

must not expect many converts to his geological heresy unless he give us irresistibly convincing proofs. We are not willing to close our columns against any expression of opinion, however rash or wrong it may at first sight appear,—the wildest might turn out right at last; but we cannot permit any further discussion of these Portland fissures, unless positive sections to scale with the position of these mammal bones or some practical details are submitted to us.—ED. GEOL.]

Age of the Trinidad Strata.

DEAR SIR,—Perhaps you will allow me to make a remark in connection with a statement occurring in Mr. Guppy's paper on the Parian Formation of Trinidad. He mentions sandstones containing a *Trigonia*, *Belemmites*, and other fossils belonging to a period represented by a series of rocks on the continent of Europe, known as the Neocomian. What I wish to suggest is, that it is more than probable that the beds in Trinidad were not of Neocomian age, as Mr. Guppy says. Are we to suppose it probable, or even possible, that there was no variation of fauna in geological periods, and that the occurrence of two or three species of mollusca together in different localities, furnishes proof of their existence? Can geologists point to certain species of shells, and say, "Wherever these are found together imbedded, we know the rocks containing them to have been contemporaneous"?

Suppose the existing fauna of the world to become fossils, where should we find species to characterize it? By what two or three species would a geologist be able to distinguish the deposit from any that preceded it? Would he not be very likely to place the Australian beds as contemporaneous with our *Oolites* (the absence of *Cephalopoda* being the only remarkable difference)? and he would most probably, according to the system now pursued in geological classification, assign a different period to nearly every existing fauna. Geologists are, it seems, too much impressed with an idea of "contemporaneity." As Professor Huxley said, in his Address to the Geological Society, 1862, "it would have been very much better for geology if so loose and ambiguous a word as 'contemporaneous' had been excluded from her terminology, and if in its stead some term expressing similarity of serial relation, and excluding the notion of time altogether, had been employed to denote correspondence in position in two or more series of strata." Professor Huxley proposes to substitute the word "homotaxis" as more correct, and avoiding the production of an erroneous impression. Edward Forbes was in the habit of asserting that the similarity of the organic contents of distant formations was *primâ facie* evidence, not of their similarity, but of their difference of age. It would be well if geologists were more attentive to these facts. Many conclusions which are now held as undeniable would be shaken from their foundations, and geology would have a difficulty removed from her path which must sooner or later make itself known.

E. R. LANKESTER.

Remarkable Coal-Plant.

SIR,—I have lately found in a seam of coal a stem of *Sigillaria* which throws considerable light on the compound character of some of our common Coal-plants, and tends somewhat to simplify a portion of fossil botany. The circumference of the specimen is 1 foot 6 inches, and after the removal