Mr Alexander read an account of the Annular eclipse of Febr 12th as observed at Berlin, Worcester County (Maryland) accompanied with drawings illustrative of the same.²

Mr Henry exhibited some experiments with a large electro-magnetic magnet & having the instantaneous reversion of the poles, by merely changing the direction of the galvanic current.

He also exhibited an Apparatus for determining the Magnetic Intensity of the Earth by means of the vibrations of a small needle, suspended by a silk fibre in a box with a glass cover. This apparatus was invented by Professor Hansteen of Norway & was sent by Capt. Sabine to this country to be used in the contemplated Southern Expedition.⁴ Accompanying the box are two needles, the one constructed by Professor Hansteen & the other by Capt. Sabine. From the mean of a great number of observations it is found that the rate of the Hansteen needle (or the time which it requires to make 300 Vibrations) is at Albany 978'.⁵ At London the rate of the same needle is 956'. The rate of the Sabine needle at Albany is 830'; its rate at London is not known.

Mr H. mentioned that in the course of the observations with these needles, on two occasions the time of vibrations was strangely altered without an apparent cause. The first was observed at the time of the solar eclipse on the 12th of February. The Hansteen needle was then found to make 300 Vibrations in 130 Seconds of time less than its usual rate (of 978'). It is possible that this was caused by some accidental disturbing cause. None however is known to exist.

This circumstance is now stated in order that the fact may be recorded & that attention may be directed to it at the time of the next solar eclipse in 1832.⁶

The second was on the 19th of April, when an observation was made with

---

¹ We have omitted the first portion of these minutes dealing with routine matters and with a report by a committee gathering materials for a history of Albany.

² Stephen Alexander published his observations on the solar eclipse in "Astronomical Observations Made at Berlin, Worcester County, Md. (February, 1831), with Some of Their Results," Transactions, Albany Institute, 1833-1852, 2:84-96.

³ The Sabine-Hansteen apparatus is described above, Minutes, Albany Institute, September 21, 1830, footnote 10.

⁴ The 1829 exploration of the Antarctic under Captain Nathaniel B. Palmer. See above, Minutes, Albany Institute, May 5, 1824, footnote 16.

⁵ i.e., seconds.

⁶ In July 1832.
April 27, 1831

the same needle at 5 O Clock pm. The time of 300 Vibrations was found to be 10 seconds less than the usual rate. At about 9 pm. of the same evening, an auroral arch was seen in the south. A short time afterward the whole northern hemisphere was covered with beams of light, which crossed at the Zenith. As it was thought that this might have influenced the needle, a set of observations was made in the same place at 10 O Clock, while the aurora was most active. The time was then one second greater than the mean rate.7

Adjourned.

7 Henry published his observations of the disturbances in “On a Disturbance of the Earth's Magnetism, in Connexion with the Appearance of an Aurora Borealis, as Observed at Albany, April 19th, 1831,” Silliman's Journal, 1832, 22:143-155.

EXCERPT,1 MINUTES, ACADEMY TRUSTEES

Trustees' Minutes, Albany Academy Archives

April 27, 1831

An Application was made in behalf of William Dunlap Esq2 for leave to exhibit his painting of the Attack on the Louvre in the Large Room of the Academy, which on motion was granted.

2 We have omitted from the minutes a number of topics of a routine nature.

2 William Dunlap (1766-1839), noted playwright, theatrical manager, painter, and historian. Having lost sight in his right eye as a child, Dunlap determined to pursue a career in art. While studying in London, Dunlap developed an interest in the theatre. He made several attempts at a career in the theatre upon his return to New York, but he was forced to resort to painting to maintain solvency. While he had been a member of the reactionary American Academy of the Fine Arts, he joined with a group of progressives in founding the rival National Academy of Design in 1826. The Attack on the Louvre was painted by Dunlap in the winter of 1830-1831, depicting vividly the revolutionary movement of the previous summer. Apparently the picture was shown at the National Academy of Design, and at that time (1831) Dunlap was made Vice President and Acting President of the Academy, which office he held until his death. Despite its popularity in New York, however, the painting was an absolute failure on the road. See DAB and Oral Coad, William Dunlap, A Study of His Life and Works (New York, 1962), especially p. 111.

Dunlap may have met Henry in connection with the exhibition of his painting at the Albany Academy, but we have no specific evidence of their contact at this time. There is evidence that a meeting did occur late in 1832. The noted educator James C. Welling (1825-1894; DAB), paying tribute to his personal friend Joseph Henry after the latter's death in 1878, relates a story of an encounter between Dunlap and Henry shortly before the call to Princeton, in which Dunlap cheered a dispirited Henry by saying: “Albany will one day be proud of her son.” A Memorial of Joseph Henry (Washington, 1880), p. 184. Dunlap’s diary entry for October 8, 1832, confirms a meeting with Henry, and although the diary does not contain Welling’s phrase, it does note another prophetic evaluation of Henry: “His name will be enroll’d with those of Franklin, Silliman, Rittenhouse & other Americans who have transmitted light from the West to the East, and from the region to which light has