

salt would naturally be occasioned, upon any renewed blocking up of the entrance.

The entire absence of marine exuviæ from these strata is no objection to the hypothesis ; because this is the case with almost the whole extent of the red sandstone formation in England.

Upon the whole, it seems evident that this hypothesis is well adapted to the circumstances of the case for which it was framed, and is in itself very simple and plausible, but is liable to the serious objection that it employs data drawn from the *present relations* of land and sea to elucidate the phenomena of a period long gone by, and when, from unquestionable evidence, it is certain that their relations were *generally* very different. It is, however, not impossible that the district in question may have been undisturbed by any subsequent convulsion, and only altered in its physical features by the general elevation which our island appears to have undergone, by the rapid transition of diluvial currents, and the erosive action of rains and rivers. This is perfectly supposable, and may be true ; for, as far as yet known, the circumstances of the case do not appear to contradict it ; but before adopting this explanation, we must examine other salt deposits, and see whether a similar mode of origin can be reasonably ascribed to them.

#### OOLITIC SYSTEM.

*Composition.*—The change of deposits from the saliferous to the oolitic system is in all respects great, and, from the contrast of colours in the rocks generally, very obvious. Instead of red, green, or white marls, we have blue clays : the red and white sandstones are exchanged for calcareous grits, tinted yellow, or ochraceous, by iron in a different state of oxidation : instead of powdery magnesian limestones, we have compact or oolitic rocks. Nothing can be a clearer truth than that this great difference of chemical and mechanical deposits requires the supposition of some great physical revolution in the relations of land and sea. If we suppose