

the formula of Bahr and Bunsen, after the conversion of the oxides into sulphates :

$\text{Er}_2\text{O}_3 = 4.79 \text{ wt. oxides} - 2.33 \text{ wt. sulphates.}$

The absorption spectrum of erbium from one gram of the mineral in a solution 2 c. m. thick and 1 c. m. deep was so weak that only the band in the green was visible, being but little darker than the two dark Fraunhofer lines on each side.

In the notes in connection with the analyses given here as III and IV, Humpidge and Burney make the following remarks :

“The P_2O_5 (for the first time discovered in gadolinite,) is combined with cerium metals, for it remains undissolved on treatment with aqua regia. Xenotime could not be detected in thin sections, the whole appearing as a homogeneous, isotropic, green mass. The above analyses contradict the statement of Descloiseaux that the amorphous gadolinites are free from Be_2O_3 ”

It will be noticed in regard to this last statement, that my analyses lead to the same conclusion.

Dr. M. W. Iles gave an informal description of some recent inventions connected with lead smelting, illustrating the same by black-board sketches.

MISCELLANEOUS NOTES AND REMARKS.

Mr. Whitman Cross called attention to an article in the American Journal of Science, for September, 1885, by G. F. Kunz, describing some large pieces of meteoric iron from Glorietta Mountain, Santa Fe Co., New Mexico, and further stated that personal correspondence with Mr. Kunz had brought out the probable identity of the meteoric iron presented to the Society by Mr. Pearce and analyzed by Mr. Eakins, with this

from Glorieta Mountain. Mr. Kunz * had secured six fragments of this meteorite and knew of a seventh which was supposed to be the one now in possession of the Society. Prof. Wm. P. Headden spoke of a substance recently observed by him in coal, from the Mitchel mine, Erie, Col. This substance occurs in microscopic, tabular crystals belonging apparently to the rhombic system. The tablets are thin, colorless and transparent, with angles corresponding to those given for naphthaline. He had been unable to secure a sufficient quantity of pure material for chemical tests.

Mr. Iles suggested the determination of the substance by ascertaining its fusing point. Prof. Headden replied that even the small quantity for such a test could not be obtained from the material at his command.

* This volume page 7.