

stone form a layer on the flanks of the mountain, thirty feet thick; stems and branches of the birch-tree occur in the midst of this bed; they are the remains of the ancient forests of the island, which the volcanic eruptions have entirely extirpated.*

This modern silicious formation is a fact of great interest and importance. It tells us in language that cannot be mistaken, that the most insoluble and refractory substances may be reduced to a liquid state, and again become consolidated, and assume other modifications, merely by the agency of thermal waters; hence the envelopement of the delicate corals, shells, &c. which are so abundant in flint nodules, is readily explained.

59. HERTFORDSHIRE CONGLOMERATE, OR PUD-DING-STONE.—We have before us a collection of conglomerates formed by carbonate of lime; in other words, aggregations of pebbles, sand, shells, and corals, which are cemented together by calcareous spar and by ferruginous solutions: but this specimen is an example of a mass of rounded flint pebbles, imbedded in a silicious paste, forming the well-known substance called Hertfordshire pudding-stone, which was formerly in much request; for the cement, being as hard and solid as the pebbles themselves, the stones admit of being cut and polished by the lapidary into a great diversity of ornaments. The formation of this rock must have been effected by a stream of silicious matter flowing into a bed

* Bulletin de la Société Géologique de France.