

very busily occupied about, and it seems to have been rendered at least highly probable—I do not say that it has been proved—that a great many of the chemical elements of this our earth exist in the sun—such as, for instance, iron, soda, magnesia, and some others. We cannot here state the extraordinary facts on which this conclusion rests. But the conclusion itself is not so absolutely strange and startling as it may at first appear. The analysis of meteorolites, which there can be no doubt have come to the earth from very remote regions of the Planetary spaces, has, up to the present time, exhibited no new chemical element—so that a community of nature, at least as regards material constitution, between our earth and the rest of the bodies of our system, is at all events no unexpected, as it is, in itself, no unreasonable conclusion.

(32.) Not that it is meant, by anything above said, to imply that the light of the sun is that of any flame, in the usual sense of the word. A late celebrated French philosopher, M. Arago, indeed, considered that he had proved it to be so by certain optical tests. But in the first place his proof is vitiated by an enormous oversight; and the thing, besides, is a physical impossibility. The light and heat of the sun cannot possibly arise from the burning of *fuel*, so as to give out what we call flame. If it be the sun's substance that *burns* (I mean consumes), where is the oxygen to come from? and what is to become of the ashes, and other products of combustion? Even supposing the oxygen supplied from the material, as in the cases of gunpowder, Bengal light, or gun cotton, still