

without coming upon it ; and the establishment of sewers under the streets of the capital necessitates, as a preliminary operation, the exhaustion of the aquiferous strata of the soil.

In this cause, also, we must seek the origin of *springs*, or *natural fountains*. These, in fact, are simply the pluvial waters re-united in subterranean courses, and emerging into the light at a point below their first level. The water furnished by the springs, added to the so-called "wild waters," give birth to brooks, which, when combined, form *streams* and *rivers*.

The two latter denominations are applied to water-courses of a more or less considerable volume. The borders of a running stream are called its *banks*. The right and left bank are on the right and left hand respectively of a spectator standing at the source, and looking in the direction of the current. When the bank is steep it is sometimes called a *cliff* or *scaur* ; the level border of a river is, in Scotland, named the *haugh*. The *bed* of a river is the space ordinarily covered by its waters. Streams which precipitate themselves impetuously from mountains, through broken and rugged ravines, are designated *torrents*.

When the waters can find no issue, or make for themselves no channel, they expand into a *marsh*, *swamp*, or *morass*. These accumulations of stagnant waters are generally produced by water-courses checked in their advance by a horizontal or ascending surface ; sometimes they are formed *in situ* by the gathering of spring-waters, which force a passage through the soil. If the ground subsides into larger or smaller depressions in which the water is able to collect, we witness the result in *mountain-lakes*, *basins*, or *ponds*—natural reservoirs, which are situated at all degrees of elevation. It is no infrequent circumstance for a river to traverse these basins, its waves constantly refreshing and renewing those of the lake or pond.

According to the preceding division of the fresh waters, we shall have to consider successively—*springs*, *rivers*, and *lakes*.

Let us commence with an examination of the *springs*, or *natural fountains*.