melbourne, from sketches by Mrs. E. C. Hobson, for the *Tasmanian Journal*.

June 4, 1845.

Mr. James Grant read a paper "On the structure and habits of *Thylacinus Harrisii*," being the first of a series on the Mammals of Tasmania.

The secretary drew the attention of the members to the very perfect list of all the mammalia of Australia, with their geographical distribution, by J. E. Grey, Esq., F.R.S., published in the

appendix to Captain Grey's Travels in North-west and Western Australia.

The secretary read an account of the Cider-tree of Tasmania (*Eucalyptus Gunnii*), published by Dr. J. D. Hooker in the *London Journal of Botany*, vol. iii. page 496.

The first four parts of Dr. Hooker's beautiful work, the *Flora Antarctica* were shown, and the descriptions of various new Tasmanian plants therein first described, noticed; viz., *Coprosma repens*, *Hook. fil.*, found on Lord Auckland's and Campbell's Islands. *Celmisia asteliaefolia*, *MSS.*, and *Richea pandanifolia*, *Hook. fil.*, supposed to be the largest of the natural family *Eparcrideæ*; specimens seen by Mr. R. C. Gunn west of Lake St. Clair, measuring $36\frac{1}{2}$ feet in height, without a branch.

Mr. Gunn mentioned that he had found recently on the summit of the western mountains a species of *Gaultheria* in fruit—which grew in clusters of a beautiful pink or rose colour—very distinct from *G. hispidia*. The present plant has creeping stems, grows usually six to nine inches high, covering patches of ground several feet in diameter. The leaves and stems are hispid; very similar in form, but smaller, than those of *G. hispidia*. This is the fourth species in *Ericææ* found in Tasmania.

An interesting case of that singular disease *Cyanosis* or *morbus cœruleus* was exhibited to the members, in the person of a boy aged twelve years. The disease was evidently owing to congenital malformation of the heart; the function of nutrition had been very imperfectly performed, his countenance was swollen and livid, and he showed a great deficiency in both physical and mental development.

Mr. James Grant exhibited a specimen of a curious Lamprey, (*Petromyzon?*), fifteen inches in length, from the Meander or Western River, with a large bag under the mouth. This species appears to have been hitherto undescribed. It is stated to be also found in the other rivers of the colony.