

negro unmistakably show the most decided approach to the monkey genus." The same author goes on to say, "Without doubt, man in his earlier periods approached in his whole character nearer to animals than he does in his present condition; and the oldest excavated human skulls indicate rough, undeveloped, and animal-like forms."

Such conditions as these, agitating and seething in the minds of patient observers and reflective thinkers in France and Germany, are being forced upon the minds of Englishmen. Our best thinkers now refrain from offering any theological or metaphysical explanation of geological facts.

I trust that Professor King, whose valuable tables of strata as recently published in the 'Geologist' have had so beneficial an effect on science, may be ultimately led to reject the unphilosophical theory of "autotheogeny."

The doctrine of "Geneotheonomy," or the "Derivative" hypothesis of animal causation, is now fast converting the minds of all palæontologists. Amongst its supporters can be numbered* Lamarck, Geoffroy St. Hilaire, Grant, Matthew, Rafinesque, Haldeman, the author of the 'Vestiges of Creation,' D'Omalius d'Halloy, Owen, Isidore Geoffroy St. Hilaire, Dr. Freke, Herbert Spencer, Naudin, Keyserling, Schauffhausen, Baden Powell, Wallace, Huxley, and Hooker. To these may be now possibly added those of Lyell, Fawcett, Lubbock, Mackie, Salter, Rupert Jones, Blake, Büchner, Schvareze, Knox, Burke, Hutton, King, and many others.

To accept, in 1862, the doctrine of the origin of species by creative fiat out of inorganic matter, is as unphilosophical as to believe in the theory of earthquakes given out by the Muyscas of New Granada, that the earth is supported by pillars of *guaiacum*, on the shoulders of the deity Chibchacum, who, being tired, shifts the weight from one shoulder to another; † or to the Egyptian theory, that the earth, during earthquakes, is tossed from one horn to another of a gigantic cow. ‡ Such theories are fast disappearing in the minds of those who, with Comte, "substitute the study of laws for that of causes, the *how* for the *why*."

I am, Sir, your obedient servant,
MICROLESTES.

Monography of the Geological Survey.

Dear Sir,—Will you be kind enough to inform me, through your Magazine, if the plates to Monograph I. of the Memoirs of the Geological Survey are issued or likely to be issued soon? The Monograph itself (on *Pterygotus*) is published without a word of notice as to when the plates are to be published, although they are referred to in the body of the paper.

It seems to me there is a great want of energy about the Government Geological Survey in the matter of the publication of their Decades and Monographs. On the covers of the work alluded to it is constantly announced that "Other Decades are in the press;" whilst years elapse between the publication of two small Decades. Were the undertaking car-

* List from Darwin, 'Origin of Species,' 3rd edition, 1861, p. xiii.: "Historical Sketch of the recent Progress of Opinion on the Origin of Species."

† Bollaert, 'Antiquities and Ethnology of South America.'

‡ Pouchet, 'Pluralité des Races Humaines.'

ried out in the spirit of Sir Henry De la Beche's preface to the first Decade, palæontologists and naturalists generally would benefit very greatly by a work so remarkable for the beauty and accuracy of its figures and the completeness of its descriptions.

I dare say most palæontologists would not object to receive one Decade or Monograph at the least every three months.

I am, Sir, your most obedient servant,

R. LECHMERE GUPPY.

Port of Spain, Trinidad, 19th June, 1862.

GEOLOGICAL NOTES IN THE GREAT EXHIBITION.

In a few months—and how soon they will fly away!—the great show of the world's industry, that daily attracts its tens of thousands of visitors, will have closed for ever, and have become like many other beautiful things—an item of the oblivious past. As the dulcet sounds of music pass away and are never heard again, although fresh lips or fingers may bring forth other sounds as tender and as sweet, so from our eyes this exquisite vision will pass, and if in future years other and nobler displays shall take its place, *this* glorious scene will truly be no more. How much material of high interest for the geologist is there! as there is for the naturalist and ethnologist; as there is for every thinking mind, for every inquiring intellect. In these notes it is not our intention to attempt to detail *all* the geology that may be learnt within those miles of walls, the catalogues show what a volume would be needed for this; nor is it our wish to fill our pages with expatiations on the wonderful scenery. The work of the navy and the mechanic, the work of the labourer and builder is the work that endures. We attempt to harvest in the fields of facts which other men have there recorded; facts written down for the present occasion for *their* purposes; facts which we wish to gather for our science. We have mineral materials from all parts of the globe. Who has described them, figured them? Plants, trees, woods, animals, skins, bones, gems, and metals conveying years of information to the student. Surely in these fields we may gather as much as we are able of such goodly seeds of knowledge.

First, in walking through the courts, how many noble samples of our nation's great sources of power and wealth, coal and iron, have we seen? Samples of many or of most of them we *may* have seen before, for they are of daily use, some or other hourly before us; but when have we seen such samples so instructively placed? Where have we seen them accompanied and illustrated by such instructive plans and sections?

We have pondered long *how* we should *best* place these various matters before our readers, and at last we have resolved to gather the good seed wherever we can find it, and to take it as it stands, to gather it as it is, and to store it in our volume for everybody's use. This we *must* do, or lose it altogether. Our readers may thrash it, grind it, do what they will with it; but unless we bring it in it will perish thriftless in the field where it stands. What we intend to do, then, is to take note of whatever is valuable as we meet it, we shall not attempt more. As we find good facts we shall write them down—ay, in the Exhibition itself—and send them, then and there, direct to our printers.

MINERAL RESOURCES OF TASMANIA.—The bold greenstone and basaltic mountains of Tasmania, formerly known as Van Diemen's Land, their