

rocks and *roche moutonnées*. Our view hypothetically unites the two kinds of effects exercised upon the rocks by the passage of ancient glaciers.

The *roches moutonnées*, striated stones, and terminal moraines, by preserving their various positions after the recession and disappearance of a glacier, enable us to recognize the ancient existence of glaciers in countries where no one would have suspected it but for these physical signs and this tangible evidence brought to light by modern science. We are constrained, by proofs so incontestable, to admit that glaciers in the primitive age must have extended over a wide area of the world.

We owe to the industry of Venet a list of thirty-four observations, by which he has established in Switzerland the existence of ancient moraines, isolated, and situated at a great distance from the glaciers which, after building them up, have abandoned them. For example, the moraine of Kandersteg is now some thousands of yards from the glacier of Oeschinen. The villages of Ried, Bodmen, and Halten, in the Valais, are built upon an old moraine of the mighty glacier of Viesch, which is now a league distant from that village.

But it is not only in the valleys radiating from the foot of the Alps that we discover—thanks to the existence of erratic blocks, moraines, and striated pebbles—the infallible traces of the existence of ancient glaciers. We meet with them in the north of Europe, extending even into the central districts—into Sweden, Russia, and even Prussia. Eloquent witnesses are they to the existence, in the ancient history of our globe, of a *Glacial Period*, during which a part of our continent was infolded in a mantle of ice and snow: they are, so to speak, the milestones placed at intervals along the extent of those vast frozen wildernesses which for an unknown time invaded Europe and annihilated organic life.

MELTING OF THE GLACIERS.

The melting of the glaciers takes place at their extremity, either in the valleys, or in those parts of the mountains which are below the