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will be melted in this latter case, while in the first, it will only be slightly heated.

After these experiments and reflections, I began to entertain sanguine hopes of making mirrors to burn at a great distance; for I no longer dreaded as before, the great extent of the focus; I was persuaded, on the contrary, that a focus of a considerable breadth, as two feet, and which in the intensity of the light would not be near so great as in a small focus of four lines, might, nevertheless, produce inflammation, and with more power; and that, consequently, this mirror, which, by mathematical theory, ought to have at least thirty feet diameter, would be reduced to one of eight or ten feet at most, which was not only a possible, but even a very practicable thing.

I then thought seriously of executing my project: I had at first a design of trying to burn at 200 or 300 fect distance with circular or hexagonal glasses of a square foot in surface, and I was desirous of having four iron carriages for them, with screws to each to move them, and a spring to adjust them; but the considerable expense that this required made me quit that idea, and I took two common glasses of six inches by eight, and a wooden adjustment,

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