comparatively shallow waters are perhaps generally referable to the character of their beds. Rivers have their origin in springs, a number of which commonly unite their waters to form a stream, so that it is difficult to single out the head fountain; or they flow from lakes, or have their source in the melting of ice and snow. They are great assistants to civilization, as means of communication between inland nations, and channels of commerce are rendered vastly more efficient in these respects since the discovery of steam, which, overcoming the power of the current, admits of the most rapid floods being readily ascended. From the days of the Ark to the present time rivers and lakes have been used as a great means of transit, whether in the wicker coracle of the ancient Briton or the unwieldy barque of Christopher Columbus.

Rivers are either oceanic or continental: oceanic rivers are those which run into the sea; continental rivers are those which never reach the ocean, but let themselves out into lakes that are unconnected with it, or are absorbed and lost in sandy deserts. The course of rivers in general is very winding, apparently a disadvantage, but in reality one of the numberless acts of wisdom on the part of Providence, for not only is a larger tract of country provided with the means of intercommunication, but the rush of the body of water is prevented, which would render navigation altogether impracticable. The form of the channel, the slope of the bed, and the volume of water, are the elements upon which the velocity of rivers depends. If the banks offered no obstruction, and the water were not checked by friction with the sides and bottom of the bed, the accelerating force of gravity would convert gently flowing streams into irresistible torrents perfectly impassable to the inhabitants of the opposite banks. When water has once received an impulse, by following a descent, the simple pressure of the particles of water upon each other is sufficient to keep it in motion, long after its bed has lost all inclination. A slope of one foot in 200 in the bed of a river renders it unnavigable, a greater inclination produces a rapid, and one still greater, approaching the perpendicular, a cataract. Rapids occur in most principal rivers, the navigation being carried on by means of barges along the banks, or by artificial canals; but in some instances they are surmounted by the aid of the tide. The Richelieu Rapids, opposite Sorel, appear and disappear with the ebb and flow of the tide.