

taken up in cooling of iron, is not in a smaller, as stated in a passage of Newton, but in a larger ratio than that of the diameter.

Now if we would enquire how long it would require for a globe as large as the earth to cool, we should find, after the preceding experiments, that instead of 50,000 years, which Newton assigns for the earth to cool to the present temperature, it would take 42,964 years, 221 days, to cool only to the point where it would cease to burn, and 86,667 years and 132 days, to cool to the present temperature.

It might only be supposed, that the refrigeration of the earth should be considerably increased, because we imagine that refrigeration is performed by the contact of the air, and that there is a great difference between the time of refrigeration in the air and in vacuo; and supposing that the earth and air cool in the same time in vacuo, this surplus of time should be reckoned: But, in fact, this difference of time is very inconsiderable, for though the density of the medium, in which a body cools, makes something on the duration of the refrigeration, yet this effect is much less than might be imagined, since in mercury, which is eleven thousand times denser than air, it is only requisite to plunge bodies into it  
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