

XI. VI. *An Account of a very remarkable Meteor seen at Oxford. In a Letter to Mathew Maty, M. D. Sec. R. S. from the Rev. John Swinton, B. D. F. R. S. Custos Archivorum of the University of Oxford, Member of the Academy degli Apatisti at Florence, and of the Etruscan Academy of Cortona in Tuscany.*

GOOD SIR,

Read Dec. 20, 1770. **T**HE person that first saw the very remarkable luminous appearances in the air here, on Tuesday, October 24, 1769, as far as I have hitherto been able to learn, was the Rev. Mr. Cleaver, student of Christ-Church; who, on his return home, at a village called Horton, six or seven miles from Oxford, about 7^h 15' P. M. observed, with some degree of astonishment, a dark fuscous vapour, resembling a blackish cloud, contiguous to the northern horizon. Out of this vapour there issued another of a flame colour, in the N.N.W. not unlike the meteor seen by me, Sept. 9, 1769, and described in the last volume of the *Philosophical Transactions**. His account of it, if I remember right, was, that "it looked like an house, or building, set on fire." This at first was confined to a very small space in the heavens, but soon after ex-

* *Philosoph. Transact.* Vol. LIX. for the Year 1769, p. 369, 370, 371, 372.

panded.

panded itself in such a manner, that it covered a very large and extensive tract in that part of the hemisphere where it first appeared. In this state the meteor continued till 7^h 45' P. M. when it assumed a deep blood-red colour, moving a little towards the west, which gave it a very awful aspect. Mr. Cleaver imparted to me no particulars relative to its extinction, but only said, that he saw not the faintest traces of it after eight o'clock, so that it might probably about that time, or a little before, have totally disappeared.

The same night, at 8^h 10' P. M. I saw in the great quadrangle of Christ-church, and that part of Fish-Street adjoining to it, several lucid streamers, ascending in the N. and N. W. from the horizon, or rather a dusky kind of vapour contiguous to it, to a very considerable height. These all moved towards the S. and S. E. with great velocity; and soon after many other similar streams of light shot up from the horizon, in various parts of the hemisphere, particularly in the S. and S. E. They were all of a very pale yellow colour, such as those that form the *Auroræ Boreales* of the common kind. They constantly multiplied, in so amazing a manner, and with such surprizing celerity, that by 8^h 15' P. M. they seemed to have almost intirely covered the greatest part of the hemisphere, and then centered in a point a little to the S. of the zenith. They were attended by an infinite number of flashes, or coruscations, and undulations of the lucid matter, as * is usual in such phænomena. In fine, the whole atmosphere, or rather

* *Philosoph. Transact.* ubi sup. p. 367, 473. & alib.

the whole collection of the luminous vapour lodged in it, was in a continual agitation for above a quarter of an hour; during which time, the whole hemisphere seemed to be all on a blaze.

This most glorious and extraordinary appearance was, however, of a very short and inconsiderable duration; the extinction of the whole being so completely effected by 8^h 40' P. M. that no remains of the phenomenon, in any part of the heavens, could then be discerned.

But what principally engaged my attention this evening, was a luminous arch, or zone, of a very beautiful purple colour, such as I had never seen before; which presented itself to my view about 8^h 40' P. M. and extended from E. to W. nearly, as I apprehended, bisecting the hemisphere. This began to grow faint a little before nine o'clock; and in less than ten minutes time, as near as I could guess, totally disappeared.

The light cast by the *Auroræ Boreales* above mentioned was greater than any I had ever observed to attend such phenomena before. Nor, indeed, did I ever meet with a description of any meteors resembling that mentioned here in every particular. The conversion of the flame-colour in the first stage of the meteor into a deep blood-red, together with its wonderful expansion, and the beautiful purple zone, or coloured arch, which closed the whole, are singularities that, I believe, never occurred before; or, at least, such as have never hitherto met with a proper and adequate description. Some of these phenomena seem, from the public papers, to have been seen at London, Windsor, and other places at a considerable distance from

from Oxford, about the same time that they appeared there; which remarkable circumstance, on several accounts, merits a place in this letter. The whole city, for a short time, seemed to be perfectly illuminated; the light cast by the *Auroræ* succeeding the luminous appearance of a deep blood-red colour, being, as I apprehended, much superior to that of the full moon. In fine, the whole phænomenon (or rather all the phænomena) was so very striking and remarkable, that it was one of the most common topics of conversation, amongst all orders and degrees of people here, for above a month after it appeared. I shall only beg leave to add, that the Reverend and learned Dr. Sharp, of Christ-Church, professor of Greek in this university, assured me that he saw some of the common *Auroræ Boreales* between eleven and twelve o'clock the same night; and that I have the honour to be,

GOOD SIR,

Your much obliged,

and most obedient,

humble servant,

Christ-Church, Oxon.
Sept. 27, 1770.

John Swinton.