VISIT TO MESSRS. FARMER & BRINDLEY'S MARBLE WORKS.

SATURDAY, MARCH 13TH, 1909.

Director: MR. WILLIAM BRINDLEY, F.G.S.

(*Report by* J. ALLEN HOWE, B.Sc., F.G.S.)

SOME fifty members of the Association assembled at Messrs. Farmer & Brindley's marble works, 63, Westminster Bridge Road, at 3 o'clock, when they were met by Mr. Brindley, who had very kindly consented to act as guide.

Since the last visit to these works, 17 years ago, there has been a great development in the employment of marble in all our large towns, and the prominent part played by Mr. Brindley in this movement by the re-discovery of ancient and long-lost marble localities, and by his keen quest for new varieties, is a matter of common knowledge.

The most striking object observed on entering the studios was a large mass of the rich purple-blue Canadian sodalite, a material in which the Princess of Wales took great interest and visited the mine when in Canada. On account of this association the stone is sometimes known in the trade as "Princess Blue." Another stone that evoked much interest was the large piece of fine green jade presented to their Royal Highnesses on the occasion of their visit to New Zealand. This was in process of being converted from the original rough boulder into a solid vase, 13 ins. high (without the base), 8 ins. wide, and 5 ins. thick in the centre. When finished, the vase will be mounted with ormolu fittings of English make, and will be a thing of great beauty and rarity.

A large number of examples of turning and other specimens had been spread out for inspection, including fine pieces of turnery in granite; some of the plates and tazzas of this intractable material were so thin as to be translucent. Here, too, were several slabs of vari-coloured labradorite, the largest known slab of pale green jadeite—supposed to have come from a temple in Burmah, rhodonite, Blue John from Castleton, Derbyshire, and green and purple fluorite from the Ardennes.

After examining these specimens, the various methods of cutting, rubbing, and polishing were noticed. Here were stones being cut on the same principle as that employed in the first marble mill in this country, the one at Ashford, near Bakewell in Derbyshire, in 1815; other newer devices were seen in operation, including a large diamond-charged slitting-wheel, and the large iron eccentric rubbing plates. Immense stocks of monolith

blocks of choice rare marble were seen in the yard ; those of *Verde Antico* from the ancient quarries in Thessaly were cut with a wire saw from the solid rock from which the monoliths in Santa Sophia, Constantinople, were extracted in the time of Justinian. Also large slabs of the *Breche Universelle*, a siliceous conglomerate of green and red jasper boulders, the quarries of which are in the Desert north-east of Luxor, on the Nile.

Then mounting the stairs to the "Museum," a bewildering variety of marbles met the eye. Here were beautiful examples of the rich red porphyry from Mons Porphyritus in Egypt; *Green porphyry* from near Sparta ; a number of varieties of *Verde Antico* Greek carystian cipollino from the ancient quarries of Stura, Greece ; varieties of *Rosso Antico* from Laconia, including a new bed, recently discovered and used in St. Mark's, Venice ; Campan marbles from the Pyrenees, and endless others. Mr. Brindley here pointed out examples of *cipollino* from buildings in Rome and Pompeii, illustrating the mellowing effect of time and exposure, whereby the cruder colouring of the raw new marble is softened and improved.

The party then passed through rooms full of ecclesiastical and monumental statuary, and through the oak-carving workshops, and finally entered the modelling studio, of historic interest, for here it was that Sowerby worked on his wonderful, but now almost forgotten, volumes on mineralogy and conchology.

The President then proposed a very hearty vote of thanks to Mr. Brindley for the trouble he had taken in arranging for the visit of the Association (the works being closed as a rule on Saturday afternoons), and for the lively and interesting discourse he had given.

EXCURSION TO HERTINGFORDBURY AND HERTFORD.

SATURDAY, MARCH 20TH, 1909.

Director : G. BARROW, F.G.S.

Excursion Secretary : A. C. YOUNG.

(*Report by THE DIRECTOR.*)

THE members left King's Cross by 1.15 train for Hertingfordbury, where they were joined by others, bringing their numbers up to 27.

Under the guidance of the manager, Mr. Knight, the large gravel pit near the station was visited first. The section at the
PROC. GEOL. ASSOC., VOL. XXI, PART 3, 1909.] 12