

its spark. On this subject we cannot avoid a reflection on the fate of the unfortunate Richman. In this case such precautions are adopted as will obviate any casualties whatever; great precaution, however, is required in these experiments, and Dr. Smallwood, fully aware of it, has the whole placed in connection with the earth by means of a brass chain and iron rod. As another proof of Dr. Smallwood's ingenuity and mechanical skill, we may notice that the whole of this apparatus, even to the electrometers, is the result of his own handicraft; and the whole arrangements in the little room are a signal proof how much a man may do unaided, and how well he can effect an object if thrown entirely upon his own resources.

On the right wall of the apartment are suspended the barometers, of which there are three. 1. A standard of Newman's; 2. Another of Negretti's, but of different construction; and 3. One of Dr. Smallwood's own construction. The means of the three observations is the measure adopted for the observation.

The only other instrument deserving of notice is the one to determine the terrestrial radiation; and this also has been made by Dr. Smallwood. It consists of a mirror of speculum metal, (composed of copper, zinc, and tin,) of six inches in diameter, and wrought into the form of a parabolic surface, in the focus of which, at the distance of eight feet, a self-registering spirit thermometer is placed. The construction of this was a labor requiring great nicety in execution, and involving the sacrifice of much time; but perseverance even here conquered the difficulties, and we witnessed a mirror whose reflecting powers would not have disgraced Lord Ross' telescope. In fact, placed in a telescope, it has, we are informed, proved itself capable of resolving those singular stellar curiosities—the double stars.

Dr. Smallwood certainly deserves great credit for his perseverance in a favorite study, under the most unpromising circumstances; but in nothing is he so remarkable as in that peculiar ingenuity which has led him to overcome difficulties in the prosecution of scientific enquiry, which, to most minds, would have been utterly discouraging.

The Natural History Society of Montreal have petitioned the legislature for a grant of money to enable them to publish Dr. Smallwood's tables of observations for the last twelve years. This is a measure, on which no difference of opinion can be anticipated, and must meet with the support of every man who has the welfare of science and Canada at heart.