

I regret to say that I am not acquainted with the examples of lagoons in Ireland, to which the Fleet is supposed to be analogous. Probably Mr. Kinahan's explanation of their origin may be correct: but that the like will account for all the marshes and reclaimed low lands from Portland to Dover seems to me highly improbable. Take the same sheet of the Map, and observe the forms of the indentations of Weymouth Backwater, and of Lodmore; or further east, of Poole Harbour, Southampton Water, Portsmouth Harbour, Langston and Chichester Harbours. The action of the sea upon a coast composed of soft strata cannot possibly have formed these indentations. They must be drowned valleys.

I feel much supported in my views about the Fleet by the corroboration Mr. Mellard Reade has given to them.<sup>1</sup> O. FISHER.

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#### STALAGMITIC DEPOSITS.

SIR,—When the organic remains which are found buried in caves are receiving such general attention, and when attempts are being made to determine their age by the rate of stalagmitic deposits, I trust that the following case of such deposits may be of interest to the readers of the GEOLOGICAL MAGAZINE.

About 30 years ago, I procured a piece of lime deposit from a lead mine at Boltsburn, in the county of Durham. It measured 18 inches in length, 10 inches in breadth, and fully  $\frac{3}{4}$  of an inch in thickness. It was compact and crystalline, and showed distinct facets of crystals on its surface, over which the water was running. I have indisputable evidence that the deposit had been accomplished in 15 years. The water from which it was produced issued from an adit driven in the Little Limestone, which is about nine feet thick. After leaving the adit, the water ran down the perpendicular side of a rise, for some fathoms, on to some rock debris, which was lying on the bottom of a hopper, whence it proceeded from the upper part of the hopper mouth, then perpendicularly downward over two narrowish wood deals, which were set on edge, and put across the mouth of the hopper to stop the marked materials. It was from off these deals that I obtained the specimen above described. On its under side the forms of the deals were well defined; on the exposed surface, the crystals were best developed where the stream was most active.

In accordance with the above rate of increase, namely,  $\frac{3}{4}$  of an inch in 15 years, 5in. would require 100 years, 4ft. 2in. 1000, and 41ft. 8in. 10,000 years. The data here given to arrive at these results may be relied on as being accurate. In the case now related, the rate of increase was likely to continue tolerably uniform, as the surface water could have no appreciable influence in augmenting or lessening the flow from the adit.

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*Explanation of terms, if required.*—A "rise" is an excavation made by the miner working from below upwards; size, generally about 9ft. by 4ft. A "hopper" is made by bratticeing (or partitioning) off a portion of the rise, and putting timbering horizontally across the low part for a bottom; its use is to hold the worked materials.

<sup>1</sup> GEOL. MAG. Vol. X. p. 573.