I was informed by T. Johnston, Esq. of Exeter, that he had frequently examined the red ground in the vicinity of the different trap rocks in Devonshire, and that he invariably found it composed of fragments of these rocks, increasing in size as he approached nearer to them. The sand rock on which Nottingham and Nottingham Castle are built, has, evidently, been formed of the ruins of more ancient rocks in its vicinity; and the rounded pebbles of quartz and of Lydian stone, granite, porphyry, jasper, and mica-slate, indicate that they have come from rocks, formerly connected with the Charnwood Forest range. Still nearer the Charnwood hills, the finest sandstone contains fragments of slate, and the lower conglomerate is almost entirely composed of the fragments of the Charnwood rocks, as before observed. In the Vosges, the red sandstone every where accompanies the granitic and transition rocks, of which also it contains fragments. It must be recollected that the rocks most disposed to decompose or disintegrate, would be the soonest worn down. With the exception of the Malvern range we have no rocks of soft granite, or sienite in England, like those of Auvergne, or of the Forez mountains in France; and the reason why we have not, may be, that, from their smaller magnitude, they were probably carried away by those mighty inundations, that have swept over our present islands and continents. The Malvern Hills, the Lickey, the Charnwood Forest Hills, and the trap rocks in Gloucestershire, Somersetshire, and Devonshire, are the remaining nuclei of much larger ranges, as the scattered fragments in the adjacent, as well as in distant districts attest. If the red marl and sandstone in England, and in other countries, were formed of decomposing rocks of trap, granular quartz, porphyry, sienite, and granite, the frequent occurrence of porphyroidal beds in this formation may admit of a probable explanation.

It is not intended to maintain, that every bed or stratum in this extensive formation is composed principally of the fragments of transition and trap rocks; but it may be safely affirmed, that there are few strata, in which some of these fragments may not be discovered.

The red marl produces some of the most fertile soils in England, which may be owing partly to its formation from soft trap rocks. Some basaltic rocks decompose rapidly, and are known to form soil favourable to vegetation; several basaltic rocks in Staffordshire decompose into a reddish brown clay, moderately tenacious.

A very remarkable discovery has been recently made (1828), of the foot-marks of some unknown quadruped in strata of new red sandstone, at the Corn Cockle Muir, three miles from Lochmaben in Dumfries-shire. They were found forty-five feet under the present surface; the strata are inclined thirty-seven degrees. This circumstance was communicated to the author by Mr. Murray, jun. of Albemarle Street, who showed him at the same time a plaster cast, taken from a slab of stone, in which the impressions were tolerably distinct, and also part of a thin stratum of the stone itself, with indis-