at the surface, whether by evaporation or by cooling, obey the inevitable laws of gravity.

Mr. Forbes next proceeds to some considerations drawn from the mean density of the earth, which being about 5.3, is twice that of the average specific gravity of the solid materials known at the surface. Admitting that a solid crust of specific gravity 2.65 were to form at the surface of a liquid of density 2.3, and in obedience to natural laws, to sink therein, our critic conceives that, in its descent, it would meet with a denser liquid stratum. He supposes a liquid globe "becoming rapidly denser in descending, as the pressure increased by the superincumbent column of liquid matter," and he tells us, in a note, that we may admit a density of " nearly 10.7 for the middle zone and about 18.8 for the centre." (page 435). Two pages farther on he has completely changed his mind, for he tells us that "experimental research tends to show that a limit is soon reached beyond which the compression or increase of density becomes less and less in relation to the force employed," and concludes that there are strong reasons for believing that the central parts of the earth "must consist of much denser bodies, such as metals and their metallic compounds," which he farther on explains may mean "dense sulphids."

To which of these two views does Mr. Forbes mean to hold, that of a rapidly and constantly increasing density from pressure, or that in which, limiting the condensing effect of pressure, he seeks to explain the density of the earth by a nucleus of heavy metallic compounds? The latter is seemingly an after-thought of the critic, suggested by some notion of the principle involved in the augmentation by pressure, of the fusing point of bodies which expand in melting. As was shown by James Thompson, the effect of pressure upon ice (and naturally upon such metals and metallic alloys as, like it, contract in melting,) would be to reduce its melting point, a fact which has been experimentally established for ice. Reasoning from the same principle, Sir Wm. Thompson deduced the conclusion that a reverse effect should result from pressure for all such solids as expand in melting, that is to say, that their points of fusion would be raised, a conclusion verified by the experiments of Bunsen and by those of Fairbairn and Hopkins. From some apparent irregularities in these results, and from the fact that certain of the substances submitted to experiment were bodies of the carbon series, which Mr. Forbes calls " organic," he argues against the conclusions which depend upon a well defined physical law. In the case of the fusible alloys tried