been  $888\frac{14}{25}$ , in the supposition that this first heat should have been only five times greater than this actual temperature. This alone shews us that if we even suppose this primitive heat below 25, there would only be a longer prolongation of the refrigeration of the globe, and that alone appears to me sufficient to satisfy the objection.

It may likewise be said, "you have calculated the duration of the refrigeration of the planets, not only by the inverted ratio of their diameters, but also by the inverted ratio of their density; this might be well founded if we could imagine that in fact there exists matter whose density is as different from that of our globe: but does it exist? What, for example, will be the matter of which Saturn is composed, since its density is more than five times less than that of the earth?

To this I answer, that it would be very easy to find, in the vegetable class, matters five or six times less dense than a mass of iron, marble, hard calcareous stone, &c. of which we know that the earth is principally composed; but without quiting the mineral kingdom, and considering the density of these five matters, we have  $21 \frac{10}{72}$  for iron,  $8\frac{25}{72}$  for white marble, for gres  $7\frac{24}{72}$ , for common marble and calcareous stone  $7\frac{20}{72}$ ; taking the mean term of the densities