

bed , is exceeding small in respect of the whole circumference thereof, and hardly distinguishable by us from a streight line.

Concerning the New Comet you mention, I saw it on the 11. of *February*, about the 24. deg. of *Aries*, with a Northern latitude of 24. deg. 40. min. The cloudy weather hath not yet permitted me to see it in *Andromeda*, as others affirm to have done.

Extract of a Letter , written from Paris , containing some Reflections on part of the precedent Roman Letter.

As to the *Hypothesis* of *Georg. Domenico Cassini*, touching the motion of the *Comet* about the *Great Dog* in a Circle, whose Centre is in a streight line drawn from the Earth thorough the said Star, I believe it will shortly be publish'd in print, as a thought I lighted upon in discoursing with one of my Friends, who did maintain, that it turned about a Centre, because that its *Perigee* had been over against the *Great Dog*, as I had noted in my *Ephemerides*. This particular I did long since declare to many of my acquaintance, whereof some or other will certainly do me that right, as to let the world know it by the Press. I have added an Observation, which I find not, that Signior *Cassini* hath made, *viz.* that there was ground to think, that the *Comet* of 1652. was the same with the present, seeing that, besides the parity of the swiftness of its motion, the *Perigee* thereof was also over against the *Great Dog*, if the Observations extant thereof, deceive not. But, to make it out, what ground I had for these thoughts, I said, that if they were true, the *Comet* must needs accomplish its revolution from 12. to 12. years, or thereabout. But, seeing it appears not by History, that a *Comet* hath been seen at those determinate distances of time, nor that over against the *Perigee* of all the other *Comets*, whereof particular observations are recorded, are alwaies found Stars of the first Magnitude, or such others, as are very notable, besides other reasons, that might be alleged, I shall not pursue this speculation; but rather suggest

suggest what I have taken notice of in my reflexions upon former Comets, which is, that more of them enter into our Systeme by the sign of *Libra* and about *Spica virginis*, then by all the other parts of the Heavens. For, both the present Comet, and many others registred in History, have entred that way, and consequently passed out of it by the sign *Aries*; by which also many have entred.

I did found my *Hypothesis* upon three Observations only, *viz.* those of the 22, 26, and 31. of *December*. Nor have I done, as some have fancied of me, who having been able to observe the Comet, the 27, 28, 29, 30, and 31. of *December*, and to see the diminution of its motion, have judged, that I had only determined that diminution for the time to come, conform to the augmentation thereof in time passed until the 29. of *December*. For *January* 1. (on which day I composed my *Ephemerides*) I knew not (nor any person here) that the motion of the Comet did diminish; but on the contrary, most men believed, it was not the same Comet. But Signior *Cassini* knows very well, that that was not necessary, seeing that two portions of a *Tangent* being given, and the *Angles* answering thereunto, 'tis easie to find the position and magnitude of its circle. The reason, which I think the true one, of the diminution of its Motion in Longitude, and of its Retrogradation, by me conjectured in my *Ephemerides*, I began to be assured of, *Febr.* 10. For until the sixth, the Comet had alwaies advanced, as Signior *Cassini* also hath very well noted: but after that day, I found that it returned in augmenting alwaies its Latitude. And I have constantly observed it, until *March* 8. between many Stars, which must be the same with these mention'd by *Cassini*, whereof the number was so great, that I think, I saw of them *March* 6. with one *Aperture* of my Glass, more then 40. or 50. and especially, above the head of *Aries*; but I did not particularly note the situation of more than 12. or 15; amongst which I have observed the position of the Comet since *January* 28. every day, when the weather did permit, *viz.* *January* 29. *February* 3, 6, 10, 17, 19, 24, 26, 27. and *March* 6,

7, 8. I left it on *March* 8. at the 18. of the Horn of *Aries*, almost in the same latitude ; and I am apt to believe, it will be Eclipsed ; which I wish I may be able to observe this evening, if it be not already passed.

If Signior *Cassini* hath observed it on those daies that I have, he will be glad to find the conformity of our Observations. I shall only add, that on *February* 3. we were surprized, to see the Comet again much brighter then ordinary, and with a considerable Train. Some did believe, that it approach'd again to us. But having beheld it with a *Telescope*, I soon said, that it was joyned with two small Stars, whereof one was pretty bright, which I had already seen, on *February* 28. and 29: And this conjunction gave the Comet that brightness, as it happens to most of the Starrs of the fifth and sixth magnitude, where 2 or 3. or more are conjoyned, which perhaps would shew but faintly single, though by reason of their proximity to one another, they appear but one starr. Hence it was, that I assured my friends here, that the following days we should no more see it so bright, because I knew, that there were none such small bright Stars in the way, which by my former observations I conjectured it was to move.

An Observation imparted to the Noble Mr. Boyle, by Mr. David Thomas, touching some particulars further considerable in the Monster mentioned in the first Papers of these Philosophical Transactions.

Upon the strictest inquiry, I find by one, that saw the Monstrous Calf and stone, within four hours after it was cut out of the Cows belly, that the Breast of the Calf was not stony (as I wrote) but that the skin of the Breast and between the Legs and of the Neck (which parts lay on the smaller end of the stone) was very much thicker, then on any other part, and that the Feet of the Calf were so parted as to be like the Claws of a Dog. The stone I have since seen ; it is bigger at one end
then