(See Cambridge Transactions,) to the dislocations of the carboniferous system, will be successful. Mineral veins commonly range a little N. of E. and a little W. of N. on the carboniferous system of the north of England.

## Saliferous System.

## New Red Sandstone System of Authors; Poicilitic System. (Combleare.)

Composition. - After examining the carboniferous rocks, the red sandstones and the associated strata present themselves with an air of novelty and freshness, not less striking to the geologist than a new country to the traveller. Instead of the black, blue, or grey limestone, full of crinoidal columns, producte, $\mathcal{\&}$ c., we have now yellow, sandy, or granular rocks, with few organic remains: the dark shales of the coal series are exchanged for red, green, and blue marls, and the micaceous yellow, ochraceous or brown grits, for red or white sandstones. One feature, indeed, the systems have in common; viz. red conglomerates at or near the bottom ; and close examination points out several instances (Manchester and Salop) of transition coal deposits, in which red grits and clays inclose coal, with shales and limestones of a peculiar aspect.

The arenaceous deposits are a considerable part of the red sandstone system ; they are generally red, and not micaceous. Some of them are coarse brecciated rocks (Kirkby-Stephen), containing limestone fragments; others conglomerates full of various pebbles (Nottingham castle) ; others holding a few pebbles (Runcorn). Many are coarse red grits (Pemrith Beacon) ; or finer building stone (Meriden Hill, near Coventry), often white or greenish (Warwickshire). It is worthy of notice, that the grains of red sandstones near Manchester, were found by Dr. Dalton to be internally a clear quartz, the red oxide of iron being merely an external coating. In Germany are grits (keuper), somewhat resembling certain of the coal measure sandstones.

