

and, in addition, mica and other minerals are intermixed with the limestone. The broad flakes of carbonate of lime are here very remarkable.

The basaltic district of Antrim furnishes abundant and precise evidence of the conversion of chalk into granular marble by the action of basaltic dykes.

“ The Irish chalk is seldom of a texture sufficiently loose to soil the hand ; and in the few instances where this does take place, it is in a very slight degree : its general colour is either perfectly white, or white with a very slight tinge of yellow ; towards the lower part it passes into a uniform ash-colour ; the texture then becomes still more compact.” “ At many points near Belfast, Glenarm, Moira, &c., the chalk is frequently traversed by basaltic dykes, and often undergoes a remarkable alteration near the point of contact ; where this is the case, the change sometimes extends 8 or 10 feet from the wall of the dyke, being at that point greatest, and thence gradually decreasing till it becomes evanescent. The extreme effect presents a dark brown crystalline limestone, the crystals running in flakes as large as those of coarse primitive limestone ; the next state is saccharine, then fine grained and arenaceous ; a compact variety having a porcellanous aspect, and bluish grey colour succeeds ; this towards the outer edge becomes yellowish white, and insensibly graduates into the unaltered chalk. The flints in the altered chalk usually assume a grey yellowish colour ; the altered chalk is highly phosphorescent when subjected to heat.” *

In the island of Raghlin, directly over against Kenbaan Head, a singular combination of dykes occur (seeming to be a continuation of those which at the latter place have been attended by such extraordinary disturbances). Here, within a distance of 90 feet, these dykes may be seen traversing the chalk, which is converted into a finely granular marble, where contiguous

* Dr. Berger on the Geological Features of the North of Ireland, Geol. Trans. vol. iii. p. 172.