that of hot iron, according to Newton's estimation, or only ten minutes greater according to this estimation; it must be supposed, that give a heat ten times greater than that of red hot iron, it required ten times more time; that is to say, 1332; consequently, we may compare the comet to a globe of iron heated by a forge fire for 13320 hours, to heat it to a whiteness.

Now we find by calculation from my experiments, that with a forge fire, we can heat to a whiteness a globe whose diameter is 228342½ inches in 799200 minutes, and, consequently, the whole mass of the comet to be heated to the point of iron to a whiteness, during the short time it was exposed to the heat of the sun, could only be 223342½ inches in diameter; and even then it must have been struck on all sides, and at the same time, by the light of the sun. Thus comets, when they approach the sun, do not receive an immense nor a very durable heat, as Newton says, and as we at the first view might be inclined to believe. Their stay is so short in the vicinity of the sun, that their masses have not time to be heated, and besides only part of their surface is exposed to it; this part is burnt by the extreme heat, which

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