

of Beuron by La Caille, under more favourable circumstances; and both of these astronomers agree in stating that the tail was distinctly visible by the naked eye, and varied in length at different periods from ten degrees to forty-seven degrees. These circumstances are obviously in perfect accordance with the former appearances of the same body."

Thus, at this time, it had again acquired a long tail, which, I conceive, can be well accounted for, by its having, between the two observations, attracted the mass of aqueous vapour in the vicinity of the sun, which then formed its new appendage.

Now it is plainly visible that our theory of this part of the purposes of comets will account naturally and with perfect ease for the increase of their tails, by the absorption by attraction of the aqueous vapours it found near the sun's atmosphere, after having deposited therein the combustible gases they were previously charged with.

We now conclude our extracts with one from Mr. Higgins's work, to shew the vast length of the tails of comets:—"The nature of comets, and the purposes they serve in the system to which they belong, are almost entirely unknown. No probable explanation has yet been given of the character of that train of luminous matter frequently appended to them, and very inappropriately termed the tail, since it frequently precedes the body itself. The tail is sometimes of very considerable length. Aristotle states that the tail of the comet that appeared in 371 A. C., occupied a third of the hemisphere, or 60° ; that of 1580 is said to have covered an extent of more than 70° ; and that of 1618, 104° . But a tail is not a necessary appendage to a comet, for some have been quite destitute, as were those of 1585 and 1763; but there are also some that have several tails; that of 1744 had no less than six, which, spreading out in the form of a fan, extended over a space of nearly 30° . A very small condensed spot has been observed in the heads of some comets, but the fixed stars may be seen through the densest parts of many; and from the circumstance that none of them have exhibited