

- Thoughts on the Principles of Taxation, with reference to a Property Tax, and its Exceptions. By Charles Babbage, Esq. London, 1848. 8vo.—*Anonymous.*
- The American Journal of Science and Arts. Conducted by Professors Silliman and Dana. Second Series. Vol. VI. No. 16. July, 1848. New Haven. 8vo.—*From the Editors.*
- Medical News and Library. Vol. VI. No. 67. July, 1848. 8vo.—*From Lea & Blanchard.*
- The American Journal of the Medical Sciences. Edited by Isaac Hays, M.D. Vol. XXXI. New Series. July, 1848. 8vo.—*From the Editor.*
- The African Repository and Colonial Journal. Vol. XXIV. No. 7. July, 1848.—*From the American Colonization Society.*
- Quarterly Journal of the Geological Society. No. 14. May, 1848. London.—*From the Society.*

Dr. R. M. Patterson presented a communication from Mr. Charles M. Wetherill, entitled, "On the Neutral Sulphate of the Oxide of Ethyle and the Products of its Decomposition," which was referred to a Committee, consisting of Profs. Booth, F. Bache and Frazer.

There being no quorum present, the stated business of the meeting, the election of members, could not be proceeded with.

Pending nominations, Nos. 224 and 225, were read.

Stated Meeting, August 18.

Present, fifteen members.

A. D. BACHE, LL.D., Vice-President, in the Chair.

Letters were received and read:—

From the Literary and Philosophical Society of Manchester, dated 6th July, 1848; and from the Horticultural Society of London, dated 4th July, 1848, each acknowledging the receipt of Vol. X. Part 1, of the Transactions, and Nos. 39 and 40 of the Proceedings of this Society.

The following donations were announced :—

FOR THE LIBRARY.

- Fifteenth Annual Report of the Royal Cornwall Polytechnic Society. 1847. Svo.—*From the Society.*
- Boletin de la Sociedad Economica de Amigos del Pais, de Valencia. Año 9°. Tomo 5°. April, 1848. Svo.—*From the Society.*
- Proceedings of the American Academy of Arts and Sciences. Vol. I., from May, 1846, to May, 1848. Boston and Cambridge. Svo.—*From the Academy.*
- Proceedings of the Academy of Natural Sciences of Philadelphia. For May and June, 1848. Svo.—*From the Academy.*
- Annual Report of the Regents of the University of the State of New York, made to the Legislature, March 2, 1848. Svo.—*From the Regents of the University of New York.*
- Journal of the Franklin Institute. Third Series. Vol. XVI. No. 1. July, 1848. Svo.—*From the Institute.*
- The Medical News and Library. Vol. VI. No. 68. August, 1848. Svo.—*From Messrs. Lea & Blanchard.*
- The African Repository and Colonial Journal. Vol. XXIX. No. 8. August, 1848. Svo.—*From the American Colonization Society.*
- An Address delivered at the laying of the Corner Stone of the House of Refuge for Coloured Juvenile Delinquents, on Saturday, July 1, 1848. By James J. Barclay, A.M. Svo.—*From the Author.*
- Messages of the President of the United States, with the Correspondence therewith communicated, between the Secretary of War and the Officers of the Government, on the subject of the Mexican War. Washington, 1848. Svo.—*From the Hon. J. R. Ingersoll.*
- Report of the Board of Regents of the Smithsonian Institution, showing the Operations, Expenditures and Condition of the Institution. Washington, January 6, 1848. Svo.—*From the Hon. G. M. Dallas.*
- Memorial of D. L. Dix, praying a Grant of Land for the Relief and Support of the Indigent Curable and Incurable Insane in the United States. Washington, June 27, 1848. Svo.—*From the same.*

The following communication was received from Professor Alexander, relative to some observations made by himself and Dr. Philip Ten Eyck, Professor in the Albany Academy, on the small eclipse of the sun, which occurred in March last.

Princeton, July 25, 1848.

My Dear Sir,—I had intended ere this to have sent to the American Philosophical Society, a minute of the observations made by Dr. Philip Ten Eyck, Professor in the Albany Academy, and myself, on the small eclipse of the sun, which occurred in March last.

The place of observation was a few rods N. E. of the Albany Academy, the position of which, according to the table in the American Almanac, is in Lat. $42^{\circ} 39' 3''$ N., Longitude $73^{\circ} 44' 49''$ W. of Greenwich.

The weather both before and after the eclipse was very changeable, and we, consequently, contented ourselves with an imperfect observation of the sun's transit on the day before, applying, afterward, corrections for rate, by a comparison of the patent lever watch, which we used, with a clock furnished with a compensation pendulum. These observations and reductions were made by Dr. Ten Eyck.

The beginning was lost by my having inadvertently taken the angle with the north pole for the angle with the vertical.

Indentation first perceived (in a small telescope) by Dr. Ten Eyck, at—

7h	37m	42s.4	mean time, civil reckoning.
8	4	5.4	indentation no longer certain.
	4	18.4	indentation had certainly disappeared.

At 8h 1m 46s.4, or about $2\frac{1}{2}$ minutes before the end, I perceived an elevation or projection of the cusps beyond the natural outline of the remainder of the sun's disc. I was led to conclude that it could hardly be a mere optical deception, from the fact that it rather seemed to increase as the moon's disc seemingly slipped off, or separated from that of the sun, by a very oblique movement; and the same appearance was not noticed at a period equally near to the beginning.

The telescope which I used was from the manufactory of Uschneider & Fraunhofer. Eye-piece adjusted for direct vision; power 80; screen-glass red.

The projections were, it may be, rather more conspicuous than in the enclosed sketch, made after completing the observations, in which I was careful not to overrate the appearance.

I remain, dear sir, yours, very truly,

STEPHEN ALEXANDER.

A communication was received from Dr. John Locke, of Cincinnati, Ohio, on his "Gravity Escapement with Detached Detents," which was referred to a Committee, consisting of Mr. Downes, Prof. A. D. Bache, and Mr. Saxton.

Dr. Patterson laid before the Society specimens of two minerals from the diamond mines of Brazil, received through Mr. Ernest Pailhet, a merchant of Paris, now in Philadelphia, by whom they were first introduced into commerce.

One of these minerals occurs in irregular black lumps of considerable size, and is found in the diamond grounds one or two feet below the surface. It is considered a certain indication of the presence of diamonds, which, indeed, are sometimes found inside of its masses. Its structure is perfectly vitreous, and it appears to be a pure obsidian.

The other, called "Diamond Carbon," or "Black Diamond," is found in the same locality. It cuts all other minerals, including the diamond itself, upon which it acts with as much rapidity as the diamond dust. The specific gravity of the smaller piece is 3.01. These minerals first attracted attention at the diamond mines, about six years ago. The "Diamond Carbon" is sold here at 75 cents per carat of $3\frac{1}{2}$ grains troy, being about 25 cents per grain, or about six times the value of gold.

Dr. P. conceives that the "Diamond Carbon" will be found exceedingly useful in the arts, being applicable to all purposes for which diamond dust is now used.

Pending nominations, Nos. 224 and 225, were read.

Stated Meeting, September 15.

Present, twenty members.

Dr. PATTERSON, Vice-President, in the Chair.

Lieut. J. Melville Gilliss, U.S.N., a recently elected member, was presented to the presiding officer and took his seat.

A letter was received and read:—

From Prince Metternich, dated Vienna, February, 1847, announcing a donation to the Society:—