The same constitution of the district immediately succeeding the chalky range, may be traced through the other midland counties (Buckinghamshire and Bedfordshire) into Cambridgeshire, but is much covered and concealed by the great accumulation of the diluvial debris of the chalk hills, which converts much of this interval into a vast plain of flint gravel.

The indurated chalk marle is extensively quarried at Totternhoe in Bedfordshire and Reach in Cambridgeshire. It is there known by the name of *clunch*. It affords by burning a good lime. Some of the beds resemble those of Riegate, and are used for the like purpose, as a firestone. Reniform masses of radiated pyrites are common, and one singular bed is full of similar masses of yellow indurated marle, externally of a green colour, and of all sizes from a hazel nut to an ordinary potatoe.

This clunch, or indurated chalk marle, forms the Castle hill at Cambridge, and most of the heights in that neighbourhood. Its line of junction with the upper chalk is said to range by Royston, Balsham, and Newmarket, between the chalk marle and the iron sand, which occurs on the west of this county. Near Gamlingay may be traced, as in Oxfordshire, a broad argillaceous tract, the clay composing which is locally known by the name of *galt*.

The chalk marle which reposes on this bed is said not to be separated from it by any strongly decided demarcation, but rather to pass into it by an insensible gradation.* Some beds of green sand occur near the junction, and others at the bottom of the galt, and near its junction with the iron sand. Its organic remains seem rather to identify the galt with the clay of Folkstone, than with that of the Weald. It is possible, however, that both may be blended together, almost without the chance of discriminating them, in a country where little is to be seen but fen and marsh. The Isle of Ely presents a

* I have never been able to observe, says Professor Hailstone, any strong line of separation betwixt the clunch and the succeeding stratum of gault on which it rests. I believe they pass into each other. The lower beds of clunch become more sandy, and gradually assume the nature of an argillaceous loam. In the next observable stage of transition, the mass assumes a greenish-grey colour, and a plentiful admixture of dark green sand is uniformly dispersed through its substance. At the same time it contains numerous irregular dark brown nodules of a ferruginous indurated marle. At length these foreign matters disappear, the mass becomes uniform, and ends in a bluish clay or argillaceous marle called gault. This occurrence of green sand in the confines of the two beds, was first noticed by Mr. Warburton at the brick-pits near the Castle hill, from which he inferred that it always takes place under the same circumstances; an inference which is borne out by the testimony of the most experienced brick-makers about Cambridge. (G.T. vol. iii. p. 249.)