When on the scale of these thermometers filled with oil or mercury, the first divisions 1, 2, 3, 4, &c. are marked to indicate the double, treble, quadruple, &c. augmentations of heat, we must search after the aliquot parts of each division; for example, of the point $1\frac{1}{4}$, $2\frac{1}{4}$, $3\frac{1}{4}$, &c. or $1\frac{1}{2}$, $2\frac{1}{2}$, $3\frac{1}{2}$, &c. and $1\frac{3}{4}$, $2\frac{3}{4}$, $3\frac{3}{4}$, and which will be obtained in an easy manner, by covering the $\frac{1}{4}$, $\frac{1}{2}$, or $\frac{3}{4}$, of the superfices of one of those small mirrors; for then the image which it reflects, will contain only the $\frac{1}{4}$, $\frac{1}{2}$, or $\frac{3}{4}$, of the heat which the whole image will contain, and, consequently, the division of the aliquot parts will be as exact as those of the whole numbers.

If once we succeed in this real thermometer, which I call real, because it actually marks the proportion of the heat, every other thermometer whose scale is arbitrary and different, will become not only superfluous, but even inimical, in many cases, to the precision of natural truths sought after by these means.

5. By means of three mirrors we may easily collect in their entire purity, the volatile parts of gold, silver, and other metals and minerals; for, by exposing to the large focus of those mirrors a large piece of metal, as a dish, or silver plate, we shall see smoke issue from it

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