

ridges, which are parallel to one another and to the direction of the principal valley of the district."

Similar mounds are equally common in many parts of the Yorkshire dales: they occur, for instance, in Bishopsdale, Wensleydale, and Ribblesdale, and on the Haws between the latter dale and Wharfedale. In Westmorland, too, such mounds are common at the foot of the mountains, and they form a striking feature in the landscape of the low ground near Kendal. J. R. DAKYNS.

BRIDLINGTON QUAY.

FAULTS IN THE LONDON CLAY, NEAR HARWICH.

SIR,—The extensive excavations now going on at Ray Island, near Harwich, where the new docks are being constructed for the Great Eastern Railway Company, have exposed some splendid banded sections of the London Clay. One of these is plainly visible to the railway traveller, on the left-hand side, about a mile before he reaches Dovercourt Station. As nearly the whole of the humpy mass of land now called Ray Island is intended to be carried into the neighbouring estuary of the Stour for the erection of embankments, a notice of the dislocations now visible in the sections is of geological value.

In many places the London Clay is seen to be thrown into a series of very gentle folds. At no fewer than *nine* places in the section, small faults are as plainly visible as in a geological diagram, owing to the banded character of the strata. With one exception all the faults have an angle of about fifty degrees, the exceptional fault (seen in the railway cutting) being nearly vertical. The latter shows a dislocation of about two feet. The largest fault is visible in that end of the railway cutting nearest to Dovercourt, and measures upwards of twelve feet. A fault of more than eight feet is seen in a section near the estuary, and some of the minor dislocations occur at intervals of from fifty to one hundred yards. The line of fault is in most instances as sharply defined as if the strata had been diagonally cut through with a knife. J. E. TAYLOR.

PYRITIFEROUS SAND FROM LAKE WINNIPEG.

SIR,—I have had a sample of somewhat curious sand put in my hands by a man who has recently returned from America, and venture to think it may elicit some further information about it could you find space for my note. I send a sample of the sand; you will see that it consists of a very fine grained siliceous sand, grey in colour, the greyness being due to an innumerable quantity of almost microscopic concretions of pyrites. Under the microscope these are pretty objects, mostly globular, and when broken show very distinctly their concentric structure; they appear very similar on a minute scale to the concretions so commonly met with in the Cretaceous deposits, etc. Possibly they have formed round a foraminiferous or other organic nucleus, but I have not succeeded in detecting it as yet in any of the broken globules.

The locality from which the sand was brought is said to be on the