

merate, from 200 to 300 feet thick, through which the river makes its way. At St. Peters are low hills more decidedly granitic. Near Stuckeys farm are numerous fragments of crystalline rock, the surface of which is much worn, as is the case with other calcareous rocks all over New South Wales. No traces of fossils have been found in these limestones.

The author remarks that the greenstone becomes compact near the marble, and assumes a bottle-green colour, traces of limestone being common in it; whilst on the other hand, the marble near the greenstone is also changed, so that a passage may be traced from one to the other.

The author concludes by referring to other instances in New South Wales, in which similar phenomena have been produced. He mentions one case in lat. $32^{\circ} 6'$ S., and long. about 151° E., where, in the neighbourhood of the river Page, veins of marble intersect a lava-like trap; and another about 16 miles north of Arthursleigh, where a magnificent tunnel in white crystalline marble occurs in the bed of a creek surrounded by basaltic rocks. On a branch of the Abercrombie river, west of the Dividing Range, and about 40 miles south of Bathurst, a similar tunnel of gigantic dimensions, nearly 800 feet long and 80 feet high, also passes through a mass of white crystalline marble at the bottom of a ravine in the middle of a country of volcanic rocks and blocks of snow-white quartz.

The author hopes to be able, at a future time, to describe these examples more fully; he alludes to them now to show that there is reason to believe that these connections of limestone, plutonic rocks, and quartz dykes, are not without their application to a condition of geological phenomena, to the elucidation of which the banks of the Wollondilly have exhibited a clue.

3. *On the Atherfield Section of the Lower Greensand, in the Isle of Wight.* By W. H. FITTON, Esq., M.D., F.R.S.

[This paper is postponed, not having been received from the author in time for notice in the present number of the Journal.]