

THE FEET IN WINTER.

Sometimes in washing the feet in warm water a great deal of scurf or whitish soft substance may be scraped from the soles. This is dead skin, dried perspiration, and other accumulations, all resulting from a want of personal cleanliness. These accumulations occur most in winter, when washing the feet is neither as convenient nor agreeable as in summer time. Many persons suffer from cold feet, simply from a neglect to keep them clean. Few suffer thus in summer time, one reason for which is that the skin is moist, the pores are open, a free evaporation takes place, and the blood is invited to the surface. In winter the skin is dry, harsh and cold. To keep them constantly warm and comfortable is indispensable to good health, and to do this the surface must be brought to the condition of summer—that is, must be soft and somewhat moist, instead of being harsh and dry. This may be soon brought about by soaking the feet in warm water for half an hour at a time daily, using most freely a very stiff brush, with good soap. After the skin has become soft and smooth, a good washing with soap and warm water twice a week during cold weather will greatly contribute to a healthful condition of the feet as well as to personal comfort. If the feet are kept unexceptionally clean, and are nevertheless inclined to be dry, considerable benefit will be derived by rubbing into the soles every morning a little sweet oil, 20 or 30 drops to each sole, with the palm of the hand, patiently and well, the object being to secure by artificial means, that softness and moistness which is known to favor evaporation and invite thither the flow of blood. If in addition, the feet were placed in cold water regularly every morning (when not unwell) not over two inches deep, and remaining in not over half a minute in cold weather, then rub briskly dry with a coarse cloth, next with the hands, all followed by a brisk walk or stamping for a minute or two, or until they begin to feel comfortably warm after the cold bath, an improvement in the condition of the feet would be secured in a reasonably short time, which would largely compensate for the trouble taken.—*Hall's Journal of Health.*

HOW LONG WE ARE TO LIVE.

It is not every one who asks himself this question, because, strangely enough, it is the belief of many persons that their lives will be exceptionally lengthy. However, life assurance companies are aware of the credulous weakness of those whose lives they assure, and have therefore compiled numerous tables of expectancy of life for their own guidance, which are carefully referred to before a policy is granted. The following is one of these well-authenticated tables, in use among London assurance companies, showing the expectancy of life at various ages. In the first column we have the present ages of persons of average health; and in the second column we are enabled to peep, as it were, behind the scenes of an assurance office, and gather from its table the number of years it will give us to live. This table has been the result of careful calculation and seldom proves misleading. Of course, sudden and premature deaths, as well as lives unusually extended, occasionally occur; but this is a tale of average expectancy of life of an ordinary man or woman:

Age.	More yrs. to live.	Age.	More yrs. to live.
1	39	50	21
10	51	60	19
20	41	70	9
30	32	80	4
40	4		

Our readers will easily gather from the above tabulated statement the number of years to which their lives according to the law of averages, may reasonably be expected to extend.

STRAIGHTENING CASTINGS.—Sometimes a casting is warped in cooling and requires straightening before being used. If the piece is to be pined or otherwise finished it should be straightened by heating and placing weights upon it. If it yields to this treatment it will retain its corrected form after the scale is removed, and through all the after processes; but, if the piece is to be used without finishing, it may be straightened by "pening" with the hammer—striking with the "pene" or wedge-shaped end of the machinist's hammer. This process makes a series of indentations on the convex side of the iron, stretching the "skin" of the casting; but when these indentations are removed by after working, the casting is liable to return to its curved form. In "pening," that portion of the casting that receives the blow should be immediately over the face of the anvil or bench block; in other words, each blow should find a solid resistance, and the

casting should be moved along the face of the anvil as the work progresses.

CAUSE OF DRUNKENNESS.—Dr. Jackson expresses the opinion that one of the most common inducements to the use of alcohol, is that people overwork themselves, and being so exhausted that they cannot sleep, resort to smoking, chewing and alcohol drinking. This may sometimes be the case, but we can testify to having learned by observation that men do not become drinkers because they cannot rest, but because instead of devoting their leisure hours to useful reading and proper entertainments, they spend them in drinking saloons among dissipated companions, or they drink at home to kill time. When a man is fatigued from bodily labor, all he has to do is to keep his mind occupied with reading, or have others read to him, and he will soon feel sleepy. The kind of reading has, of course, much influence, and a man must learn by experience what kind of literature will keep him awake, and the sort that will cause him to sleep.

SODA FOR BURNS.—All kinds of burns, including scalds and sunburns, are almost immediately relieved by the application of a solution of soda to the burnt surface. It must be remembered that dry soda will not do unless it is surrounded by a cloth moist enough to dissolve it. This method of sprinkling it on and covering it with a wet cloth is often the very best; but it is sufficient to wash the wound repeatedly with a strong solution. It would be well to keep a bottle of it always at hand, made so strong that more or less settled at the bottom. This is what is called a saturated solution; and really such a solution as this is formed when the dry soda is sprinkled on and covered with a moistened cloth. It is thought by some that the pain of a burn is caused by the hardening of the albumen of the flesh which presses on the nerves, and that the soda dissolves the albumen and thus relieves the pressure; others think the burn generates an acrid acid which the soda neutralizes.

WARM CLOTHING.—If you are apt to feel chilly dress warmly at home. A wadded coat will enable the chilly man to sit and work anywhere in doors, and so will an extra suit of thin flannel worn during the whole of the active day. Just let any one who doubts what we say try the very simple expedient, when the chilliness becomes unbearable, of putting on his dressing gown over his ordinary clothing, and in five minutes he will be perfectly comfortable and ready for work, while he will not suffer as he fancies he will, when he goes out of doors. The popular notion upon that subject is a mere delusion. You are not strengthened for outdoor work by shivering indoors, but rather weakened; habitual warmth, if not too great, being one of the best preservatives of constitutional strength. Always try to remain moderately and healthfully warm.

MAKING GLUE WATERPROOF.—The best substance is bi-chromate of potash. Add about one part of it, first dissolved in water, to every thirty or forty parts of glue; but you must keep the mixture in the dark, as light makes it insoluble. When you have glued your substances together, expose the joint to the light, and every part of the glue thus exposed will become insoluble and therefore waterproof. If the substances glued together are translucent like paper is, all will become waterproof; if opaque like wood, only the exposed edges will become so, but they also protect the interior—not exposed parts—against the penetration of moisture.

LIME FOR DIPHTHERIA.—A child in Auburn, ill of diphtheria, and whose life was despaired of, was cured by slaking lime. Small lumps of lime were kept constantly slaking near its mouth for a day and a half, until over a barrel lime was thus slaked. The child was thought to be dying before this remedy was employed. It breathed the fumes constantly until cured.

NUTRIMENT IN BEANS.—One pound of beans will support life in action as long as four pounds of rice. Two pounds of beans will help do more muscular work than three pounds of wheat, and more brain work than three and one-half pounds. The reason why beans require stronger powers of digestion than wheat is that they contain casein instead of gluten.

NEW KINDS OF PLATED SHEET IRON.—In Iserlohn, Westphalia, thin sheet iron is plated with alloys of nickel, or cobalt and manganese. A half of one per cent. of manganese makes cobalt and nickel very malleable, fluid when melted, and ductile. The plates, which are already in the market, are beautifully white and brilliant.

—The first gold mine in the United States was discovered in South Carolina, in 1790.