Commander Shortt's instruments were placed, and did not think they could ever give the normal state of the air. The verandah had a roof, and was enclosed on both sides. The instruments were against a weatherboard wall, and sheltered from the west and south-west; and altogether a more sheltered place could hardly be found, and the lowest temperature could not possibly be obtained.

Mr. JOHNSTON then read an elaborate and valuable paper, entitled 'General and Critical Observations on the Fishes of Tasmania, with a Classified Catalogue of all the known species." The time was too limited to admit of more than the first two divisions of the subject being read, and the remainder, including the classified catalogue, was deferred until the next monthly meeting. Discussion on the portion read was also deferred until a future occasion, in order to admit of its being printed and circulated.

The usual vote of thanks was accorded to the contributors to the Museum, and also to the authors of the papers read.

SEPTEMBER, 1882.

The monthly meeting of the Society was held on Monday, the 11th September; Mr. T. Stephens, V.P., in the chair.

The following gentlemen, who had previously been nominated by the Council, were balloted for, and declared duly elected as honorary Members of the Society, viz.:—Baron Ferd. von Müeller, K.C M.G., M.D., F.R.S., Government Botanist of Victoria; and the Rev. J. E. Tenison-Woods, F.L.S., F.G.S., F.R.G.S., etc., etc.

The Hon. Secretary (Mr. BARNARD) laid before the meeting the following returns for the month of August :—

1. Number of visitors to Museum—On Sundays, 1,012; on week days, 666; total, 1,678.
2. Do. to Gardens—Total, 4,192.
3. Plants received at Gardens : —From Messrs. Shepherd and Co., Sydney, 16 plants. From Messrs. Vilmorin and Co., Paris, a general collection of flower and shrub seeds. From Mr. W. R. Guilfoyle, Director of Botanic Gardens, Melbourne, seeds of Pinus Australis (the Georgia Pitch pine). From Professor McOwen, Cape Town Botanic Gardens, sods of Disa grandiflora, a magnificent Orchid from the Table Mountain, in good condition.
4. Books and periodicals received.
5. Presentations to Museum.

Meteorological Returns.

1. Hobart, from Captain Shortt. Table of observations for August. Registers of rainfall at various stations through the colony.
2. From the Marine Board. Monthly tables from Mount Nelson for August; Swan Island for May; Goose Island for June and July; and King's Island from February to July inclusive.

Time of leafing, flowering, etc., of a few standard plants in the Botanic Gardens during August :—

20th. Sambucus niger commencing to break.
24th. Horsechestnuts do.
28th. Gooseberries do.
28th. Elm commencing to flower.
29th. Poplar commencing to break.
30th. Apricots commencing to flower.

Results of the Hobart observations :—

Barometer.—Mean for month, 29·836in.

Thermometer.—Mean, Max., 52·2 deg.; Min., 40·7deg.; Dry Bulb, 48·1deg Wet Bulb, 45·6deg.

Humidity.—Dew Point, 42·9deg.; Elastic Force of Vapour, ·276; Humidity, ·821.

Condensation.—Number of days on which rain fell, 12; amount collected, 4·82in.

Clouds.—Mean daily amount, 6 (scale 0-10).

Wind.—Prevailing direction, South and N.W. Mean force, 1·4 (scale, 0-12).

Remarks.—Rain on 12 days. The heaviest fall, registered at 9 a.m. on the 9th, was 1·48in. Highest temperature in the shade, 60·8deg. on the 25th; the lowest, 33·6deg., on the night of the 10th. Light and variable winds prevailed during the month, with a few squally days. Thick fogs at beginning of month. Heavy rain during the first eight days, 4½in. having fallen in that time. Cloudy and damp throughout the month. The lowest reading of the Barometer, 29·233in., was at 3 p.m. of the 31st; and the highest, 30·209in., at 9 a.m. of the 27th.

A very large and brilliant meteor was observed at 7h. 10m. p.m. on the 5th.

Rainfall in Tasmania, August, 1882 :—

Hobart, rain fell on 12 days, amount 4·82in.

Southport, rain fell on 14 days, amount 3·23in.

Oatlands, rain fell on 15 days, amount 2·47in.

Falmouth, rain fell on 17 days, amount 4·91in.

Low Heads, rain fell on 18 days, amount 4·13in.

Circular Head, rain fell on 23 days, amount 4·12in.

Mount Bischoff, rain fell on 23 days, amount 4·52in.

Botanical Gardens, Hobart, rain fell on 14 days, amount 3·09in.

Strahan, Macquarie Harbour, rain fell on 26 days in July; amount collected, 6·62in.

Presentations to Museum :—

1. From Mr. A. Winter. Specimens of an albino variety of the Brush Kangaroo (*Halmaturus Bennettii*), mounted.
2. From Mr. W. Ritchie. Specimen of Asbestos, from Anderson's Creek.
3. From Mr. J. Simmons. Specimen of Lode Tin from the claim of the Lottah T.M. Co., Gould's Country.
4. From Mr. Lester. Specimen of Ruby Tin from the vicinity of the Heemskirk River.

In reference to the specimens of asbestos from the West Tamar, which were exhibited at the meeting, the CHAIRMAN remarked that it was to be regretted that this mineral had hitherto received little attention, though it had long been known to exist in the colony; indeed, the Asbestos Ranges derived their name from it in very early days, though, as Mr. Gould had pointed out, they were quite unconnected with the serpentine of the neighbourhood of Anderson's Creek, in which rock it occurs. There was one point in connection with this substance which was involved in some obscurity. The mineral known to manufacturers in the United States and elsewhere, and now largely used for sheathing boilers and steam pipes, for packing piston rods, and for general felting purposes, is the true asbestos classed by Von Cotta, Dana, and other mineralogists, among the anhydrous silicates of lime and magnesia, and is a fibrous variety of tremolite, or actinolite. The proper title of the West Tamar mineral is probably chrysotile, better known as picrolite, or Schiller asbestos, a fibrous variety of serpentine, which belongs to the hydrous silicates of magnesia. As far as one could judge from superficial examination, the fibre seemed to be of excellent quality, and it would be interesting to ascertain whether it is inferior in any essential point to the other asbestos, so far as regards the special purpose for which it is manufactured.

Mr. C. H. GRANT observed that there were many reasons why the article had not yet been exported in large quantities for manufacturing purposes. Asbestos was found in considerable abundance in many parts of the world, especially in Cornwall, Corsica, and the Austrian Alps; but the largest deposits he knew were situated near the banks of the St. Lawrence, and in the United States: there the fibres were of great length. He had not heard of two qualities, differing in chemical composition, being used in manufacture, but there were many varieties from the desiccated fibre of amianthus to the massive rock, and these necessarily differed to some extent in their chemical composition. The specimen on the table appeared similar to other deposits that he had seen, but not so white and silky as that from Cornwall and Hungary. Some very fine samples had been procured in Virginia, U.S. He understood that the mineral was found in large quantities on the West Tamar in veins 2ft. thick and upwards, of considerable length. That so obtained appeared to be a good merchantable article, as far as he could judge, comparing it with what he had previously seen. The bulk of the asbestos that had come under his notice was of much shorter fibre than in the samples on the table, it being arranged vertically in slabs of from half an inch to one inch in thickness, but he had been informed that fibres of only half an inch in length could now be worked into many useful products. It should be remembered that Tasmania is a long distance from the centres of manufacture, as compared with other localities where this mineral is found, and whence it could be obtained at a low price. It had only recently become in important demand, but now that it is coming into such general use there is a probability that a large market will be found for the Tasmanian article.

Mr. R. M. JOHNSTON said that he had found a variety of fibre and colour in asbestos according to its exposure to atmospheric influences. It was only possible to get the fibre, in its true state, in the solid rock. Mr. Davies, an authority on the subject, states that asbestos is only just coming into general use, and is found very useful for packing engine piston rods, etc., but dependent upon the length of fibre to be of value. All the Tasmanian asbestos that he had seen had very short fibre.

Mr. R. M. JOHNSTON read the second part of his paper on the Fishes of Tasmania, which will be concluded at the next evening meeting of the Society.

The CHAIRMAN said that at the last meeting of the Society mention was inadvertently omitted of a new addition to the *fauna* of Tasmania in the shape of two native rats—one constituting a new genus—which are described by Mr. Oldfield Thomas, F.Z.S., of the British Museum, in the "Annals of Natural History" for June, 1882. One was described from a specimen sent to the British Museum by the late Mr. Ronald Gunn, the other from specimens contributed by Mr. Augustus Simson. A paper on this branch of the Tasmanian *fauna* had been communicated by Mr. Petterd, and would probably have been read that evening, had time allowed.

Mr. JOHN SWAN remarked that about two years ago he obtained a specimen of a black rat, generally considered as a Tasmanian species, but, on reference to Gould's work, he found it to agree with the description of one previously known to exist in Western Australia, and not mentioned as occurring in Tasmania. He did not agree with the idea that rats of different colours could not belong to the same species, for he had observed two of these animals, which had their nest near his residence, one of them being similar to the one above referred to, and the other of a much lighter colour. When at Deloraine a short time since, he saw a black rat killed, the colour of which induced no remark, being evidently regarded as nothing unusual.

A short discussion ensued, after which the usual vote of thanks was passed to the several donors to the Museum, and also to Mr. Johnston for his interesting paper.