by dykes and faults; it then issuing in springs. But it is no longer the same water: rain water is, indeed, far from being in a state of purity; it contains always carbonic acid, frequently some muriatic acid or chloride of sodium, besides other irregular admixtures. In passing through the rocks it absorbs lime, oxide of iron, &c., and on issuing in the form of springs, loses its excess of carbonic acid, and again deposits carbonate of lime, carbonate of iron, &c. From some springs the quantity of carbonate of lime deposited is enormous; with the water of others, sand, gravel, fossil shells, and zoophytic fragments issue. Thus the first operation of water in and upon the earth is the same, viz. to consume away the solid substance of the rocks, and either deposit it in new situations not far from the source, or deliver it to flowing streams to be carried further away.

Springs which have an impeded issue to the surface, are the most general cause of landslips: we may consider the great fall of the Rossberg as a case of this kind, the water entering and moistening a particular layer of strata, all inclined very highly, so as easily to acquire a descending force, if the cohesion of the parts were weakened by interposed moisture.



The spring, or rather river (Arve), which issues from the foot of the mer de glace, near Mont Blanc, brings a vast quantity of detritus, which the grinding motion of the glacier on its rocky bed had broken and rolled to pebbles.

326