

Beaches to show that there were pauses in the elevating process, during which the lines against which the waves beat were hollowed into rectilinear terraces, much broken, it is true, and widely separated in their parts, but that wonderfully correspond in height over extensive areas. It is of course to be expected, that the higher and more ancient the beach or terrace, the more must it be worn down by the action of the elements, especially by the descent of water-courses; and as the supposed beaches intermediate between the strongly-marked ancient coast line which I have already described at such length, and certain upper lines traceable in the moorland districts of the country, occur in an agricultural region, the obliterating wear of the plough has been added to that of the climate. After, however, all fair allowances have been made, there remain great difficulties in the way. I have been puzzled, for instance, by the fact that Scotland presents us with but two lines of water-worn caves,—that of the present coast line, and that of the old line immediately above it. Mr. Chambers enumerates no fewer than fifteen coast lines intermediate between the old coast line and a coast line about three hundred feet over it; and in the range of granitic rocks which skirt on both sides the entrance of the Cromarty Firth, there are precipices fully a hundred yards in height, and broadly exposed to the stormy north-east, whose bases bear their double lines of deeply-hollowed caverns. But they exhibit no third, or fourth, or fifth line of caves. Equally impressible throughout their entire extent of front, and with their enclosed masses of chloritic schist and their lines of fault as thickly set in their brows as in their bases, they yet present no upper storeys of caves. Had the sea stood at the fifteen intermediate lines for periods at all equal in duration to those in which it has stood at the ancient or at the existing coast line, the taller precipices of the Cromarty Sutons would present their seventeen storeys