present purpose will be served by a few broad outlines of the condition of the European area at successive geological periods.

It is the fate of continents, no less than of the human communities that inhabit them, to have their first origin shrouded in obscurity. When the curtain of darkness begins to rise from our primeval Europe, it reveals to us a scene marvellously unlike that of the existing continent. The land then lay chiefly to the north and north-west, probably extending as far as the edge of the great submarine plateau by which the European ridge is prolonged under the Atlantic for 230 miles to the west of Ireland. Worn fragments of that land exist in Finland, Scandinavia, and the north-west of Scotland, and there are traces of what seem to have been some detached islands in Central Europe, notably in Bohemia and Bavaria. Its original height and extent can of course never be known; but some idea of them may be formed by considering the bulk of solid rock which was formed out of the waste of that land. I find that if we take merely one portion of the detritus washed from its surface and laid down in the sea —viz. that which is comprised in what is termed the Silurian system—and if we assume that it spreads over 60,000 square miles of Britain with an average thickness of 16,000 feet, or 3 miles, which is probably under the truth, then we obtain the enormous mass of 180,000 cubic miles. The magnitude of this pile of material may be better realised if we reflect that it would form a mountain ridge three times as long as the Alps, or from the North Cape to Marseilles (1800), with a breadth of more than 33 miles, and an average height of 16,000 feet—that is, higher than the summit of Mont Blanc. All this vast pile of sedimentary rock was worn from the slopes and shores of the