

River-System.

On the European continent stretching in a peninsular form towards the southwest, there extends a chief watershed from the Spanish Mezeta across France, the Alps and the Carpathians as far as the Valdai Hills, and from here on as far as the center of the Ural Mountains. To the north of this main watershed-line the rivers empty into the Atlantic, the North and the Baltic Sea and the Arctic Ocean; to the south of the same line they flow into the Mediterranean, the Black- and the Caspian Sea. In the middle portions of Europe quite a special river system came into being. Far in the west, among the rivers flowing generally to the north and south, a river, the Danube originates which running to the east cuts the body of the continent. Thus, the draining-area of this river forms quite a special hydrographic island in the center of the continent. The body of the Danube is confined to a fairly narrow strip of land in the west and is getting narrow again near the mouth; it extends most widely in the area of the Carpathian Basin, which fact makes this territory to be the centre of the Danube region.

The Carpathian Basin contains a separate and closed river system. To the west and east of this area the tributaries of the Danube flow almost parallel toward this axis. The situation is the same in the Wallachian Plain. In contrast with this, in the Carpathian Basin a circular river system had been formed where the rivers radiate toward a center from all directions, towards the Great Hungarian Plain. Outside this circular draining area, the rivers run in all directions flowing partly into the Atlantic and North Sea, partly to the Baltic Sea, into the different bays of the Mediterranean and into the Black Sea.

The rivers of the Central European area are of a different character. In the areas lying to the north of the Danube valley, in consequence of the cool winter-climate, the rivers are glaciated for a rather long period. To the south of the Danube Basin, on the coastal areas of the Mediterranean. However, in consequence of the mild winters, the rivers are ne-

ver covered with ice. The Danube Basin makes a transition. The ice-cover of the rivers is not so permanent as in the regions lying more up to the north, and it is not so solid either; the winters are often mild, and without any ice.

There are differences also in the abundance and courses of the rivers. The rivers running towards the North Sea collect the waters of the oceanic climate-zones; here, in consequence of the steady and evenly distributed rainfall, the amount of water is rather stable. The rivers running towards the Baltic Sea are not so abundant in water, and also their course is rather changeable. The courses of the rivers flowing from the Russian territories into the Black Sea, are extremely changeable. In the winter those rivers are not suited for navigation, as they are icebound for a considerable period each year; in the summer, in consequence of the drought, which makes the water very low, they are useless again. As for the amount of water, the Mediterranean rivers show considerable fluctuations. In the winter, in consequence of the great amount of rainfall, they are abundant in water, in the droughty summer they dry up.

The Danube flows across the most various climate zones and its tributaries run from the most different climatic regions as well. As a consequence, its course in the various sections is different and changes under the most complicated influences. In the Alpine regions, where the Danube is running across oceanic climate zones receiving a fairly constant amount of water from the glaciers of the Alps, the Danube is of western European type. In the Carpathian Basin, in the Tisza River and its tributaries, the Danube received a tributary of an Eastern European type; it is freezing and low in the winters, it rises in the early summer. The Drava renders a larger tributary of an Alpine type, while the Sava one of a Mediterranean character. Thus, under these various influences the course of the Danube changes according to the disembogement of its tributaries. Leaving the Carpathian Basin behind, the Danube arrives at a continental climate zone collecting rivers of continental type from the Roumanian Plain, as well as from Moldavia.

PRINCIPAL HEAD-WATER AREAS

