

and iron, and only nearer this first metal than the last. For supposing that the cube foot of gold weighed 1326lb and that of iron 280, that of platina in grains will be found to weigh about 1194lb. which supposes more than $\frac{3}{4}$ of gold to $\frac{1}{4}$ of iron in this alloy, if there is no penetration; but as we extract $\frac{6}{7}$ by the loadstone, it might be thought, that there is more than $\frac{1}{4}$ iron therein: especially as by continuing this experiment, I am persuaded, we should be able, with a strong loadstone to bring away all the platina even to the last grain. Nevertheless, we must not conclude that iron is contained therein in so great a quantity; for when it is mixed by the fusion with gold, the mass which results from this alloy is attractable by the loadstone, although the iron is in no great quantity therein. M. Baume had a piece of this alloy weighing 66 grains, in which was only entered 6 grains, that is, $\frac{1}{11}$ of iron, and this button was easily taken up by the loadstone. Hence the platina might possibly contain only $\frac{1}{11}$ iron, or $\frac{16}{11}$ gold, and yet be attracted entirely by the loadstone; and this perfectly agrees with the specific weight which is $\frac{1}{12}$ less than gold.

But what makes me presume, that platina contains more than $\frac{1}{11}$ of iron, or $\frac{16}{11}$ of gold,
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