## GREENOUGH.

na which have detained us so long, the state and connexions of gravel and transported bowlders. It is right to say of this gentleman that he has been always distinguished by his comprehensiveness of knowledge and his caution, I might say extreme reluctance and even jealousy, in acceding to new opinions, till they were substantiated by very satisfactory evidence. In that large and careful disquisition, he repeatedly declares himself in favour of one great and universal deluge. But, in the year 1834, we find him thus addressing that Society.

"Allow me—to say a few words upon a subject in connexion with which my name has of late been brought forward much more prominently than I could have desired;—I mean *Diluvial action*.

"Some fourteen years ago I advanced an opinion, founded altogether upon physical and geological considerations, that the entire earth had, at an unknown period, (as far as that word implies any determinate portion of time,) been covered by one general but temporary deluge. The opinion was not hastily formed. My reasoning rested on the facts which had then come before me. My acquaintance with physical and geological nature is now extended: and that more extended acquaintance would be entirely wasted upon me, if the opinions which it will no longer allow me to retain, it did not also induce me to rectify. New data have flowed in, and with the frankness of one of my predecessors, I do also now read my recantation.

"The varied and accurate researches which have been instituted of late years throughout and far beyond the limits of Europe, all tend to this conclusion, that the geological schools of Paris, Freyberg and London have been accustomed to rate too low the various forces which are still modifying, and always have modified, the external form of the earth. What the value of those forces may be in each case, or what their relative value, will continue for many years a subject of discussion; but that their aggregate effect greatly surpasses all our early estimates, is I believe incontestably established. To Mr. Lyell is eminently due the merit of having awakened us to a sense of our error in this respect. The vast mass of evidence which he has brought together, in illustration of what may be called Diurnal Geology, convinces me that if, five thousand years ago, a Deluge did sweep over the entire globe, its traces can no longer be distinguished from more modern and local disturbances. The first sight of those