

be immersed, you will perceive that it will be immediately covered with a thin coating of copper. The cause of this is, that the nitric acid has a greater affinity to the iron, than to the copper it holds in solution; that, consequently, it quits the copper and forms a new compound with the iron; the copper being thus relinquished is *precipitated*, and forms that thin coating which you may observe on the surface of the iron. Upon this principle depends the power of chemically decomposing bodies, i. e. reducing them to their original matters. Here the copper is first dissolved by the acid, and then the compound thus formed is decomposed by the intervention of the iron, and the copper restored in its former state. On this principle it is that chemical tables have been formed, by which at one view the chemist may be informed of the various powers of attraction between different matter. A single column of this sort is here introduced as a specimen.

Sulphuric Acid.

BARYTA.	LIME.
STRONTIA	MAGNESIA.
POTASSA	AMMONIA.
SODA	

From this table we should deduce that sulphuric acid had a greater affinity to baryta than to strontia, to strontia than to potassa, to potassa than to soda, and so on; and, consequently, that baryta would decompose any compound of sulphuric acid formed with those bases enumerated after it. There are two classes of decomposition, simple and double. In the simple, one body separates a second from its combination with a third. In the double, two new