teen small mirrors to calcine gypsum; and because of the losses thereby occasioned, as well by the obliquity of the light as by the inequality of the focus, which is not removed above fifteen feet, I presume it would require twenty, and perhaps twenty-four mirrors of a foot square each, to calcine gypsum in a short time, consequently it would require an assemblage of forty-eight small mirrors to calcine the softest calcareous stone, and seventy-two of a foot square to calcine hard calcareous stones. Now a mirror twelve feet broad by six feet high, would be a large and cumbersome machine; yet we might conquer these difficulties if the product of the calcination were considerable enough to surpass the expense of the consumption of wood. To ascertain this, we ought to begin by calcining plaister with a mirror of twenty-four pieces, and if that succeeded, to make two other similar mirrors, instead of making a large one of seventy-two pieces; for by coinciding the focuses of these three mirrors of twenty-four pieces, we should produce an equal heat, strong enough to calcine marble or hard stone.

But a very essential matter remains doubtful, that is, to know how much time would be requisite, for example, to calcine a cubical foot of matter, especially if that foot were struck

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