

Health and Home.

HOW TYPHOID FEVER MAY BE PROPAGATED.

In a recent number of the *Popular Science Monthly*, Ely Van De Warker, M.D., of Syracuse, N.Y., under the title "Typhoid Fever Poison," reports seventeen cases of the fever in an isolated suburb of the city in which there were but fourteen houses. The first case was imported; thence through the overflowing of the privy in which all the excrement of the patient had been thrown, a well became contaminated. All the persons who were taken ill used this well. It was the constant or occasional source of supply of seven of the fourteen families. No cases occurred in the households who did not drink from this well. Some cases were developed in every family who drew water from it. The families who escaped were exposed to every other influence but that of this particular well; their own water supply was the same, less the privy contamination. It is not unlikely that their own wells received some of the overflow from their own vaults, but as these were free from typhoid poison, no ill results ensued.

About eight years since, Dr. Flint, who has studied and written a great deal on the subject, became satisfied that a source of typhoid fever existed which was little dreamed of, and which at first thought would seem impossible. This source, as he then enunciated it to his home medical society (and not to his knowledge having been before suggested), is found in ice. If this idea is thoroughly investigated, it will not appear to be very problematical. In the first place, the poison is not destroyed or impaired by freezing (some one long ago remarked that ice often kills). Now, whence comes our ice supply? Often from shallow reservoirs in the midst of neighborhoods of large towns purposely made to receive surface drainage from all around, under the erroneous idea that no harm will ensue, as freezing is supposed to purify and render harmless what might otherwise be objectionable. Great quantities of ice are taken from canals, from creeks, from stagnant ponds, and from streams that are either the natural or artificial recipients of surface drainage, of the outpourings of sewers, and of uncleanliness from various sources. The danger from ice taken from improper places is not only from that which is drunk, but from its use in refrigerators and preservatories, where milk, butter, fruits, vegetables and meats are subjected to its saturating influence as it vaporizes. Several instances have fallen under the doctor's observation where the disease, by the most careful investigation, could not be traced to any other source; and if we accept as a fact the statement positively made by Budd in the London *Lancet*, in July, 1859, that it never originates *de novo*, but proceeds from a special and specific poison, which is capable of diffusion to a great extent, and which preserves its noxious qualities for a long period, even if buried for many months, we cannot reject the hypothesis of ice infection; and it is hoped that it will be made the subject of very thorough and careful investigation.

THE EFFECTS OF DRINKING COFFEE.

The brown beverage prepared from the berry, improperly so-called, of the Levant leads more than half the world vanquished in its triumphal train, mocking the energetic and barbarous means employed to combat it and check its march. It has found innumerable friends and willing subjects, not only in Europe and Africa, but in America. In the Orient and in Middle Germany it has become the national drink, England and Russia alone preferring the tea-canister to the coffee-pot. The reason of this extended popularity, and the physiological action of coffee have not hitherto been clearly understood. Prof. C. Binz, an investigator to whom we are indebted for an explanation of the action of alcohol, has also rendered a service by carefully examining the active constituents of coffee, namely, caffeine, the empyreumatic substances produced during the burning, and its potash salts.

Moderate doses of caffeine produce an increase of bodily temperature without any symptoms of illness being perceived at the same time. Large doses, which caused perceptible stiffness of the muscles, disquiet, and flow of saliva, were attended with increase of temperature, reaching a maximum in one or two hours, and then decreasing somewhat, but frequently lasting for hours. This action of caffeine renders it an antidote to that of alcohol, and it is employed to counteract the effects of opium also. Experiments made upon dogs show that it is able to check the fall in temperature caused by alcohol, and to produce a continued wakefulness in place of the stupefaction of opium.

Empyreumatic compounds found in burning, and called in France *caffoen*, consisting chiefly of burned oils and bitter principles, also contribute to the action of coffee upon the system. To test their action when isolated from the caffeine, Binz employed the aromatic distillate of a strong decoction of coffee, which smells strongly of coffee. It caused increased activity of the heart with more frequent breathing, and reduced the pressure of the blood.

The increase of temperature assigned to caffeine, by Binz, can result only from an increased decomposition and consumption of material. For most coffee drinkers, the real effects of the drink are due solely to the moderate excitement of these oils.

COLD FEET AND SLEEPLESSNESS.—The association betwixt cold feet and sleeplessness is much closer than is commonly imagined. Persons with cold feet rarely sleep well, especially women. Yet the number of persons so troubled is very considerable. We now know that if the blood supply to the brain be kept up sleep is impossible. An old theologian, when weary and sleepy with much writing, found that he could keep his brain active by immersing his feet in cold water; the cold drove the blood from the feet to the head. Now, what this old gentleman accomplished by design, is secured for many persons much against their will. Cold feet are the bane of many women. Light boots keep up a bloodless condition of the feet in the day, and in many women there is no subsequent dilatation of the blood-vessels when the boots are taken off. These women come in from a walk, and put their feet to the fire to warm—the most effective plan of cultivating chilblains. At night, they put their feet to the fire and have a hot bottle in bed. But it is all of no use; their feet still remain cold. How to get their feet warm is the great question of life with them—in cold weather. The effective plan is not very attractive at first sight to many minds. It consists first in driving the blood-vessels into firm contraction, after which secondary dilatation follows. See the snow-baller's hands. The first contact of the snow makes the hand terribly cold, for the small arteries are driven thereby into firm contraction, and the nerve-endings of the finger-tips feel the low temperature very keenly. But, as the snow-baller perseveres his hands commence to glow; the blood-vessels have become secondarily dilated, and the rush of warm arterial blood is felt agreeably by the peripheral nerve-endings. This is the plan to adopt with cold feet. They should be dipped in cold water for a brief period; often just to immerse them and no more, is sufficient; and then they should be rubbed with a pair of hair flesh-gloves, or a rough Turkish towel, till they glow, immediately before getting into bed. After this, a hot-water bottle will be successful enough in maintaining the temperature of the feet, though, without this preliminary, it is impossible to do so. Disagreeable as the plan at first sight may appear, it is efficient; and those who have once fairly tried it, continue it, and find that they have put an end to their bad nights and cold feet. Pills, potions, lozenges, "night-caps," all narcotics, fail to enable the sufferer to woo sleep successfully: get rid of the cold feet, and then sleep will come of itself.

HEARING AND HOW TO KEEP IT.—Lindsay & Blakiston, 25 South Sixth street, Philadelphia, have published a valuable work under the above title. The book is Vol. I. of a series of American Health Primers edited by W. W. Keen, M.D. From the mass of information contained in it we learn that the ear should not be tampered with, sweet oil and other greasy substances should never be dropped into the ear; they make it heavy, sticky and cloggy. The oil soon becomes rancid and affords a fit soil for the growth of a fungus which may entirely destroy the hearing. Poultices should be avoided both in eye and ear, for they are apt to induce proud flesh. Care should be taken of the bodily comfort, warmth, etc., and the ears protected against cold drafts and other changes. Great care also should be taken not to pull the ears of children, or "box" their ears, a practice which may endanger the hearing in after-life. If the ear should become affected through any cause a simple treatment should be adopted. If the ear runs, it should not be stopped up with cotton or any other substance. The matter must be allowed free egress, and the syringe should be gently used with lukewarm water. The great delicacy of the ear requires the gentlest manipulation, and all the nostrums advertised to drop in it, or sponges to scrub it out, must be avoided. As to the eye bright colors and pleasant objects are grateful, so to the ear sweet music, pleasant company, etc., are beneficial. Brightness of nature and cheerfulness of character have more to do with the preservation of health than is dreamed of.