which reaches 6 dm. in thickness in places. This biotite, where seen in place, contained round nodules of gray corundum, up to 500 grams in weight, streaked and spotted with deep blue; grass green nodules of fibrous actinolite, and disseminated perfect terminated crystals of black tourmaline up to 3 cm. in length. Masses of biotite loose on the quarry floor contain bladed black hornblende crystals and granular masses of black hornblende. Above the biotite is the great mass of reaction-rim plagioclase, granular in texture and grading in composition from anorthite next the biotite, to acid oligoclase nearest the gneiss. Within this layer, which is several dm. in thickness, are large masses of imperfectly crystallized black tourmaline. The plagioclase is separated from the gneiss by another thin band of bronzy biotite.

During an afternoon's visit there were obtained many good specimens of olivine (saxonite), anthophyllite, granular and crystallized hornblende, fibrous actinolite, biotite, corundum, vermiculite and plagioclase. The additional minerals villarsite, rutile, apatite, zoisite and allanite, mentioned from here by Emerson and others, were not found by the writer but may easily have been overlooked in the short time spent at the mine. The mineral collector in New England will find that a day spent at this locality is well invested.

### NOTES AND NEWS

A soft blue-white diamond weighing 388  $\frac{1}{4}$  carats has been found at the Jagersfontein mine, Orange River Colony. This promises to become one of the diamond fields' historic gems. It is said to be the largest stone unearthed since the Cullinan diamond was discovered in 1905. In the rough the latter weighed about 3,000 carats; the famous Koh-i-noor weighs about 100 carats. (Eng. and Min. J., 107, (5), 248, 1919.)

Sir Lazarus Fletcher, whose contributions to mineralogy are well known, retired from the directorship of the Natural History Museum, (London), under the age limit, on March 31.

The increase in the number of pages per issue of this magazine, forecasted in our January editorial, goes into effect this month. This has been made possible by generous financial assistance extended to us by friends, whose names we list here that subscribers may know to whom they are indebted for the additional reading matter thus made available to them:

Mr. Clarence S. Bement, of Philadelphia; Mr. Albert C. Burrage, of Boston; Dr. George F. Kunz, of New York; Mr. James G. Manchester, New York; Col. Washington A. Roebling, of Trenton; Mr. Gilman S. Stanton, of New York; and Col. William B. Thompson, New York. One additional page is to be devoted to our "Abstracts of mineralogic literature," enabling us to bring this department up to date more rapidly than has heretofore been possible, and to increase somewhat the average length of abstracts, thereby enhancing their usefulness. We will also be able to publish at least one full-page plate in every number. We are planning a number, to appear early next year, devoted to the application of the Goldschmidt twocircle goniometer to the study of crystals, and an appreciation of the contributions to science of Professor Victor Goldschmidt. We are glad to announce that the construction of these goniometers in this country is under consideration by a well-known firm of instrument-makers.

# PROCEEDINGS OF SOCIETIES

#### THE NEWARK MINERALOGICAL SOCIETY

The twenty-ninth regular meeting of the Newark Mineralogical Society was held on February 2, at the Newark Technical School, with Dr. Colton presiding and an attendance of 52 per cent. of our membership; there were also present three visitors.

After the usual routine of business, during which one application was favorably acted upon and two others received, one of our members, Mr. Schoonmaker, presented a paper on quartz inclusions, supplemented with a large array of specimens.

The presenting of papers by members has proved to be a great incentive towards bringing out the members. Last month Mr. A. C. Bates read a paper on quartz inclusions, and the month previous Mr. Holzman read a paper on the minerals of Chimney Rock, N. J., and Wm. H. Broadwell a paper on Paterson as a mineral locality. WM. H. BROADWELL, Secretary,

# THE PHILADELPHIA MINERALOGICAL SOCIETY

# Wagner Free Institute of Science, February 13, 1919

A stated meeting of The Philadelphia Mineralogical Society was held on the above date with the President, Dr. Leffmann, in the chair, and later, Mr. Trudell. Fifteen members and visitors were present.

Mr. J. C. Boyle and Mr. William Lee were elected active members.

Mr. R. J. Hagey addressed the society on "The rudiments of optical mineralogy." The movement of light in anisotropic media was described, and illustrated with sections projected on a screen, showing the various phenomena of interference and dispersion.

A vote of thanks was extended to Mr. Hagey for his interesting communication and exhibition. SAMUEL G. GORDON, Secretary.

#### THE MINERALOGICAL SOCIETY (LONDON)

#### January 14, 1919

Mr. W. Barlow, past-president, in the chair. A. Hutchinson: Stereoscopic lantern-slides of crystal pictures. The twin pictures are projected by means of a double lantern thru screens of complementary colors—red and green and are viewed thru similarly tinted screens, one for each eye. If the adjustment is correct, a black and white picture stands out in relief. The method admits of the properties of crystals and crystal structure being demonstrated