long distances without any marked variation of level, whereas those which run north and south are a succession of rapid ups and downs.

Few localities are better fitted at once to interest and perplex a geologist than a cliff of boulder-clay. He sees before him a stiff sandy clay, without any traces of stratification, full of stones of every size up to blocks several feet in diameter (Fig. 83). These are grouped in no order whatever; large boulders and small pebbles are scattered indiscriminately through the clay from top to bottom. They are stuck at every angle, their smoothed and polished surfaces are covered with ruts and striæ running chiefly along

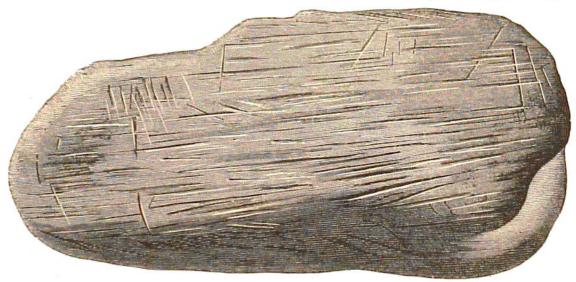


Fig. 84.—Striated Stone from Boulder-Clay of North Medwin Water, Lanarkshire

the longer diameter of the stones, and if the face of the rock below be uncovered, it may be seen to retain the same markings (Fig. 84). On careful examination these stones are found to consist, almost wholly, of fragments from the rocks of the immediate neighbourhood. In a Coal-measure district, for instance, there is a mixture of bits of sandstone, shale, ironstone, coal, and other Carboniferous strata, with a few pieces of the harder rocks of an adjacent geological area. In the Old Red Sandstone and Permian districts, the