BUFFON'S

great quantity of fixed air, which may be disengaged by calcination. This operation produces the same effect on the shells taken in the sea as upon those drawn out of quarries; they both form lime, with only a little difference in their quality. Lime, made with oyster or other shells, is weaker than that made with marble or hard stone; but the process of Nature is the same, as are the results of its operation. Both shells and stones, lose nearly half their weight by the action of fire in calcination; the water issues first, after which the fixed air is disengaged, and then the fixed water, of which these stony substances are composed, resumes its primitive nature, is elevated into vapours, drove off and rarefied by the fire, so that there remains only the most fixed parts of this air and water, which, perhaps, are so strongly united in themselves, and to the small quantity of the fixed earth of the stone, that the fire cannot separate them ; the mass, therefore, is reduced nearly a half, and would probably be still more if submitted to a stronger fire. And what appears to me to prove that this matter, driven out of the stone by the fire, is nothing else than air and water, is the avidity with which calcined stone sucks up the water given to it, and the force with which it draws water from the atmosphere. Lime, by exposure either in air

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