

ABSTRACT OF PROCEEDINGS, SEPTEMBER, 1903.

The monthly meeting of the Royal Society of Tasmania was held on Monday, the 14th inst., the president (His Excellency Sir A. Elibank Havelock, G.C.S.I., etc.) presiding.

Election of New Members.

The following were elected Fellows of the Society:—Messrs. Robert Willmot, M.R.C.S., F.R.C.S., W. P. Henderson (of Port Esperance), and W. H. Bennett, M.H.A.

Greetings.

The Governor read the cablegrams which passed between the Governor-General of the Commonwealth and himself with reference to the Centenary of Tasmania, and expressed the hope that the society would permit them to be placed in the records of the society.

Presentations.

The Premier (Hon. W. B. Propsting), on behalf of the Government, presented the Governor with a copy of Mr. L. Rodway's new work on "Tasmanian Flora." He said he need hardly remind them that Mr. Rodway was one of the most scientific members of the Royal Society of Tasmania, and his book represented years of laborious scientific work, following in the footsteps of such famous botanists as Mr. Robert Brown and Sir Joseph Hooker.

His Excellency returned thanks. He said he would have great pleasure in reading the work, as he believed Mr. Rodway was probably the best authority on botany in this part of the world. (Cheers.)

Mr. R. M. Johnston referred to the early work of Mr. Ronald C. Gunn, Mr. Hannaford, and Sir Joseph Hooker. He said Mr. Rodway had completed the task begun by them, and had turned out one of the finest works on the botany of any province that had appeared. (Applause.)

Mr. L. Rodway thanked His Excellency, and the members of the society for the reception they had given his book. He wished to state that in its production he had received the greatest courtesy and assistance from the Government Printer and his staff.

Sir Elliot Lewis, on behalf of the executive committee, presented the Governor with an advance copy of the proceedings of the Australasian Association for the Advancement of Science at the annual meeting held at Hobart in 1902.

His Excellency accepted the volume with thanks.

Papers.

A paper by the Government Geologist (Mr. W. H. Twelvetrees, F.G.S.), dealing with a rock that had come under his ob-

servaion from Port Cygnet. The author said:—"The aptitude of the alkaline magmas for differentiation is illustrated by the feldspathoid rocks at Port Cygnet. The promontory at the regatta ground south of the jetty, consists of a central spur of elæolite syenite, varying into different kinds of alkali syenite. The margins are composed of the dark elæolite pyroxene rock, known as jacupirangite. This name was given by Derby in 1891 to a similar rock in Brazil, traversed by dykes of elæolite syenite. The Port Cygnet rock, the author pointed out, is a dark, medium grained rock, speckled with elæolite, and glistening with small brilliant crystals of augite. The respective quantities of augite and elæolite present do not differ much. The augite is green, apparently now titanite, the titanite acid in the rock residing principally in the sphene. In order of quantity, the minerals present are elæolite, augite, sphene, garnet, apatite, magnetite, and biotite. Its specific gravity is 2.89. Professor H. Rosenbusch, said the writer, in mentioning that this is a typical jacupirangite, says that search ought to be made in it for the rare mineral baddeleyite (dioxide of zirconium). At Port Cygnet it cannot be called a geological entity. It is not a dyke of later material invading the mass of syenite, but may rather be interpreted as resulting from differentiations by progressive crystallisation, the marginal parts of the cooling mass receiving concentrations of basic oxides, while the centre was left more acid."

Notes on Tasmanian Minerals.

Mr. W. F. Petterd, C.M.Z.S., who has contributed many important papers dealing with the minerals of Tasmania, has again placed a valuable contribution on record. The writer, in the opening remarks of his paper, says:—"The present paper records the more recent results of the continued investigation into the mineralogy of this State, from which it will be found that not only are several unrecorded localities enumerated for minerals which have been previously catalogued in former contributions on the subject to this Society, but also that no less than 13 species are now added to a remarkably long list. Two peculiar chemical varieties of well known substances are for the first time described, both of which are from one locality, and owe their unique features to a common cause. Several of the species are of special interest to the geologist, and a few are of commercial importance; but it may be needless to say that mineralogy

deals with a variety of substances usually placed under that particular branch of scientific investigation, irrespective of their individual intrinsic value, in fact, by far the major portion that interest the geologist, the chemist, and those in search of some of the most beautiful of nature's treasures. So much, says the author, is known of the mineralogy of this State, that the flood of discovery in this particular field is without doubt past, and it is only by the most strenuous efforts, coupled with close application, that additions to the minerals already known to occur can be made; but needless to say, as to peculiarities of occurrence and chemical analysis much remains to be done. The author wishes to place on record his grateful thanks to many friends for ready assistance as in the past, and generous donations of both beautiful and interesting material for this addendum, as well as for facilities for collecting, and opportunities for the examination of many minerals in situ. To Mr. R. W. F. Waller, general manager of the Magnet Silver Mining Co., who Mr. Petterd says is a most enthusiastic mineralogist, he is specially under obligation, both for collecting at his particular locality, and for assistance in the identification by the blow-pipe and other determinations. The paper then gives a detailed list and description of 31 species of minerals and their localities. The following is a list of the minerals dealt with by Mr. Petterd:—Albite (polysilicate of aluminium and sodium), Allophane (hydrate silicate of aluminium), Antimony (native), Apatite (phosphate of calcium) Aragonite (orthorhmic carbonate of calcium), Beresourite (chromate and

carbonate of lead), Cassiterite (dioxide of tin), Chalcophanite (hydrated manganese and zinc protoxide), Chrysoberyl (aluminate of beryllium), variety Alexandrite, Chromiferous Mimetite (arsenate of lead with chromic acid, Chromiferous Cerussite (lead carbonate with chromic acid), Dolomite (carbonate of magnesium and calcium), Diopside (metasilicate of calcium iron and manganese), Dufrenite (basic ferric phosphate), Embolite (Chlorobromide of silver), Felspar (polysilicates of aluminium potassium, etc.), Lanidine, Galenite (sulphate of lead), Gothite (Hydrous sesquioxide of iron), Hisingerite (hydrated ferric silicate), Hornblende (bisilicates of various protoxides and peroxides), Hixtrixite (sulphide of bismuth and antimony), Hyalite (hydrated silica), Hydrocerussite (basic lead carbonate), Lepidomelaine (potassium mica rich in iron), Phlogopite (magnesium mica with little iron), Pyrargyrite (silver sulph. antimonite), Restormelite (hydrous silicate of aluminium and iron), Silver Native, Turgite (Hydrous sesquioxide of iron), Xanthosiderite (hydrous sesquioxide of iron).

The East Coast.

Mr. J. W. Beattie exhibited over 130 views of interesting spots on the East Coast, and imparted some useful information regarding the early history of that part of Tasmania, and the attractions it now provides for holiday-makers.

On the motion of His Excellency, a hearty vote of thanks was awarded Messrs. Twelvetees, Petterd, and Beattie for their papers.