

an elevated and bleak interior, as different in its temperature and productions from the sea-coast, as the pine-covered sides of the Alps, where they rise towards the snow line, are different in *their* temperature and productions from the rich vine-bearing valleys which they overlook.

I remark, in the second place, that the occurrence in the Oolite of those boring shells of which I have laid specimens before the Society is not without interest, as in some measure illustrative of that unity of plan on which the Creator has wrought in all the geologic periods, and which serves so strikingly to indicate the identity of the Worker. Those four master ideas embodied in the animal kingdom which furnished Cuvier with his principles of classification, each forming the centre of a great division, seem to have been equally the master ideas of all the geologic creations. So far as we know, animal life existed at all times, when it existed at all, in its four master types, and no more; and these in the Oolitic ages, — life radiating round a centre, as in the *Isastrea*, — life lodged within a series of rings, as in the annelids and the crustacea, — life combined with a duality of corresponding parts, as in the cuttle-fishes and the clams, — and life associated with a brain and vertebral column, as in fishes and reptiles, — were not less prominently developed than now. Had a Cuvier then existed to write the history of animated nature, the various classes would have occupied very different proportional spaces in his “Animal Kingdom” from that occupied by those of the present time; but the master divisions, — vertebrata, mollusca, articulata, and radiata, — would have been the same. For of all the creations, I repeat, in the leading idea there has been no change. Two of these we find exemplified before us in single specimens, — those in which the lithodomi lie sepultured in cavities hollowed in *Isastrea*; and we are enabled to trace this identity of idea into yet minuter ramifications, when we thus