

sheet streaming down from Scandinavia, which was thereby kept from reaching the more northerly parts of England.

The stones in boulder-clay have a characteristic form and surface. They are usually oblong, have one or more flat sides or "soles," are smoothed or polished, and have their edges worn round (Fig. 160). Where they consist of a fine-grained enduring rock, they are almost invariably striated, the striæ running on the whole with the long axis of the stone, though one set of scratches may be seen crossing and partially effacing another, which would necessarily happen as the stones shifted their position under the ice. These markings are precisely similar to those on the solid rocks underneath the boulder-clay, and have manifestly been produced in the same way by the mutual friction of rocks, stones, and grains of sand as the whole mass of *débris* was being steadily pushed on in one general direction.

As above remarked, boulder-clay is not always one continuous deposit. On the contrary, when a sufficiently large extent of it is examined, evidence can commonly be found of two distinct divisions, sometimes even of more than two. These are separable from each other by differences of color, composition, and texture. An attentive study of them shows that they have been formed successively under ice-sheets moving often from different directions and transporting different materials. Their limits of distribution also vary, the lower and older subdivisions extending further south and spreading over a wider area than the upper.

**Interglacial Beds.**—That the deposition of boulder-clay in Britain was interrupted by milder intervals, when the ice, partially at least, retreated from the land and allowed trees and other vegetation to grow up to heights of 800 or 900 feet above the sea, was first proved