Dr. Hess then discussed in detail the uranium and vanadium deposits in the several formations found in the vicinity, beginning with the Shinarump conglomerate, which contains quantities of fragmental tree trunks and boulders in cross-bedded sand. Part of the sand is made up of asphaltite grains. This asphaltite carries both uranium and vanadium.

Dr. Hess also described the so-called "butter balls," which are small masses of very pure carnotite.

Dr. Hess described his discovery of several minerals, including rauvite, a purplish massive uranium and vanadium mineral, uvanite, a mineral which corresponds closely to carnotite without potassium. He also found torbernite (copper uranium vanadate), halotrichite (iron aluminum sulphate) and a little erythrite the cobalt bloom.

Dr. Hess then continued with a description of deposits found in the LaPlata sandstones, which lie above the Shinarump conglomerate stratographically. A thin, unevenly bedded limestone divides the formation into two parts and immediately below the limestone large flat lenses of the sandstone are cemented by the vanadium mica roscoelite, which gives them a dark green color. The lenses are enclosed within sandstone of a light green color, due to mariposite, the chromium-bearing muscocovite. Directly above the LaPlata formation is the Morrison formation, containing most of the carnotite deposits, which, from 1907 to 1920, furnished most of the world's radium. The deposits in all cases are found in the vicinity of plant remains in this formation. The commonest mineral in all the deposits is roscoelite, but instead of being greenish as in the rocks below, it is gray or black.

On the south side of Paradox Valley, near its head, masses of sandstone are colored black by the mineral vanoxite, which forms tiny prisms between the sand grains. At other places, the sandstone is impregnated with spots of carnotite and others of vanoxite, and such ore is known to the miners as "rattlesnake ore." No carnotite deposits are found in the Morrison formation without vegetal matter, except where they can be shown to have been moved by percolating waters. Dr. Hess called it a shallow inland sea, with organic matter which trapped the metals as they weathered from the old veins, of which even the roots have disappeared. The waters draining the slopes leading to the lake or sea reached the veins found in the rocks and carried small amounts of uranium, vanadium, pyrite, chalcopyrite, and other minerals down. The oxidation of sulphides would form sulphuric acid, which would dissolve the uranium and vanadium and carry them into the lake, probably accompanied by some selenides.

After Dr. Hess concluded his talk, a period of question and discussion followed, participated in by Mr. I. O. Lee, Dr. Blank, Mr. Allen, and Mr. Radu.

DANIEL T. O'CONNELL, *Secretary*

NEW MINERAL NAMES

Graebite

ALFRED TREIBS AND HERMANN STEINMETZ: Über das Vorkommen von Anthrachinon-Farbstoffen im Mineralreich (Graebeït), *Justus Liebigs Annal. Chem.*, vol. **506**, 171–195, 1933.

CHEMICAL COMPOSITION: A polyhydroxyanthraquinone, about $C_{18}H_{14}O_8$ or $C_{17}H_{14}O_8$. Analysis on pure orange red crystals (1.285 mgs.) C 55.71, H. 3.18. Soluble in chloroform and benzol-ligroin. M. P. 245°.

CRYSTALLOGRAPHICAL PROPERTIES: Small prisms with parallel extinction and pleochroic—parallel to the prism, weak, across the prism distinct red. After recrystallization from acetone prisms with inclined extinction result.

OPTICAL PROPERTIES: Color red, orange red after sublimation. Absorption spectra and fluorescence spectra given. Dyes wool.

OCCURRENCE: Found as red stains in blocks of shale bearing plant remains in a fault zone at Olsnitz, Saxony, at a depth of 291 meters. Believed to be a natural compound and not the remains of explosives or the effect of microorganisms on decaying mine timbers.

W.F.F.

NOMINATIONS FOR OFFICERS OF THE MINERALOGICAL SOCIETY OF AMERICA FOR 1935

The Council has nominated the following for officers of *The Mineralogical Society of America* for the year 1935:

PRESIDENT: Clarence S. Ross, United States Geological Survey, Washington, D. C.

VICE-PRESIDENT: J. Ellis Thomson, University of Toronto, Toronto, Ontario.

SECRETARY: Paul F. Kerr, Columbia University, New York City.

TREASURER: Waldemar T. Schaller, United States Geological Survey, Washington, D. C.

EDITOR: Walter F. Hunt, University of Michigan, Ann Arbor, Michigan.

COUNCILOR (1935–1938): John F. Schairer, Carnegie Institution, Washington, D. C.

The fifteenth annual meeting of the Society will be held December 27–29, 1934, at the University of Rochester, Rochester, New York. It is planned to publish in the December issue of the Journal a *preliminary* list of titles of papers to be presented before the Society at its annual meeting. In order to appear on the advance program, titles of papers should be in the hands of the Secretary by *November 10.*

PAUL F. KERR, *Secretary*

Correction

In the Memorial of Georges Friedel, by J. D. H. Donnay (*Am. Mineral.*, vol. **19,** pp. 329–335, 1934), page 331, lines 23 and 24, *instead of:* "on an allotropic transformation of diamond into graphite," *read:* "on an allotropic transformation at high temperature distinct from the transformation of diamond into graphite."