

THE CHAIN OF CAUSES.

‘It is no recent discovery,’ says an ingenious French writer of the last century, ‘that there is no effect without a cause, and that often the smallest causes produce the greatest effects. Examine the situations of every people upon earth ;—they are founded on a train of occurrences seemingly without connexion, but all connected. In this immense machine all is wheel, pulley, cord, or spring. It is the same in physical nature. A wind blowing from the southern seas and the remotest parts of Africa brings with it a portion of the African atmosphere, which, falling in showers in the valleys of the Alps, fertilizes our lands. On the other hand, our north wind carries our vapours among the negroes : we do good to Guinea, and Guinea to us. The chain extends from one end of the universe to the other.’ Waiving, however, for the present, the moral view of the question, I may be permitted to present my readers with an illustration of the physical one,—*i.e.*, the dependence of the conditions of one country on the conditions on which some other and mayhap very distant country exists,—which may be new to some of them, and which the Frenchman just quoted could have little anticipated.

When in the island of Bute, to which I had gone on two several occasions in the course of a few weeks, in order to examine what are known to geologists as the Pleistocene deposits of the Kyles, my attention was directed to a deep