three inches; so that only half the time is required for the refrigeration of clay, to what is necessary for iron.

I found also, that lumps of clay, or marl, of two inches, refrigerated so as to be held in the hand in 45 minutes; those of two inches and a half in 58; and those of three inches in 75, which being compared with the time of refrigeration of iron bullets of the same diameters, gives 46 to 80 for two inches, 58 to 102 for two inches and a half, and 75 to 127 for three inches, which nearly form the ratio of 9 to 5; so that for the refrigeration of clay, more than half the time is required than for iron.

It is necessary to observe, that globes of clay heated white, lost more of their weight than iron bullets, even to the ninth or tenth part of their weight: whereas marl heated in the same fire, lost scarcely any thing, although the whole surface was covered over with scales, and reduced into glass. As this appeared singular, I repeated the experiment several times, increasing the fire, and continuing it longer than for iron; and although it scarcely required a third of the time to redden marl, to what it did to redden iron, I kept them in the fire thrice as long as was requisite, to see if they would lose more, but I found very trifling di-