Valais guide, modern physicists are indebted for its fundamental observations.

This was in 1817. A geologist, whose glacier studies were one day to render him famous, M. de Charpentier, strayed in the course of his excursions into the hut of Jean Perraudin, a guide of the Valais, and a redoubtable chamois-hunter. A storm detained him in this cabin a whole night. Seated before a glowing cheery fire, geologist and hunter began to talk. The former explained to his companion that chance had conducted him thither; then the theories in vogue among men of science, by which they endeavoured to explain the mode of transport of *erratic blocks;* that is to say, of those boulders detached from their parent mountains which are frequently met with at great distances from their birth-place. The geologists of the first quarter of the present century referred their removal to the action of currents of water.

"Why," then said the mountaineer,—"why do you invent your deluges and torrents, and load them with rocks evidently too heavy to be carried by them? Is it not more reasonable to conclude that these stony masses were transported by the glaciers, which are every day transporting similar masses under our very eyes?" An explanation so categorical greatly surprised M. de Charpentier. It was so opposed to the theories then accepted by geologists, that he meditated upon it for eighteen years, while closely studying the characteristics of the glaciers. It was not until 1834, and before a meeting held at Lucerne by the Swiss naturalists, that he made known the results of his protracted investigations.

Already, before this date, an intrepid Alpine explorer, Hugi, of Soleure, had made a very important and decisive experiment. In the summer of 1827, he had had constructed, on the edge of the glacier of the Lower Aar, a small hut of stone; supporting it against a kind of promontory, named the *Abschwung*, and verifying at intervals its exact position. In 1830, he found that it had descended about 320 feet lower; in 1836, it had accomplished a distance of 2300 feet. In 1840, it was sought out by Messrs. Agassiz and Dessor, who dis-