THE GEOLOGIST.

THE CRADLEY PTERASPIDES.

DEAR SIR.—In answer to your correspondent of last month, who signs himself "Malleus," I merely state again that when I visited the quarry at Cradley, in June last, there was a large heap of stone in blocks of about a foot to a foot and a half square, which had been worked out of the quarry, and that most of these blocks when carefully examined, contained three or four good specimens (some more) of *P. rostratus*. I had in my possession one piece of sandatone from Cradley half a foot square, in which were imbedded five Pteraspides and one Cephalaspis. Part of this specimen is now in the British Museum. I should not have called my specimens *P. rostratus* unless I had had good authority for so doing. As your correspondent inquires as to what or whose it is, I beg to inform the "poor ignoramus," as he styles himself, that I have shown all my specimens of Pteraspis to Professor Huxley, who has had others from the same locality under examination, and it was upon his authority that I called them *P. rostratus* and not Lewisi or Lloydii. In conclusion, I would say with your correspondent, "Do not, young geologist, turn aside from Cradley, but repair thither," &c., and mind to provide thyself with the largest bag thou canst lay thine hands on.

I remain, dear Sir, yours truly,

E. R. LANKESTER.

THE DARWINIAN THEORY.

SIR,—In replying to Lieut. Hutton's article on the Development Theory of Mr. Darwin, I understood him to advocate the Development Theory as usually propounded. I find, however, from his explanation in your number for July, that such is not the case ; that he claims for his theory what the theory claims for the various forms of life, namely, the ability in the "struggle for life"—and a hard struggle this "theory" has had for *its* life!—to modify itself according to circumstances. And hence arises the fact that what seemed "shadows" to him possessed all the characteristics of reality to me. The "Development Theory," as I knew it before Lieut. Hutton published his views concerning it, is thus epitomized by Professor Oken ("Elements of Physio-Philosophy"—quoted by Hugh Miller in "Footprints of the Creator"):—"No organism has been created of larger size than an infusorial point. No organism is, nor ever has been, created which is not microscopic. Whatever is larger has not been created but developed. Man has not been created but developed." Do these sentences contain Lieut. Hutton's idea of the Development Theory?

As thus laid down the Development Theory says, "Man was not created but developed." The Bible says, "God created man in his own image." Again, the new "variation" of the theory, as "developed" by Lieut. Hutton, says, "Man" was developed from the brute until "the time was come that he was fitted to receive his mental and moral powers"—when can a brute be "fitted" to receive a responsible soul ?- and that then "they were given him by a special interposition of the same power that created (developed !) all things." That is to say, one night the "man" Adam lay down to sleep a brute, with the irrational mind, brutish propensities, and irresponsible nature of a brute, and awoke the next morning a man, with the God like intellect and untainted holiness of unfallen This is "development" with a vengeance; and the faith that can humanity ! swallow this camel of transmutation need never strain at the gnat of creation. To me it seems very little different from what the advocates of creation by direct act claim, at least so far as man is concerned, for we can neither say that Adam the man was the same individual with Adam the brute, nor yet that the one was a development of the other. Therefore it is evident, from Lieut. Hutton's own admission, that the "Theory of Development" fails, in the case of man, to account for the various forms of organic life.

But let us pursue this admission to another of its results. While it is undeniable that the superior mental powers of man pre-eminently distinguish him above every other creature, it is equally undeniable that most, if not all, of the other forms of life possess their various degrees of mental power, and that they are not more distinguished by their peculiarities of form and structure than by their varied

8, Savile-row.