

wash the alimentary canal, carrying down the slime, yeast, and bile through normal channels. A few ounces can have but little effect in accomplishing such results. It is assumed that the liver and kidneys are greatly influenced by the hot water treatment, and that they are washed as well as the intestinal canal, the bile being eliminated through the bowels, and not through the blood by way of the kidneys.

The best time to use hot water is probably about one hour before meals, and, in some instances, half an hour before retiring to bed. The most important time of all, however, is the hour before breakfast, in the morning. The digestive apparatus of the weak and morbid needs cleansing after a night of rest, or unrest, as in the case of invalids. A half or a whole pint of hot water taken upon getting out of bed in the morning, will in most instances soon break up morbid conditions of the bowels; and natural peristaltic motions will be established, even in obstinate cases.

It may be necessary in some instances to moderate the water slightly, and thus improve its taste and add to its activity. A few drops of tincture of ginger, a half teaspoonful of tartrate of soda, or sulphate of magnesia, are unobjectionable adjuncts to the water, and, indeed, sometimes are necessary. The practice of using hot water may continue so long as it is found to give relief, and so long as it contributes to the establishment of "inward cleanliness," and consequent robust health. Those in sound condition may use hot water with advantage occasionally throughout life.

The therapeutical influence of water, hot and cold, has been but imperfectly understood by physicians; and this is not strange, considering the circumstances under which it has been employed. It has been supposed, when patients were

sent to famous springs for treatment, that it was the "salts" in the water to which the cures were due; but now, observing medical men look upon the use of "salts" with distrust, and these take at least a secondary place as curative agents in their minds. The small quantities of mineral ingredients in some mineral springs, so called, render their waters in many cases unobjectionable; but there are other famous springs, which, as was stated in the last number of *Science News*, are decidedly objectionable.

Pure water is what is needed, and this can be obtained at any clear boiling spring in granitic regions or sections of country. The waters or wells in the country, and aqueduct water in many cities, are pure enough for domestic or medicinal use. The writer (Editor of *Science News*) has been compelled to nurse a defective physical organization for nearly two-thirds of a century; and among the means employed to arrest abnormal waste of tissue, or remove functional obstructions has been the use of water, hot and cold. Hot water has been used for many years according to methods alluded to in this brief paper, and he can attest the importance of the remedy. Those with defective organizations need fewer drugs, plenty of pure water, pure air, and suitable, properly cooked foods.

[In any diseased condition of the system, before using hot water, a physician should be consulted.—ED. S. J.]

LONGEVITY IN FRANCE.—At a reception not long ago at the Academy, Paris, the octogenarians made a good show. There were M. Mignot, eighty-seven; M. Dumas, the chemist, eighty-three; the Duc de Noailles, eighty; and Victor Hugo, eighty. None of them appeared to be encumbered by their weight of years.