

things common between them than has been suspected. The application of fire is the principle of both; that of air is the second cause, and almost as necessary as the first; but these two causes are equally combined, according as they act in more or less time, and with more or less power on different substances.

Combustion operates almost instantaneously; calcination is sometimes so long, as to be thought impossible; for in proportion as matters are more incombustible, the calcination is there more slowly made; and when the constituent parts of a substance, such as gold, are not only incombustible, but appear so fixed as not to be volatilized, calcination produces no effect. They must both, therefore, be considered as effects of the same cause, whose two extremes are delineated to us by phosphorus, which is the most inflammable of all bodies, and by gold, which is the most fixed and least combustible. All substances comprized between these two extremes, will be more or less subjected to the effects of combustion and calcination, according as they approach either of them; insomuch, that in the middle points there will be found substances that endure an almost equal degree of both; from which we may conclude, that all calcination is always accompanied with a
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