

THEORY OF THE OCEAN'S LEVEL, AS AFFECTED BY THE RISING OR SINKING OF THE LAND.

THE mean level of the sea cannot be regarded as a fixed line, unless, during the geologic changes of the past, it has invariably maintained the same distance from the earth's centre. If the earth, in consequence of the expansive influence of a vastly higher temperature than that which in the present era it possesses, was once greatly bulkier than it is now, the line, in proportion to the bulk, would be further removed than it is now from the centre. The sea would stand greatly higher than at its present line. And who that has surveyed the contortions, the bends, the inflections, the ever-recurring rises and falls, of the more ancient stratified rocks, such as our Scotch grauwacke for instance,—bends and inflections that forcibly remind the geologist of the foldings of a loose robe, grown greatly too large for the shrunken body which it covers,—or that has weighed the yet further evidence furnished by the carboniferous vegetation, extra-tropical in character even in Greenland,—who, I say, that has considered this evidence will venture to decide that the earth's temperature was not higher, nor the earth's radius greater, in the days of the Silurian period, or of the Coal Measures, than it is now? And, of course, if the earth's radius was greater, the level line of the sea must have stood higher,—vastly higher, it seems not impos-