

I refer to the old shape of the ground and not to the angles of the overlying deposits. At foot of page 10, for "Benluben" read *Benbulbin*.—While writing I may mention, in connection with the subject of faults in drift, a suggestion, made with reference to those illustrated in Plate II. Fig. 8 of the above number and others, in Explanation Sh. 126, Mem. Geol. Survey, Ireland, to the effect that they might have been caused in tenaceous drift by the intersection of planes of separation inclined towards each other so as to meet along a line also inclined to the horizon: and enclosing wedge-shaped masses of the material which from passage of water or from being deprived of support at their larger ends by natural causes would slide into lower positions; subsequent denudation settlement, etc., exposing faulted sections and perhaps obliterating other marks of subsidence.

None of these drift faults or dislocations were found to penetrate the underlying (limestone) rock, but I have heard of one from my friend, Mr. Kinahan, which is said to fault both the Coal-measures and superficial deposits in the Castle Corner Field.—Wishing your Magazine the compliments of the season, I am truly yours,

A. B. WYNNE.

LONDON, *January 1st, 1867.*

DENUDEATION AND THE FORM OF THE GROUND.

To the Editor of the GEOLOGICAL MAGAZINE.

SIR,—My old colleague, Mr. A. B. Wynne, appears to have quite forgotten the S.W. of Cork and Kerry, when he says in the *GEOLOGICAL MAGAZINE*, for January, 1867, p. 6, "Isolated rocky pillars upon hills, the very aspects of which suggest that the stone is being gradually disintegrated by rains." Does he forget the Skellings off the coast of Kerry; the Fasnet Rock (See Woodcut)



FASNET ROCK AND LIGHT-HOUSE, coast of Cork, with soundings of 40 fathoms, 6 fathoms from the rock

off the coast of Cork, etc., all of which would be (according to the charts), if the land was elevated 1000 feet, "isolated rocky pillars on hills," and yet at the present day they are being formed by Marine action.

G. HENRY KINAHAN.

FAULTS IN THE DRIFT AND "TRAIL."

To the Editor of the GEOLOGICAL MAGAZINE.

DEAR SIR,—Mr. S. V. Wood, jun., in your last number, questions the correctness of an observation made by me in the pit at the east end of Chillesford Church. He says, "The capping of Boulder-clay, which rests on the Chillesford beds at Chillesford, and which Mr. Fisher, in his paper read before the Geological Society, brought into his evidence of 'trail,' I believe is nothing but an oblique throw of the Upper Drift on to the Chillesford beds;" and his reason for this belief is, because "in a pit only a furlong and a half north of this section, there occurs one of the junction of the Upper and Middle Drift," showing signs of disturbance.

Such proximity of the Boulder-clay, *in situ*, would seem to be a requisite condition for the presence of trail derived from it, but I entirely deny that its being there in a disturbed state proves my explanation of its appearance at this spot to be wrong. The trail of Boulder-clay here lies in a dish, or trough, eroded out of perfectly horizontally bedded Chillesford clay. The trail is five feet thick in the centre, and thins out to nothing at its edges. The Chillesford beds occupy a thickness of nine feet beneath it. I saw no indications whatever of this small bit of Boulder-clay being let in by a fault; and I am not inexperienced in faulted clays and sands, knowing well all the Weymouth, Bridport, and Purbeck districts.

In reference to the subject of what I have called "trail," I take this opportunity of mentioning a fact, which I omitted to notice in my paper before the Society. It is, that I have in several instances observed in the New Forest, trail containing fossil shells derived from neighbouring fossil beds. Yet the out-crop of these fossil beds is not discoverable by any shells in the warp. They are either entirely dissolved or else converted into selenite. This shows that the agency, which transported the trail, acted to a depth, removed from the effects of ordinary atmospheric causes.

As regards faults in the Drift, there seems much difficulty in rightly distinguishing among these beds between true faults, arising from disturbance at a subsequent geological period, and the disturbances of deposition simulating faults, such as abound in the Norfolk cliffs. Erosion has often laid beds side by side, in a way which looks like faulting, and though unwilling to differ from Mr. Wood, who has so extensive an acquaintance with these deposits, I must confess that I suspect the instance at Bulchamp to be one of that character, because sand occurs beneath the Boulder-clay, seemingly continuous with that against which it abuts. It is unusual to meet with any true fault which does not alter the relative levels of