

surface. I have great difficulty in ascribing these markings to ice-action, because of the absence of all trituration. For it is the opinion of several of the most eminent anatomists of Paris, especially MM. Lartet and Gratiolet, that this bone (probably a fragment of the tibia of an elephant) retains its original slightly curved surface, on which the extremities of some vessels are seen quite uninjured. I cannot conceive glaciation to have given rise to more than one set of striæ and furrows where there is no accompanying friction or injury to the original surface; yet the aspect of this specimen is in other respects so exactly like that of the smaller one before described that if the scratches and furrows in the one case are not due to ice, we can hardly suppose them to be so in the other.

I also obtained, when last at Saint-Prest, a fragment of a rhinoceros bone, much rubbed and striated, and having one set of striæ upon it crossing another. In this case the original curvature of the bone is partially destroyed by trituration, but the striæ bend round the convex surface in a way not easily reconcilable with ice action.

Some, perhaps, may urge as an additional objection to the introduction of the cause here alluded to, that the *Elephas meridionalis* preceded the glacial epoch, but to such an argument M. Desnoyers might fairly reply that very severe winters and much river ice may have prevailed before the more intense cold of the glacial epoch had set in.

Among the incisions on the Saint-Prest bones which have been regarded by M. Desnoyers as probable indications of the hand of Man are some which, being single and isolated, circle round about a third part of the circumference of some shafts; the tibia for example of the Rhinoceros, passing also in their course through a prominent ridge. Others also go nearly half round the cylindrical stems of some deer's horns. Many of the streaks, when carefully examined, are not simple, but exhibit several subordinate and parallel fine striæ or lines such as the irregularities of a jagged flint knife or hatchet might produce. Moreover, several bones and especially deer's horns have had slices taken out of their sides as if by a sharp tool, leaving smooth elliptical scars.

As some remains of a large extinct rodent of the beaver family (*Trogotherium*) have been found associated with the *Elephas meridionalis* at Saint-Prest, I was desirous of ascertaining whether the teeth of such an animal could have given rise to some of the furrows and excisions alluded to; I accordingly proposed to Mr. Bartlett, of the Zoological Gardens, to make experiments for me with a view of testing the point. Two bones, namely, the radius (or rather the