## PROCEEDINGS OF SOCIETIES

## PHILADELPHIA MINERALOGICAL SOCIETY

The Academy of Natural Sciences of Philadelphia, March 7, 1935.

President Joseph L. Gillson presided at a stated meeting of the society, 42 members and 30 visitors being present.

Dr. Clarence S. Ross addressed the society on "The Clay Minerals and their Methods of Study" with lantern slide illustrations. He divided the clay minerals into two groups: the kaolinite group and the montmorillonite group. Clays are typical one-dimensional colloids, although a large proportion of the clay minerals in soils are not colloidal in size. All are platy in habit. They may be differentiated by their X-ray patterns. Dana gave species rank to amorphous allophane. The name mineraloids was proposed for such materials of no fixed composition.

Mr. M. C. Towns, a visitor, exhibited cut and uncut emerald from Colombia.

April 4, 1935

A stated meeting was held on this date, with Dr. Gillson in the chair; 130 members and visitors being present.

Mr. W. D. B. Motter Jr. talked on "Copper as mined by the Chile Exploration Company at Chuquicamata," illustrated with five reels of motion pictures. The orebody, the largest copper orebody in the world, is  $1\frac{3}{4}$  miles long,  $\frac{1}{4}$  mile wide, and 1900 feet thick. The principal minerals are brochantite, chalcanthite, atacamite, krohnkite, chalcocite, and enargite. There are reserves of a billion tons of ore, averaging 2% copper. Specimens were exhibited.

W. H. FLACK, secretary

Edward Salisbury Dana, Professor emeritus of physics at Yale University and honorary life fellow of the Mineralogical Society of America, died on June 16, in his eighty-sixth year.