

and pleasant, and would always be wholesome were it not that many are polluted, and the fish killed in them, by the refuse of the crushed ores of lead and copper mines.

Before proceeding to other subjects, I must try to give some idea of the quantity of some of the salts which are carried in solution to the sea by the agency of running water.

The first case I shall take is at Bath, where there is a striking example of what a mere spring can do. The Bath Old Well yields 126 gallons of water per minute, which is equal to 181,440 gallons per day. There are a number of constituents in this water, such as carbonate of lime, nearly nine grains to the gallon; sulphate of lime, more than eighty grains; sulphate of soda, more than seventeen grains; common salt, rather more than twelve and a half grains; chloride of magnesium, fourteen and a half grains to the gallon, &c. &c.—altogether, with our minor constituents, there are 144 grains of salts in solution in every gallon of this water, which is equal to 3,732 lbs. per day, or 608 tons a year. A cubic yard of limestone may be roughly estimated to weigh two tons. If, therefore, these salts were precipitated, compressed, and solidified into the same bulk, and having the same weight, as limestone, we should find the annual discharge of the Bath wells capable of forming a column 3 feet square in diameter, and about 912 feet high. Yet this large amount of solid mineral matter is carried away every year in invisible solution in water which, to the eye, appears perfectly limpid and pure. There are many other salt springs in England, such as those of Cheltenham, and numberless others nominally fresh, each of which brings to the surface its proportion of salts in solution. Indeed, it has been