

deposits that cover the surface, and are more or less confusedly mingled together, into two formations, the lowest called drift or diluvium, and the highest called alluvium. That human remains exist in the latter no one doubts, though it may be a question whether they fall into the class properly called fossils. But the main question is, Do any of these remains occur as low as the drift? On this question we shall find some diversity of opinion. But here let me make one or two preliminary remarks. The first is, that geologists are not at all agreed where drift ends and alluvium begins; so that what one calls drift, another calls alluvium. Nor do I believe it possible to fix a line of demarcation between them, just because no such line exists in nature. With Professor Pictet, Sir Charles Lyell, and others, I believe that we ought to consider drift and alluvium as forming a single series, and that life has not been interrupted, or entirely renewed, but only some species destroyed during its deposition.

Another remark is, that in my own opinion, the causes producing drift are still in operation, as well as those producing alluvium; and that, in fact, the two classes of causes have had a parallel operation from the first; and, therefore, the two formations should be regarded as contemporaneous, rather than successive. From the earliest times, glaciers, icebergs, waves of translation, and landslips have been forming drift, and are still forming it. And so the oceans, lakes, and rivers have ever been at work to deposit alluvium. I admit that these causes have not always acted with equal intensity, and that the greater part of drift is anterior to the great body of alluvium. But admitting any degree of parallelism in the operation of these causes, the discovery of human remains in drift does not necessarily show them to be of great antiquity. Their age can be settled only by settling that of the deposit