

throughout extensive tracts of country, and to elucidate the geological structure thus indicated; but his work having continued in manuscript till recently published in the second volume of the Cambrian Register, remains a striking instance of those anticipations of subsequent discoveries which may often be noticed in the history of science, but can in no degree have contributed to forward them.

During the seventeenth century we find little but theoretical writers, like Burnet, without observation, or collectors without general views. Among the collectors, however, Woodward deserves very honorable mention. While he enriched one of our Universities, Cambridge, Llwydd labored to rival him at the other. Llwydd appears to have been acquainted partially, at least, with the occurrence of particular shells in particular strata; having observed that the same varieties of Echini are peculiar to the chalk of England and the north-east of Ireland.

But Lister chiefly demands our notice in this century, having been undoubtedly the first proposer of regular geological maps. (See Philosophical Transactions for 1684.) The very idea of this proposal indicates an acquaintance with the regularity of geological structure prevailing over extensive districts; it does not appear that he ever carried his design into execution, but he illustrates it by mentioning the divisions he would have adopted for Yorkshire, and a map coloured according to these divisions would afford a fair delineation of its true structure. He also shews that he was well acquainted with the extent of the chalk formation in this island and France; and from some of his notices, it farther appears that he had recognised, at least in one particular instance, the distinction of strata by their organic remains.

Early in the following century we find the occurrence of the chalk and sandy hills in parallel zones in Bedfordshire, observed by Holloway (Philosoph. Trans. for 1723); and the same fact still more ably illustrated by a masterly description of the triple range of hills of chalk, of Kentish rag stone, and of clay traversing the county of Kent, by Mr. Packe, author of a chorographical chart of East Kent, published 1730. About the same period, Mr. Strachey, in a series of communications to the Royal Society, had well described the coal-district of Somersetshire. He notices the inclined position of the carboniferous strata, and the horizontal direction of the beds of red ground and lias which cover them; his sections also demonstrate that he was acquainted with the regular succession of beds in this district, namely, chalk, freestone (Bath oolite), red ground, coal-measures, metalliferous limestone of Mendip,