

day ; the spring of *Fonzanches*, in Languedoc ; that of *Madame* and *Boulidou* (which flow thirty-six times in twenty-four hours), on the banks of the Gardon ; that of *Engstler*, in the canton of Berne ; those of *Torbay*, *Buxton*, and *Giggleswick*, in England ; and of *Dixon's* and *Northwill*, in America.

In this category may likewise be ranged the natural wells which at certain epochs overflow ; such as the *Frais-Puits*, near Vesoul, in France. In 1557, the town of Vesoul, then being beleaguered, was delivered by a sudden overflow of this spring, which inundated the whole district, and swept away the works of the besiegers.

Near Brest, and about 80 feet from the sea, is a well, whose level rises as the sea sinks, and sinks as the tide rises. In the Bermuda Islands, on the contrary, the fresh-water springs, as well as the salt, rise and sink simultaneously *with* the tide.

The latter fact may be accepted as a proof that springs sometimes originate in the capillary infiltrations of the ocean waters. The ancients, and even some modern writers—among others, Descartes—were of opinion that all springs were produced by the penetration of the sea-waves into subterranean cavities. Having arrived at this point, they are heated by the action of the central fire and reduced into vapour, which, rising into the upper strata, are there condensed, and afterwards emerge in springs and fountains. Like everything which sprung from the imagination of Descartes, it was a subtly reasoned theory, but as an hypothesis superfluous, for the quantities of rain which annually fall upon the earth suffice, and more than suffice, to account for the origin of all our water-courses.

Bernard Palissy is one of the first observers who suspected the true cause of streams and springs.

“The reason,” says the immortal potter, in his book, “*Sur les Eaux et Fontaines*,” “why more rivers and fountains proceed from mountains than from all the rest of the earth, is simply because the mountain-rocks retain the rain-waters as a vessel of brass might do ;