

I should exceed the limits of this work, were I to attempt to give a full description of all the geographical circumstances attending these singular terraces, or to discuss the ingenious theories which have been severally proposed to account for them by Dr. Macculloch, Sir T. Lauder, and Messrs. Darwin, Agassiz, Milne, and Chambers. There is one point, however, on which all are agreed, namely, that these shelves are ancient beaches, or littoral formations, accumulated round the edges of one or more sheets of water which once stood for a long time successively at the level of the several shelves.

It is well known, that wherever a lake or marine fiord exists surrounded by steep mountains subject to disintegration by frost or the action of torrents, some loose matter is washed down annually, especially during the melting of snow, and a check is given to the descent of this detritus at the point where it reaches the waters of the lake. The waves then spread out the materials along the shore, and throw some of them upon the beach; their dispersing power being aided by the ice, which often adheres to pebbles during the winter months, and gives buoyancy to them.

The annexed diagram illustrates the manner in which Dr. Macculloch and Mr. Darwin suppose 'the roads' to constitute mere excrescences of the superficial alluvial coating which rests upon the hill-side, and consists chiefly of clay and sharp unrounded stones.

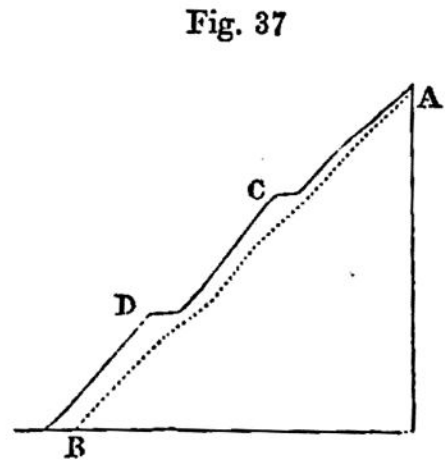


Fig. 37

Among other proofs that the parallel roads have really been formed along the margin of a sheet of water, it may be mentioned, that wherever an isolated hill rises in the middle of the glen above the level of any particular shelf, as in Mealderry, Plate II., a

- A B. Supposed original surface of rock.
- C D. Roads or shelves in the outer alluvial covering of the hill.