

are so many points which serve as rules and directions in the ancient chronology.

EXAMINATION OF THE CAUSES WHICH OPERATE AT
PRESENT ON THE SURFACE OF THE GLOBE.

Let us now examine what is at present operating on the habitable globe; let us analyse the causes which still affect its surface, and let us determine the possible extent of their effects. It is a portion of the history of the earth so much the more important, as we have long thought we could explain anterior revolutions by existing causes; as in political history we easily unfold past events, when we are well acquainted with the systems and intrigues of our own times. But unfortunately we shall find that this is not the case with physical history; the thread of the operations is broken; the march of nature is changed; and not one of her agents now at work would have sufficed to have affected her ancient works.

There are now existing four active causes which contribute to alter the surface of our continents: the rains and thaws which lower our lofty mountains, and cast their relics at their feet; the flowing waters, which carry away their remains, and leave them in places where they retard their currents; the sea, which saps the base of the lofty coasts, and which forms the beach on which it casts the sand hills; and finally, the volcanoes, which perforate the solid layers, and elevate or scatter on the surface the masses which they vomit forth. (1)

(1) See, on the changes of the earth's surface, known from history or tradition, and consequently attributable to known