

## II.—MINERALOGICAL SOCIETY.

November 17, 1908.—Professor H. A. Miers, F.R.S., President, in the Chair.

On Mica from North Wales and Chlorite from Connemara; by Messrs. A. Hutchinson and W. Campbell Smith. A mica from Tan-y-bwlch, North Wales, is found in pale-green scales in quartz veins, and approximates closely in composition to the variety of muscovite known as sericite. A chloritic mineral from Recess occurs in transparent hexagonal plates in the quarry whence the Connemara marble is obtained. It is nearly uniaxial and positive, and was found on analysis to have the composition of penninite.—On the occurrence of the rare mineral Carminite in Cornwall; by Mr. Arthur Russell. This mineral, an arsenate of iron and lead, first found at Horhausen, Rhenish Prussia, and described by F. Sandberger in 1850, was discovered in Cornwall by the author in 1906. It occurs as carmine-red or brown needles on crystallized scorodite, mimetite, etc., from Hingston Down mine. This adds one more species to the already long list of rare minerals yielded by Cornwall.—Russian Universal Instruments and Methods; by Mr. T. V. Barker. Several of the universal instruments devised and kindly lent by Professor E. Fedoroff were exhibited and the method of working explained. Among the instruments described were: the hemisphere and graduated rotatory quartz compensator of Professor V. Nikitin, the stereographic rule, circle-ruler, graduated mica and quartz compensators, universal crystal mirror-models and globes, the micro-dichroscope, and the universal microscope-stage. The great utility of the latter was demonstrated by the actual determination (using a simple projection apparatus and screen) of the optical constants, twin-law, and chemical composition of a plagioclase twin. Methods of determining birefringence and the thickness of a section were discussed, and emphasis was laid on the special usefulness of the three-legged compasses in rapid calculations by graphical methods.—On the composition of the Chandakapur Meteoric Stone; by Messrs. H. E. Clarke and H. L. Bowman. This meteorite, which fell in India in 1838, is of chondritic type, with numerous chondrules of varying structure, and consists principally of olivine and bronzite, and about 5 per cent. of nickel-iron.

## CORRESPONDENCE.

## THE TYGERBERG ANTICLINE.

SIR,—I recently spent a week in the country between Prince Albert village and the east end of Tygerberg in order to see the evidence for the inverted fold said to exist there by Dr. Sandberg.<sup>1</sup> Without troubling you with details, which will be published in the Ann. Rep. Geol. Com. of Cape Colony for 1908, may I state briefly the results of my observations, as the question of the existence of

<sup>1</sup> See *GEOL. MAG.*, 1908, p. 311.

the fold has been raised in your pages? There seemed to me to be no room for doubt as to the anticlinal structure of Tygerberg; as Professor Schwarz points out,<sup>1</sup> such a structure is clearly seen, even in the section of which a photograph is given by Dr. Sandberg in support of his views. There are many sections through the range where clear evidence of the existence of the anticline is seen, and one can walk along the axis of the anticline with the beds dipping away on either side.

I could find no trace of the Witteberg Beds *in situ* in the Sand River Valley as required on Dr. Sandberg's view, and as inserted in his sections. On the other hand, the few outcrops there are of Ecca Beds, and the character of the valley is such as to make it extremely unlikely that the Witteberg Beds ever existed there above the present surface.

The masses of quartzite in the Dwyka area belong to the Dwyka Series itself; they are lenticular beds of quartzite such as have been described from that formation in other places on the south and west sides of the Karroo.

ARTHUR W. ROGERS.

GEOLOGICAL COMMISSION,  
SOUTH AFRICAN MUSEUM, CAPE TOWN.  
November 17, 1908.

#### BURNING CLIFFS.

SIR,—I recollect the burning cliff at Holworth. As a little boy I used to ride my pony often from Osmington to visit it. The fire was in the face of a part of the cliff that had slipped so as to form a pond at the back of it. It seems that a disturbance which admits some air and water to favour decomposition is the promoting cause of these occurrences. I have picked up pebbles of baked shale and cellular slag on the beach some twenty years after all traces of the fire had disappeared from the face of the cliff at Holworth.

O. FISHER.

GRAVELEY, HUNTINGDON.  
December 3, 1908.

#### FLINTS IN DENMARK.

SIR,—It is incredible that any Danish geologist can have intended to inform Mr. Sheppard that there was no flint in Denmark (see *GEOL. MAG.*, December, 1908, p. 575). Visitors to Copenhagen may have observed the English Church of St. Alban at the entrance to the well-known promenade, Lang Linie. The late Sir Arthur Blomfield told me that, when he was commissioned to build this church, he had some difficulty in finding a suitable stone, till it occurred to him to enquire, "Have you no flints in your Danish Chalk?" "Plenty," was the reply. Whereupon he adopted this local stone, almost unused before in that country, and raised a building that recalls to English visitors many a familiar church of Sussex, Hampshire, and Norfolk.

F. A. BATHER.

December 2, 1908.

<sup>1</sup> See *GEOL. MAG.*, 1907, "The Tygerberg Anticline," by Professor E. H. I. Schwarz, pp. 487-90, Pl. XXII; and 1908, p. 479.