

with which it is intercalated, and which it apparently sometimes entirely replaces, the two deposits being *lithologically one*, any division between them would be a *zoological* boundary.

I am not surprised to hear of Mr. Reade's discovery of marine shells in a hole in the lower part of the grey clay, beneath the peat of Alt mouth, as I showed in my paper read at the Geol. Soc. of London, June, 1870, that beneath the peat and grey clay there is almost always a bed of Post-tertiary *marine* (Shirdley Hill) sand resting on denuded Boulder-Clay. But the upper part of the grey clay there I know to be of freshwater origin, containing rushes and other plants, as well as freshwater shells, which, however, are by no means common.

Freshwater shells also occur in the grey clay, beneath the peat, at the brick-pit, near the Isle of Wight, Birkdale, which I constantly visited during my nine months' stay at Birkdale, never finding any marine forms in it, though they occur abundantly in the silty-clay *above* the peat, and fragments of sea-shells were found in the Shirdley Hill Sand, underlying the grey clay of this pit.

The sand was absent in the Journal of the boring made at the Palace Hotel, Birkdale Park, communicated to me in 1868, by Mr. Holbrook Gaskell, J.P., the chairman of the Company, the peat and grey clay together having thinned to 18 inches, and being overlaid by 79 feet of modern sand, partly blown.

I would remind Mr. Reade that the peat *overlaps* the grey clays, and rests on marine sand and Boulder-clay, and that these clays have therefore nothing like an area of 75 square miles, as he states. And that, again, this plain is only a portion of a larger one, since destroyed, in which the waters of the Mersey and Ribble met, not the brooks now draining into the 75 square miles.

H.M. GEOLOGICAL SURVEY,
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CHARLES E. DE RANCE.

OBITUARY.

ON the 24th of April died Mary Elizabeth, the wife of Sir Charles Lyell, Bart., in the 65th year of her age. Lady Lyell was the eldest daughter of Leonard Horner, Esq., F.R.S., a prominent member of the Geological Society from its foundation down to his death in 1864. In 1832 she was married to Sir Charles, then Mr. Lyell, and ever since constantly accompanied him in his several geological visits to North America, as well as on almost all his journeys on the Continent of Europe as well as in England. Lady Lyell entered warmly into the scientific pursuits of her husband, and keenly appreciated the continual changes and advances in geological knowledge. By her energetic assistance in writing from dictation, the labour of bringing out the several editions of the works on Geology, by Sir Charles Lyell, was materially lessened; and scarcely a proof-sheet was finally sent off to the printer without being first submitted to her for criticism and approval. In this way one of the last acts of her life was to read over the concluding chapter of the fourth edition of the "Antiquity of Man," just published.