

pavilion of the Pierre Pointue, and on the right-hand side of the Mont Blanc route, as you ascend, I got a capital view of the glacier's rocky floor, partly laid bare; and made a rough diagram of the form of the ground, which it is not necessary to reproduce. The bed of the glacier was seen to be scooped out transversely to the glacier's length. It was evident that the rocky floor beneath the ice consisted of a wave-like series of ridges and hollows running along the hill-side across the line of ice-flow. The reason of this, and the mode of formation of the hollows or troughs, was obvious. The rocks over which the ice is moving consist of a series of crystalline schists, of varying degrees of hardness, dipping into the hill at a high angle. Accordingly, as the ice descends, it will wear away the softer strata more than the harder, and thus scoop out a series of troughs along the strike of the schists. In the case of the Mont Blanc range this strike is across the glacier, and thus the latter's rocky floor gets furrowed across the direction of ice-flow.

In my sketch is represented in one spot a mass of moraine stuff caught in a deep hollow in the rocks below the ice.

Another point interesting to geologists, which I may mention, is that the lateral moraines of the Glacier des Bossons are rudely but distinctly stratified. The layers, as might be expected, dip down the valley, very much with the fall of the ice. J. R. DAKYNS.

BRIDLINGTON QUAY.

#### MIOCENE OR EOCENE? AGE OF THE BOVEY LIGNITES.

SIR,—If it be necessary to remove the Bovey beds from the Miocene to the Eocene, why not carry them back at once to the Cretaceous age?

According to Professor Morris, the Floras of the Tertiary and Cretaceous have been mistaken one for the other.<sup>1</sup> Dr. Duncan<sup>2</sup> says the mean temperature required for the growth of the Corals now found in the Haldon Greensand would be equal to 74° Fahrenheit, which must have been a climate equally favourable to the plants of the Bovey beds. In fact the *Sequoia*, a very characteristic fossil in these beds, also occurs in the Coral bed on Haldon. There would then be no need of going eighty miles for its nearest neighbour.

THE PRIORY, COLLETON CRESCENT, EXETER,  
April 13, 1879.

WILLIAM VICARY.

#### MISCELLANEOUS.

GEOLOGICAL SURVEY OF THE TERRITORIES.—The United States Congress has sanctioned a scheme for the reorganisation of the American Surveys. It is understood that the Geological Survey will be placed under the control of Mr. Clarence King, who has so long had charge of the Geological Exploration of the 40th Parallel; but no details have yet reached us.—*Nature*, April 17th.

#### OBITUARY.

We regret to record the death of James Nicol, F.R.S.E., F.G.S., late Professor of Natural History in the University of Aberdeen. He published a Guide to the Geology of Scotland; a Geological Map of Scotland; and is the author of many original contributions to its Geology.

<sup>1</sup> Prof. Morris, on Cretaceous Flora, vol. xv. p. 47, of Popular Science Review.

<sup>2</sup> Prof. Duncan, Journal Geol. Soc. Feb. 7, 1879, page 96.