have weighed over 1000 pounds. It was cut in China and polished in Japan. The ball is now the property of the United States National Museum.

A second impression of the well known work "Petrographic Methods" by Arthur Holmes has recently been issued by Thomas Murby & Co., London. It was reprinted by the phototype process and because of this fact can be offered at a great reduction in price compared with the first edition. The cost of the first edition was 31/6d, while that of the second is only 15/–.

A new method of imbedding extremely fine mineral particles or ore samples in bakelite in preparation for microscopic study is described by R. E. Head and Morris Slavin in Technical Paper No. 10 of the United States Bureau of Mines. The twelve page pamphlet is entitled "A New Development in the Preparation of Briquetted Mineral Grains" and can be purchased from the Bureau for 15 cents.

Dr. E. L. Bruce, Miller Memorial Professor of Geology at Queen's University, Kingston, Canada, sailed on May 23rd to spend the summer chiefly in Finland.

PROCEEDINGS OF SOCIETIES

NEW YORK MINERALOGICAL CLUB

Minutes of the March Meeting.

A regular monthly meeting of the *New York Mineralogical Club* was called to order by President Herbert P. Whitlock at the American Museum of Natural History on the evening of March 19, 1930, with an attendance of 56.

Mr. John T. Gordon and Miss Gwynne Richards of New York City were elected to membership.

Dr. Kunz exhibited an unusually long (38 cms.) tapering crystal of colorless quartz from Brazil, and Mr. Grenzig showed a large "half-breed" of crystallized copper and silver from the Lake Superior district.

The speaker of the evening was Dr. W. F. Foshag, of the U. S. National Museum, who addressed the Club on "*Collecting Minerals in Mexico.*"

The rocks of Mexico are principally limestone of Comanchian and Cretaceous age, which are overlain in places by Tertiary lava flows, and underlain by granites. Most of the ore deposits (chiefly copper, silver, lead, and zinc ores) occur along faults in the central plateau region, and may be classified as veins, replacements in limestone, contact metamorphic deposits, and others. The replacements in limestone furnish the most constant supply of good mineral specimens.

The speaker described in detail a number of localities which he visited on a collecting trip a few years ago. Unusually fine specimens of wulfenite (with pyramidal habit), cerussite, anglesite, vanadinite, descloizite, pyrrhotite, gypsum (crystals up to six feet in length), hillebrandite, spurrite, and other minerals were obtained on this expedition. The places visited were illustrated by a large number of excellent lantern slides.

HORACE R. BLANK, *Secretary*

PHILADELPHIA MINERALOGICAL SOCIETY

Academy of Natural Sciences, Philadelphia, March 6th, 1930

A stated meeting of the *Philadelphia Mineralogical Society* was held on the above date, Mr. Toothaker presiding. Upon favorable recommendation of the Council, Dr. Leopold Pessel was elected a member of the Society.

Dr. George Frederick Kunz of New York City, was then introduced and gave an interesting address on "*Gems: Past, Present and Future*". Dr. Kunz first described gems used by the ancients and referred to the many legends and myths attached to gems in remote as well as in modern times. Diamonds and the diamond industry were discussed at some length and many interesting details were given on the art of cutting. He stated that stones as small as one six hundred thousandth of an ounce could be cut by present methods. The descriptions of his many experiences and anecdotes relating to his numerous trips to distant parts of the world held the interest of his audience. His early experiences in collecting specimens appealed strongly to the members of the Society. A large collection of colored slides and an exhibition of beautiful specimens from his personal collection added greatly to the pleasure of the evening. After a rising vote of thanks the meeting was adjourned with an attendance of 175.

LESTER W. STROCK, *Secretary*

Academy of Natural Sciences, Philadelphia, April 3rd, 1930

A stated meeting of the *Philadelphia Mineralogical Society*, was held on the above date with Mr. Toothaker in the chair. Mr. Henry Welkey was proposed for membership in the Society. Mr. Ernest G. Enck addressed the Society on "*Economic Uses of Rare Elements*".

The speaker described the sources, chief uses and future possibilities of the following elements: beryllium, titanium, zirconium, thorium, cerium, tantalum, tungsten, uranium, and molybdenum. He exhibited many specimens of the elements along with their salts and manufactured products in which the elements were used. Metalic zirconium was shown to be combustible by a demonstration with all lights turned out. The exhibition of tiles and porcelains which had been colored by the addition of titanium and cerium oxides was very striking as were also bricks and crucibles of zirconium oxide. He predicted that the rare minerals of to-day would be the common ones of the future and that the mineralogists were doing pioneer work by diligently seeking new localities for these minerals. Mr. Enck's talk was very much enjoyed by all present and an enthusiastic vote of thanks was given him by all present.

Mr. Samuel G. Gordon, of the Academy staff, was welcomed back after an extensive collecting trip in South America and Africa, he briefly outlined his travels in a few remarks but promised to give a detailed account of his experiences at the June meeting of the Society.

Messrs. Oldach and Cienkowski reported on recent trips to local quarries and several junior members showed some attractive finds of garnets and beryls in the Philadelphia district. The attendance was 48.

LESTER W. STROCK, *Secretary*

MINERALOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND

MINERALOGICAL SOCIETY, *March 18*.—Dr. G. T. Prior, President, in the chair.

PROFESSOR W. L. BRAGG, O.B.E., M.A., F.R.S., (Professor of Physics in the University of Manchester) delivered a lecture on the "*Structure of Silicates*". Illustrating the lecture by models and diagrams he demonstrated the principal results so-far achieved by his investigations of the structure of silicate minerals by means of x-rays.

W. CAMPBELL SMITH, *General Secretary*