Mr. E. J. Crouch, M.R.C.S., Eng., read a paper on "The Queen's Domain, with suggestions for its improvement."

A long and animated discussion, in which most of the Fellows present took part, followed the reading of this paper, and many valuable and practical suggestions were brought out. It was ultimately determined, on the motion of Mr. Barnard, seconded by Mr. James Grant, that a committee of this Society, consisting of Mr. Belbin, M.H.A., Mr. F. Abbott, Superintendent of the Botanic Gardens, Dr. E. L. Crowther, M.H.A., Captain Stanley, R.N., Mr. John Swan, Mr. Justin Browne, and Mr. E. J. Crouch, with power to add to their number, be formed to consider the subject in all its bearings, and to confer with the Government as to the best means of contributing to the improvement of the Domain.

The meeting closed with the usual vote of thanks to the authors of the various papers, and the donors of presentations to the Museum.

JULY, 1881.

The monthly evening meeting of the Society was held on Tuesday, the 12th of July; His Excellency, the President, in the chair.

Mr. W. F. Petterd, of Launceston, who had previously been nominated by the Council, was balloted for, and declared duly elected as a Fellow of the Society.

The hon. secretary, Mr. Barnard, brought forward the following returns for June :—

1. Number of visitors to Museum :—On Sundays, 374 ; on week days, 843 ; total, 1,217.
2. Do. to Gardens, 3,495.
3. Plants received at Botanic Gardens :—From Mr. J. Smith, Riddle's Creek, Victoria, 45 varieties of Fruit Trees. From the Horticultural Society's Gardens, Melbourne, one bundle new Fruit Scions. From Royal Gardens, Kew, England, one case of Willow Cuttings. From the Rev. — Codrington, Norfolk Island, one sack of Norfolk Island Pine Seeds.
4. Plants sent from Gardens :—To Rev. M. W. Gilleran, for church grounds, Ouse, 50 plants. To Right Rev. Bishop Murphy, 50 plants.
5. Books and Periodicals received.
6. Presentations to Museum.

Meteorological Returns :—

1. From the Marine Board, tables from Kent's Group Lighthouse for February, March, April, and May; Cape Wickham, do. ; Goose Island, do. for April and May ; Swan Island, do. for May ; Bruny Island, do. for June ; and Mount Nelson, do. do.
2. From Mr. D.C. Purdy, Macquarie Harbour, table for May.

Time of leafing, flowering, and fruiting of a few standard plants in the Botanic Gardens during June, 1881 :—

17th. *Maclaura aurantiaca,* commencing to shed leaves.
20th. Common Privet, ditto.
25th. *Iris alata,* commencing to flower.
28th. *Calycanthus præcox,* in flower.
30th. Black Mulberry, leaves all shed.

The presentations to the Museum were as follow :—

1. From Captain Rapp, barque Italy, Stalactites and Crystals of Carbonate of Lime, from a cavern at Hamelin Bay, West Australia.
2. From Master B. Watchorn, specimens of Tin Ore, etc., from Mounts Bischoff and Heemskirk.

3. From Mr. E. D. Swan, a Black Magpie *(Strepera arguta)*, mounted.
4. From Mr. W. Murray, Glenorchy, a Brown Trout *(Salmo fario)*, caught in the O'Brien's Bridge Rivulet.
5. From Mr. A. J. Taylor, cast of face of Lord Brougham.
6. From the Tasmanian Commissioners, Melbourne Exhibition, 1880-1 :
   A. From the Belgian Court, Melbourne Exhibition :--Samples of Cardboard ; two do. of Indigo ; one of Ultramarine ; four do. of manufactured Sulphur ; Iron Carriage, and Spiral Springs ; Specimens of Artificial Marble, samples of Tiles, Slate, etc.
   B. From the Victorian Court :—Two Cores from Diamond Drill from Stawell and Creswick, Victoria.
   Arsenical Pyrites, from 954 ft. level, Sandhurst (from Sandhurst School of Mines); Burnt Pyrites and Pyrites Tailings (from do.); Phacolyte, with Calcite (from do.) ; Lava Dyke Stone, associated with Garden Gully Reef (from do.)
   Iron Ore from Traralgon Creek (from do.)
   Do. from Dookie (from do.)
   Cobalt Ore, from Walhalla and Alexandra (from do.)
   Antimony, Sulphide and Oxide ; Antimony Regulus ; from Ringwood (from do.)
   Calcite, from Dookie (from do.)
   Lignite, from Lal Lal (from do.)
   Mammillated Sandstone (metamorphosed) ; the bounding rock of the Garden Gully Reef (from do.)
   Infusorial Earth, from Amherst (from do.)
   Crystal Sand, from Brighton Beach, Victoria.
   C. From the South Australian Court :—
   Pyrolusite, from Tangie, S.A.
   Bethangar Copper Ore, two specimens.
   Atacamite and Red Oxide of Copper, from Moonta Mine.
   Copper Pyrites, from do.
   Ditto, from Wallaroo Mine.
   Yellow Copper Ore, from do.
   Copper Pyrites, from Kurella Mine.
   Atacamite, Massive, from Moonta Mine.
   Borinite, from do.
   Peacock Copper Ore, from Moonta.
   Ingot of Smelted Copper, from Wallaroo.
   D. From New South Wales Court:—
   Kerosene Shale, from Hartley, N. S. Wales.
   Lignite, overlying do., N. S. W.
   Shale, from Tyer's River, do.
   Antimony Ore, do.
   Sulphide of Antimony, do.
   Asbestos, do.
   Ingot of Smelted Tin, N.S.W.
   Fibre, from Fiji.
   Coffee, from do.
   Seed of Sea Island Cotton, from do.
   E. From Tasmanian Court :—
   Polished Slab of Fossiliferous Limestone, from Bridgewater. Donor, Mr. E. Rayner.
   Ditto, from Maria Island. Donor, Mr. R. Robinson.
   Mineral Map of Tasmania.
   Serpentine, Polished Cube of, locality not stated.
   Two Photographic Views of Hobart, framed.

Library. From Mr. J. Barnard. Two copies of Baron von Mueller's work, entitled "Select Extra-Tropical Plants, suitable for Industrial Culture," for Library, and for the use of the Superintendent of the Botanic Gardens.

Mr. STEPHENS exhibited specimens of a paper-like material used in stereotyping at the office of the *Launceston Examiner*, and one from the establishment of the Hobart *Mercury*. This soft and flexible material has almost universally superseded the use of plaster moulds in stereotyping, and the sharpness of the type cast from it, when properly prepared, is quite remarkable.

Mr. NOWELL presented some tables which he had compiled with the assistance of Mr. Langworthy, showing the mean of the observations for the five years, 1871-5, taken at the lighthouses and other coast stations in Tasmania, and published by the Society ; and read some remarks upon the subject, with special reference to the winds in Bass' Straits and the climate of the West and North-West Coasts.

The CHAIRMAN remarked that he entirely agreed with the author as to the importance of multiplying registers of the rainfall, the simplest and easiest of all observations, and one which becomes very interesting for comparing different seasons. Probably the amount of rainfall has more to do with the agricultural or pastoral value of different districts than temperature or anything else ; and he had on a previous occasion advocated the employment of the masters of common schools, many of whom would no doubt be very willing to take charge of a rain-gauge, and perhaps of other instruments.

Captain STANLEY remarked that he thought there must be something wrong with the figures relating to the pressure of the wind. He believed that those adopted at the lighthouses were guessed by the observers, and not arrived at by the aid of anemometers. It was not the custom in the colonies to use Beaufort's scale. That in use was one common to all the Australasian colonies, and consisted in supposing that the wind ranged in force from 0 to 6, the figure 6 representing hurricane force. Beaufort's scale, or that in common use in the Royal Navy, supposed the force of the wind to be represented by figures, ranging from 0 to 12—0 representing a calm, and 12 a hurricane ; the intermediate figures were judged by the description and number of sails the ship would carry or might be happening to carry at the time, and in relation always to a well-conditioned man-of-war. As regarded private observations, great care would have to be taken by observers, and it would be necessary to know what kind of instruments were used. Aneroids were less trustworthy instruments than marine barometers ; their corrections varied according to their readings ; as, for instance, an aneroid might be perfectly correct when registering a height of 30·50, and much in error at a height of 29·50. This description of barometer would most likely be the one chosen by private observers, as being portable and simple. On board a man-of-war it was only used in conjunction with a marine barometer. With regard to the force of the wind observed at Mount Nelson and Kent's Group being so much lower than at other localities, he thought it might be owing to the fact that easterly winds, which blew during several months of the year, appeared to blow much stronger at sea level. He had noticed when employed in the survey of Bass' Strait that often he had been able to observe with a theodolite comfortably on the summit of a high hill when it was blowing a strong easterly wind at sea level ; in fact, the diminution of the force of the wind was quite noticeable during the ascent.

Mr. JUSTICE DOBSON thought it undesirable to publish any meteorological observations with the imprint of the Royal Society unless we were satisfied as to their accuracy. That Mr. Nowell's paper cast a doubt upon the accuracy of the instruments used. That these might be tested when the lighthouses were visited, by procuring a duly regulated barometer and thermometer of the Kew Standard, and by taking these instruments round and comparing with them those used at the lighthouses, the accuracy or errors of which would then be ascertained.

The CHAIRMAN remarked that he agreed very much with Mr. Justice

Dobson that it was not desirable to publish the observations taken at the lighthouses. The great value of these observations was to enable meteorologists to know the course of great atmospheric disturbances ; to give information to the Board of Trade and Marine Courts of Enquiry, and to meet exceptional occurrences ; but they are not, and cannot be, made sufficiently complete and accurate to have scientific value ; nor are the observers, however intelligent and willing, sufficiently instructed. There is great danger of adding to the masses of unreliable figures already before the world, which it is almost impossible to discriminate from the good data. At the same time, he thought the Society under an obligation to Mr. Nowell for taking the trouble to examine and adjust these returns, and hoped his remarks would not be taken as depreciating that gentleman's labour ; he could only deal with the figures furnished him.

Mr. Nowell was quite willing, as there appeared to be doubts as to the accuracy of the observations themselves, or of the instruments with which they were made, that the paper should not be published. His object would have been to some extent attained by directing attention to the subject, and by eliciting the information with which they had been favoured by the members who were present. Since he had come into that room he had casually taken up a publication, emanating from the Sydney Observatory, containing a large number of meteorological observations extending over several pages ; and on looking at the prefatory matter, he found that the work was done by the astronomer, with the aid of amateurs whose assistance he had solicited ; and the speaker suggested that something of the same kind might be done here. Meteorological observations had been taken at New Norfolk for a series of years by Mr. W. E. Shoobridge, but they had not been reduced. Work of this kind might, he thought, easily be done by organised co-operation among a few volunteers. He hoped that the discussion which had taken place would be the means of obtaining further information as to the climate of the West and North-west Coasts, a part of the colony which at the present time was exciting so much interest.

[Since the meeting the following interesting observations have been received from Mr. S. B. Emmett, of Circular Head :—" The annual fall of rain here is about 45in., in the most 69in., and least 33in. Mean range of thermometer, 57deg. at 9 a.m. Heaviest gales from N.W. during May, June, and July, always ending with thunder when the rain begins and the wind shifts. Thunder never heard (? when the wind blows from any quarter) from S.W. to E. Barometer rises from S.W. to E. and falls from N.E. to W. Thunder not heard with barometer above 29·60. For the gales from N.W. the barometer falls to 29 to 29·20 on an average. Once, twenty-five years ago, the barometer fell to 28·45. The storms here can be predicted at least 12 hours before greatest pressure. I have seen the barometer fall five-tenths in two hours."]

The proceedings closed with a vote of thanks to Mr. Nowell for his paper, and to the donors of presentations—special reference being made to the large number of specimens contributed by the Tasmanian Commissioners for the Melbourne Exhibition.

AUGUST, 1881.

The monthly evening meeting of the Society was held on Monday, the 8th August ; Mr. T. Stephens, M.A., F.G.S., in the chair.

The following persons were, on the nomination of the Council, unanimously elected honorary Members of the Society, viz. :—

1. Mrs. Charles Meredith, of Launceston, " in recognition of her long efforts to encourage the study of the Natural History of Tasmania, by illustrations both literary and pictorial, in her various and highly-popular publications."