



EQUATORIAL—CINCINNATI OBSERVATORY.

constitution holds in it the expression of ideas elevated as those so often breathed by Adams. It looks as though there were a close link revealed in it between him and Mitchell.

As the astronomer of the society engaged for a ten years' work, Professor Mitchell sailed for Europe to purchase a telescope superior to any then in this country. With letters from Mr. Adams, he was received with open arms by Airy at Greenwich, Arago at Paris, and Lamont at Munich. In the optical institute of Merz and Mähler, successors of the great Fraunhofer, at Munich, he found an object-glass of twelve-inch aperture, which, after Lamont's test in his own tube (since they fitted each other), was pronounced superior to that of the Munich telescope. It was mounted, purchased for about \$9400, and arrived in Cincinnati in 1845.

The Astronomical Society meanwhile had secured from their fellow-citizen, N. Longworth, the gift of four acres of ground on one of the beautiful and commanding hills on the east of the city, and a fund of \$11,000 in shares of \$25 each.

Professor Mitchell, on his return, devoted his whole energies to the erection of an observatory. Its corner-stone was laid Novem-

ber 10, 1843, on the site given by Longworth, on Mount Adams, at the close of the oration quoted at the beginning of this article. The discourse has been called "An Outline of Astronomy."²⁶

The observatory presented a front eighty feet, ornamented with a Grecian Doric portico, and a depth of thirty, showing a basement and two stories, with a central dome, covering an equatorial room twenty-five feet square, the roof being capable of entire removal when observations were to be made. The object-glass of the telescope had an aperture of twelve inches, and a focal length of seventeen feet. The telescope had five common eye-pieces and nine micrometers, the highest power being 1400, and was furnished with the usual clock-work by which a star is steadily kept in the field of view.

The equatorial room received the Munich instruments in March, 1845. Professor Mitchell began his labors with the enthusiasm of hope. Three thousand visitors, some of them from homes far distant, witnessed, during the first year, the satisfactory performance of his equatorial. Other necessary instruments were received: a five-foot Troughton transit, loaned by the Coast Survey, an astronomical clock, donated by Mr. McGrew, of Cincinnati, and a chronometer, loaned by Messrs. Blunt, of New York. At the request of Professor Bache, the telegraph company connected the observatory with their stations for the determination of longitude, Cincinnati being then a central point in such work. The Astronomer Royal, under whose instruction Mitchell had passed three months in 1842, urged, in an encoura-

* It seems remarkable that in this oration when Mr. Adams asks the question, "What have we been doing for astronomy?" he makes no reference to the passage by Congress in the previous year of a bill which was in reality to found the present United States Naval Observatory, although the purpose was disguised under another name for the institution. Was he not justly disgusted with the mode and the name under which had been thus yielded to the agency of others that which had been denied him since 1825? It is an incident of interest at the laying of this corner-stone that the venerable Judge Burnet, a pioneer of Cincinnati, introduced the orator by an address historic of the West and of the care of its rightful boundary by the elder Adams, commissioner in 1783.