

of metallic iron. If, as is surmised, these are portions of a shattered planet (or of more than one such planets), then that planet must have consisted of a metallic core, surrounded by a stony envelope, affording a presumption that ours is similarly constituted.

The question may be looked at from another point of view. We know such bodies to be flying about in space; and it is highly probable that our earth was formed out of a conglomeration of them. It seems probable, then, that the materials of the earth were originally mingled fortuitously in a state of fusion, arising from the heat developed by the collision. So long as the heat was sufficiently great to keep the whole in a liquid state, in spite of the pressure arising from the mutual gravitation of the parts, the heavier materials would continue to fall towards the centre, and thus produce a metallic core. But this process would possibly be imperfect in some parts, either owing to the superficial portions being cooled to the limit of the melting point for the pressure too soon for the precipitation to be completed, or perhaps from meteorites arriving afterwards, when the superficial layers had become too viscid for them to sink through to their proper stratum. The subsequent contraction of the whole beneath a cooled crust might, as I have suggested elsewhere,<sup>1</sup> cause subjacent rock to pass into a fluid state, owing to decreased pressure beneath mountain elevations, and thus basalt containing metallic masses might be erupted.

I wish that the report given in the *MAGAZINE* had described the forms of the masses of iron,<sup>2</sup> which I believe are generally of a similar angular character in most meteorites.

O. FISHER.

#### TERRACES IN NORWAY.

SIR,—Allow me to express my regret to Colonel Greenwood for having misunderstood him, and to assure him that I did not write without his letters before me. The mistake, which I now see to be my own, was partly due to my not understanding the word “inland” in exactly the same sense as he had done,—a misunderstanding caused to some extent by my experience in Norway, where terraces which he would call “marine” occur some distance away from the sea; his reference to Glenroy also helped to increase the confusion. In the other matter, we are using the word “cause” in a slightly different sense. I know, of course, that in one case there is upheaval, in another lowering of the river bed, but each makes the water run quicker, and that—the running water—I have called the cause. With this expression of my regret, both for having misunderstood Colonel Greenwood and for being still unable to accept his theory, I must occupy no more of your space on this matter.

T. G. BONNEY.

<sup>1</sup> *Cam. Phil. Trans.*, vol. xi., part iii.; and *GEOL. MAG.*, Vol. V., p. 493, and Vol. VI., p. 45.

<sup>2</sup> Nearly every *stone* meteorite preserves its true external dark vitrified coat; but *metallic* iron corrodes and rusts so rapidly on its exterior, that the original form of the mass is seldom preserved.—*EDIT. GEOL. MAG.*