SHAPE, RELIEF, AND GEOLOGICAL STRUCTURE.

The western portion of Europe is peculiarly insular and peninsular in nature ; and this, combined with a very diversified surface, has tended to the creation of numerous States, characterized by marked individuality, while the physically homogeneous nature of the eastern part has aided its absorption by a single political power—Russia. The irregular shape of the continent and consequent remarkable length of coastline have been of commercial advantage in bringing all places within easy reach of the sea, and have also materially affected the climate.

More than half of Europe is a diversified plain, under 700 feet high, which extends over Russia, broken only by the comparatively low Valdai Hills, and stretches across the rest of the continent between the plateaus which occupy much of Central Europe and those of Scandinavia and North-West Britain. In Russia, excluding Finland, this plain is composed of old rocks, with the strata very slightly tilted ; and here, as elsewhere, it is largely overlain by accumulations of rock particles, due to glacial action in past epochs. Long ago the huge glaciers, which gradually passed over much of Northern Europe, must have transported a great deal of débris, which was deposited when they melted. These glacial deposits were even sufficient to form low hills in Northern Germany, and to influence the river system in many districts. The rivers which traverse this plain have also spread a thick layer of loose soil over the old worn-down rocks underneath—soil which, in parts, is noted for its fertility. The commercial importance of the plain lies, however, not only in its fertility, but in the easy path it affords for routes in all directions, though the rivers which cross it have formed some hindrance to communication east and west.

In Scandinavia and the north-west portions of the British Isles there exist large plateaus of crystalline schists and other old rocks. These plateaus have been trenched by rivers and modified by glacial action till they have assumed the appearance of rounded mountainous masses severed by deep glens. Granite, which occurs freely in North Britain and Scandinavia, prevails over the whole of Finland ; and the lakes Onega and Ladoga, lying between the White Sea and Gulf of Finland, mark the junction of the granite with the stratified rocks of the Russian plain. The surface of Finland has been worn down, largely by glacial action, till it is a gently undulating plain, with innumerable shallow lakes in the rocky hollows.