

remains uncured, it becomes more firmly fixed, and our graveyards are full of these unfortunate people. But it should be understood that becoming cured of a cold or a cough does not result from the use of patent remedies, these seldom cure, and when they do it is at the expense of changing the disease, or driving it to some other more objectionable part. Catarrh snuffs, throat astringents, eye washes, and salves, do incalculable injury in sending the diseases elsewhere, and in fact causing acute affections, ending in death. The hygienic rules by which diseases first attacking the system may be removed can never fail if the person is persistent, and brave enough to try to use them. A cold or cough may be easily broken up by procuring a good sweat and absolutely abstaining from food a few hours. How much better this is than to tax the system with poisonous drugs, which if they cure remain in the blood perhaps a long time as a foreign element, and in antagonism to the true uses of the body.

The health of the household comprises a great deal that may be said of children. It has often been asked why do one half of these little ones born, die just as they enter life, or perhaps get a glimpse of it, and then pass into another world? We are satisfied that a large percentage of these deaths arises from the ignorance of parents. A tender infant must be tenderly cared for. Often, however, too tender care is the cause of their passing off. Infants are in danger of being kept too warm. They perspire freely and at such time they become extremely liable to cold. The cold is apt to pass off through the bowels, which, instead of being permitted, the mother tries to stop. Or the child may have convulsions, weakening its nervous system possibly for life. The best rule for children so young, and indeed for all children, is to clothe them and cover them at night with just so much as may keep them warm without sweating. They can then bear changes of atmosphere which they could not with impunity before.

Children, especially smaller ones who cannot speak to describe their feelings, may suffer long and severely when we do not know it. They have weary hours of crying, what for they cannot tell, and the impatient and naturally irritated mother attributes it to crossness. The child is punished and becomes a martyr to a second pang. It is an excellent rule to be observed by parents, that a long continued crying in the child betokens some ailment, and under such circumstances should be cared for with tenderness.

Bathing children in too cold water is another frequent error, and makes invalids of men and women who may be fortunate enough to escape worse results of the barbarous torture.

Eighty years ago a mother in England buried six children, all dying in early life with the same disease except one. That one is to-day eighty years of age. She attributes her health and long life to not being bathed in cold water daily as were the rest.

The bad effects of cold bathing, or being washed in cold water, arises from the shock experienced by the child, who soon learns to cry to avoid it, and by crying the system gets into a high state of perspiration, which, being checked too suddenly, produces disease in many forms. The children of robust and healthy parentage may survive this drain upon the system, but the vast majority suffer disease and death ultimately. While it may be said that cold water bathing is bracing, hardening the system, it is also evident that the vitality extracted is to that extent the loss of life, and its natural wards quite sufficient to lose.

Children born with frail constitutions, inheriting the infirmities of parents, need more vitality than cold water can give, even more than all the food, air and exercise, they can ordinarily get.

The true physiological principle of bathing consists in washing off the effete materials from the system, and everything beyond this is foreign to the attainment of health. A tepid bath, or slightly warm water which never shocks or causes disagreeable feelings, answers the purpose in all respects, without the violation of any principle.

Children thus cared for as to clothing and bathing, as to treatment under slight ailment before it becomes chronic, may attain to a hardy constitution, to live long and healthfully, a blessing to the race, and the name they bear.

### The Tidal Mystery.

Among the phenomena of Nature related to the earth which excite our interest, is the wondrous one—the tide. From a very early period of the world's history it has been known that this oceanic movement is produced by the influence of the sun and moon. There are two tides, one caused by the sun, the other by the moon. At new moon, when the sun and moon are in conjunction, and at full-moon, when they are in opposition, the two waves concur, and the tide is at its quadratures, and is at right angles with the sun, the action of the sun and of the moon is diverse; the two waves do not concur, and the tide is at its lowest—neap-tide. Popularly, the two waves are regarded as one, and the tidal-wave is generally spoken of as one. Popularly, too, it is attributed to the influence of the moon, as the influence of the moon is about two-thirds of the combined influence of the sun and moon. In what we have to say, therefore, we shall leave the sun out of the question—the principle governing both being the same—and treat the wave as one; or, rather, we shall speak only of the tide incited by the moon.

The tide is a vast, broad wave, of the average height of two feet, which seems to roll ceaselessly round the globe from east to west. The power of this wave is such that it slightly retards the revolution of the earth, which turns upon its axis from west to east. The tidal wave, however, is not progressive but undulatory, the ocean rising and falling in its place. It is the revolution of the earth which produces the apparent but not real outward motion. The undulation resembles the vibration of a cord stretched between two posts, and pulled in the centre. The tidal wave is stayed, affected, and deflected, by the obstruction and conformation of the various shores where it impinges. Along a part of the Irish coast, near Arklow, the tide is imperceptible; on the shore of Norway it is slight; at New York it is five feet; and at the Bay of Fundy it is seventy-one feet. These variations, which we give as examples, can be easily explained, and are the result of the general undulatory movement, modified by special and local causes, which we need not pause to describe. Touching the grandeur and the fearfulness which attend the flow of a mighty tide, no finer nor more thrilling description has been given than that by Scott in "Redgauntlet." Probably it is familiar to our readers.

There is a mystery, however, about one feature of the tide which has always perplexed students, and of which a satisfactory explanation is rarely given. Indeed, we have never been present at an examination in a public school when either the master or his pupils succeeded in shedding any light upon the subject. We refer to the reverse tide—that is to say, equivalent tides exhibit themselves on opposite sides of the earth at the same time. If the moon is on one side of the earth, there will be a