

PROCEEDINGS

OF THE

AMERICAN PHILOSOPHICAL SOCIETY.

VOL. IX.

JUNE—DECEMBER, 1862.

No. 68.

Stated Meeting, June 20, 1862.

Present, nine members.

Prof. CRESSON, Vice-President, in the Chair.

A letter accepting membership was received from Dr. Englemann, dated St. Louis, Mo., May 29, 1862.

Letters were received from Dr. A. D. Bache and D. Huntingdon, respecting the deposit of a portrait of the former in the Hall of the Society.

A letter respecting the Michaux legacy was received from the President, Dr. Wood, dated Paris, May 12, 1862.

Dr. Bache read an extract from a letter, also from Dr. Wood, respecting the Tischendorff Manuscript.

Letters advising the Society of donations to the Library were received from the Royal Prussian Academy, dated Berlin, February 18th, 1862; the Minister of the Interior, dated Harlem, February 15th, 1862; the Royal Academy of San Fernando, at Madrid; and the Royal Academy at Lisbon, per the United States Legation, dated April 19th, 1862.

Donations for the Library were received from the Physico-Economical Society at Königsberg; the Academies at Berlin, Paris, Madrid, and Philadelphia; the Natural History Societies at Bonn and Boston; the Essex, Franklin, and Wil-

mington Institutes; the Minister of the Interior at Harlem; the Museum of Natural History, and the Geographical Society at Paris; the Royal, Royal Geographical, and Chemical Societies at London; the publishers of the Medical News of Philadelphia; Messrs. J. S. Morris of Baltimore; S. Shellabarger of Washington; F. Leyboldt of Philadelphia; Dr. Englemann of St. Louis; and the State of Wisconsin.

On recommendation of the special committee to which it was referred, Dr. Hayden's memoir on the Indian Tribes of the Missouri River was, on motion of Dr. Bache, ordered to be published in the Transactions.

The committee on Mr. Prettyman's communication, reported verbally through its Chairman, Prof. Cresson, that it had had an interview with Mr. Prettyman, who asked leave to withdraw his communication. On motion, leave was granted.

A suite of coal oil specimens was offered for the examination of the members present. Mr. Heber R. Clark, who was present, being invited to give a description of the coal oil localities with which he was most familiar, and from which he had himself collected the various oils which he exhibited, communicated very interesting and detailed information respecting their geological and statistical character.

Mr. Clark said that the principal part of the specimens, and commonly those of the lightest color, were from various borings around Edenburg, in Lawrence County, Pennsylvania, and in the same valley of the Mahoning, within the Ohio State line. Many were from the Slippery Rock Creek Valley. A number were from Oil Creek, and the neighborhood of Titusville in Northwestern Pennsylvania. One or two were from Mecca in Northeastern Ohio, and from Kentucky; the last being thick and black like tar.

The Edenburg "Continental Boring" was sent down through 80 feet of so-called drift; then through 200 feet of sandstones and shales, with a layer of black, fetid shale at the bottom, from which the gas blew off violently; then through 45 or 50 feet of the "First White Sandstone," with gas in its crevices (this sandrock is said to thin out eastward); then through 40 or 50 feet of shales and slates charged with gas and oil; then through 75 or 80 feet of the "Second White Sandstone," softer, coarser, and harder than the first, and full

of gas, to the oil stratum, 448 feet beneath the surface. The first sandrock has a soft middle member between hard top and bottom members.

Crawford's Boring at Edenburg struck oil (for the second time) in a supposed crevice leading up from the "Third White Sandstone," and at a depth of 580 feet.

Mr. Clark gave it as his experience, that the harder the rock was to drill, the lighter in color, purer in quality, and smaller in quantity was the oil; the softer the rock, the darker and more abundant the oil.

Mahoning Creek oil has a stronger smell than Oil Creek oil. The surface oil of Slippery Rock Creek is as fluid as water, and quite dark, running from and impregnating the surface of the ground and the rocks in place, and is collected in shallow wells.

At the Alban Well, 600 feet deep, on Oil Creek, six miles above its mouth, Mr. Clark saw the fresh oil spouting 100 feet into the air, a week after it had been struck.

At the Edenburg well first described, Mr. Clark noticed that for two or three weeks there occurred every day invariably a few minutes after eight o'clock P.M., a blow of gas, violent enough to stop the pump, and lasting from fifteen to thirty minutes, after which the gas seemed to be exhausted. He thinks that there is more gas blown off in winter than in summer, and that the testimony among the oil-well men is general to that effect.

The Librarian presented No. 67 of the Proceedings.

Pending nominations Nos. 456 to 465 were read.

The Society was adjourned.

Stated Meeting, July 18, 1862.

Three members present. No formal proceedings.

Stated Meeting, August 15, 1862.

Dr. Bache reported the following deaths of members :