Swiss geologists as the moraine profonde or Grundmoräne (=bowlder clay, till or bottom-moraine). The sheet of ice that once filled the broad central plain of Switzerland, between the Alps and the Jura, certainly pushed a vast deal of mud, sand, and stones over the floor of the valley, and this material has been left as a covering, like the till of Northern Europe.²³⁵

When from any cause a glacier diminishes in size, it may drop its blocks upon the sides of its valley, and leave them there, sometimes in the most threatening positions. Such stranded stones are known as *perched blocks*. Those of each valley belong to the rocks of that valley; and if there be any difference between the rocks on the two sides, the perched blocks, carried far down from their sources, still point to that difference, for they remain on their own original side. But during a former great extension of the glaciers of the northern hemisphere, blocks of rock have been carried out of their native valleys, across plains, valleys, and even considerable ranges of hills.

Such "erratics" (Findlinge) not only abound in the Swiss valleys, but cross the great plain of Switzerland, and appear in numbers high upon the flanks of the Jura. Since the latter mountains consist chiefly of limestone, and the blocks are of various crystalline rocks belonging to the higher parts of the Alps, the proof of transport is irrefragable. Thousands of them form a great belt of bowlders extending for miles at an average height of 800 feet above the Lake of Neufchâtel (Fig. 151). These consist of the protogene granite of the Mont Blanc group of mountains, and must have travelled at least 60 or 70 miles. One of the most noted of them, the Pierre à Bot (toad-stone),

²³⁵ In 1869 I examined a characteristic section of an ancient morame profonde near Solothurn, full of scratched stones, and lying on the striated pavement of rock to be immediately described as further characteristic of ice-action. It closely resembled the bowlder-clay of Northern Europe.