



## VENTILATION OF SLEEPING-ROOMS

We again call attention to this subject, because we fear there are many, even intelligent, persons who do not realize the importance of pure air in the sleeping-room. We know that many sleep in rooms where all windows are shut, with no way of ventilating into the chimney if there be one, and where all the fresh air they get is what forces itself through the cracks about the windows and doors. Those who sleep in such an atmosphere are hardly aware how foul it will become by morning, or how injurious to health the same will be. Air that is repeatedly breathed over, can not be healthful and life-giving. Let any one who has doubts in regard to the condition of the air in a close room, where two or more persons have breathed it over and over during the night, go into pure, out-of-doors air, and then in a short time come back into the sleeping-room before it has been aired, and they will in many cases find the air of the room almost intolerable. The true way is to ventilate every sleeping-room.

If there be an open fire-place, that will help; and if in addition to this, one of the windows be left open a little, the air will be so changed as to be good. If no fire-place, there may be ventilators possibly that enter the chimney at the same point above that will answer the same purpose as the fire-place; but if there be neither, then more than one window should be open to a greater or less extent, depending somewhat upon the condition of the weather outside, and then a circulation may be had that will so change the atmosphere of the sleeping-apartment as to leave no doubt as to its healthfulness. Of course care must be taken not to have too strong a draft of air over the bed, and especially so if persons of infirm health occupy the room. In extreme cold weather it may not be desirable to keep the windows open too much.

We know from experience that plenty of pure air is very beneficial in the sleeping-room, and possibly we go to the extreme when we open one or sometimes two windows top and bottom, in addition to an open grate and a ventilator in the room; but we have thus far suffered no inconvenience, but on the contrary have, we believe, obtained much good. Persons should, if possible, occupy chambers rather than rooms on the lower floor for sleeping apartments, and large ones rather than small. If more attention were paid to some of these simple things, we are sure all would be greatly benefited.—*Congregationalist*.

## COLD FEET AND SLEEPLESSNESS.

The association betwixt cold feet and sleeplessness is much closer than is 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 this foot 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 in first driving the blood-vessels into firm contraction, after which secondary dilatation follows. See the snowballer's hands! The first contact of the snow makes the hands terribly cold; for the small arteries are driven thereby into firm contraction, and the nerve-endings of the fingertips feel the low temperature very keenly. But, as the snowballer 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 impotent to do so. Dis-

agreeable as the plan may at first sight 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 woe sleep successfully; get rid of the cold feet and then sleep will come of itself.—*British Medical Journal*.

## HOT AND COLD BATHS.

The *London Lancet*, in a recent number, points out the difference between the effects of hot and cold baths. The effects of the cold bath, it says, being mainly due to impressions made upon the cutaneous nerves, the modifications of the cold bath largely depend on their power of increasing its stimulating action. The colder the water, the more violent the impression. The frequent change of water, such as is found in the sea or in running streams, increases the stimulating effect. Great force of impact, as when water falls from a height, or comes forcibly through a hose upon the body; the division of the stream, as is shown in shower baths and needle baths; and the addition of acids or salt to the water, all act, it would seem, by increasing the stimulating power which the water exerts upon the cutaneous nerves. Warm baths produce an effect upon the skin directly contrary to that brought about by cold water. The cutaneous vessels dilate immediately under the influence of the heat, and although this dilation is followed by a contraction of the vessels, this contraction is seldom excessive; and the ultimate result of a warm bath is to increase the cutaneous circulation. The pulse and respiration are both quickened as in the cold bath. The warm bath increases the temperature of the body, and, by lessening the necessity for the internal production of heat, increases the call made upon certain vital processes, and enables life to be sustained with a less expenditure of force. While a cold bath causes a certain stiffness of the muscles, if continued for too long a time, a warm bath relieves stiffness and fatigue. The ultimate results of hot and cold baths, if their temperature are moderate, are about the same, the difference being, to use the words of Braun, that "cold refreshes by stimulating the functions, heat by facilitating them; and in this lies the important practical difference between the cold water and hot water systems."

## VENTILATION OF SLEEPING ROOMS AGAIN.

The *London Lancet* says if a man were to deliberately shut himself for six or eight hours daily in a stuffy room, with closed doors and windows (the doors not being opened even to change the air during the period of incarceration), and were then to complain of headache and debility, he would be justly told that his own want of intelligent foresight was the cause of his suffering. Nevertheless, this is what the great mass of people do every night of their lives, with no thought of their imprudence. There are few bedrooms in which it is perfectly safe to pass the night without something more than ordinary precautions to secure an inflow of fresh air. Every sleeping apartment should, of course, have a fire-place with an open chimney, and in cold weather it is well if the grate contains a small fire—at least enough to create an upcast current, and carry off the vitiated air of the room. In all such cases, however, when a fire is used, it is necessary to see that the air drawn into the room comes from the outside of the house. By an easy mistake it is possible to place the occupant of a bedroom with a fire, in a closed house, in a direct current of foul air drawn from all parts of the establishment. Summer and winter, with or without the use of fires, it is well to have a free egress for impure air. This should be the ventilator's first concern. So far as sleeping rooms are concerned, it is wise to let in air from without. The aim must be to accomplish the object without causing a great fall of temperature or a draught. The windows may be drawn down an inch or two at the top with advantage, and a fold of muslin will form a "ventilator" to take off the feeling of draught. This with an open fire-place will generally suffice, and produce no unpleasant consequences, even when the weather is mild. It is, however, essential that the air outside should be pure.

**HEART DISEASE.**—The origin of this malady is most frequently traceable to hereditary predisposition, and in many cases it is produced by conduct which was avoidable. Cold, dampness, an enfeebled nervous system conduce to heart disease, but in the majority of cases—taking all classes of society—its acute exhibition is due to breathing impure air. Confinement in badly-ventilated houses, cellar-dwellings, schools, workshops, and factories is the cause of a great portion of the heart affections so prevalent in this country. The impure atmosphere of crowded dwellings seems to have a similar deleterious action on the chief organ of circulation to that which it exerts on the lungs, and thus we find identical conditions favoring the development

of both consumption and derangement of the heart. The thorough and effective ventilation of our rooms and houses, our courts and alleys, which proves a preventive in the latter disease, will assuredly hinder the prevalence of the former. In some cases disease of the heart is produced by violent and continued exertion, such as that of lifting heavy weights and violent rowing, but the use of alcoholic stimulants is a far more frequent producer of cardiac mischief than overwork, and by its indirect effects on the muscular structure of the heart, it predisposes, especially in advanced life, to fatty degeneration of the organ itself and of its great blood-vessels. Tobacco is another potent cause of heart disease, its effect being to paralyze the nerves which control the cardiac function. Physicians have testified to the existence of an appalling amount of heart disease among young men who use tobacco in its different forms.—*Phrenological Journal*.

**WET FEET.**—The season of the year has arrived when wet feet are usual, to say the least, resulting in various forms of disease. Indeed, it is probable that more colds are produced from cold and wet feet after the debilitating influences of the extremes of cold and heat, than from any two other causes combined. This results from the unusual exposure of our children in their favorite amusements and recreations on the ice and snow. These are often so active and violent as to produce perspiration and consequent weakness, predisposing to colds. The discomforts which might ordinarily be observed, and heeded, under these exciting circumstances are often unnoticed. The danger is when in the quiet of home, when fatigue has prepared the way, and when in a hot room, the body in perspiration, when these cold and wet feet disturb the circulation and the equal temperature of the body. And when we remember that the foundations of consumption are laid in the thoughtless days of youth, the more alarming symptoms appearing with girls, from seventeen to twenty-five, it becomes the duty of a mother to see that her daughter looks after her feet on returning from skating, etc., securing comfort.—*Watchman*.

**POISON IN PRESERVED PEAS.**—The subject of the use of salts of copper as coloring matter for articles of food has been before the French Academy. In the course of the discussion, M. Pasteur stated that, having bought fourteen cases of preserved peas at random from several shops in the principal quarters of Paris, he found ten of them containing copper sometimes as much as 1-70,000th of the whole weight of the article, exclusive of the liquid—the latter always containing some copper when the peas contain it, but in less quantity; in the peas, the copper is generally to be found mixed under the exterior cortical envelope. It was also stated that preserved peas may always be considered as being tainted with copper when they have, even in the least degree, the fresh green color of natural peas. In the interests, therefore, of public sanitary safety, M. Pasteur urged the absolute proscription of such treatment of alimentary substances—toleration of the articles in question to be permitted only on condition that the seller label the packages, "Preserved peas colored green with salts of copper."

**SCIENTIFIC RELIANCE ON SOAP.**—Dr. Richardson lectured recently in this city on the germ theory of disease. He acknowledged his obligation to Tyndall for his microscopic investigations on air-dust, spores and other comforting and salutary topics. It is worth while for common people to learn that 50,000 typhus germs will thrive in the circumference of a pin-head or a visible globule. It is worth while for them to note that these germs may be desiccated and be borne, like thistle-seeds, everywhere, and, like demoniacal possessions, may jump noiselessly down any throat. But there are certain things spores cannot stand, according to the latest-ascertained results of science. A water temperature of 120° boils them to death and soap chemically poisons them. Here sanitary and microscopic science come together. Spores thrive in low ground and under low conditions of life. For redemption fly to hot water and soap, ye who live in danger of malarial poisoning. Hot water is sanitary. Soap is more sanitary. Fight typhus, smallpox, yellow fever and ague with soap. Soap is a board of health.—*Philadelphia Press*.

A BELGIAN journal says a new process has been applied to the manufacture of artificial black walnut, by which ordinary wood has imparted to it the appearance of the most beautiful specimens of walnut, adapted to the finest cabinet work. The wood, first thoroughly dried and warmed, is coated once or twice with a liquid composed of one part by weight of extract of walnut peel, dissolved in six parts of soft water, by heating it to boiling, and stirring. The wood thus treated is, when half dry, brushed with a solution of one part by weight of bichromate of potash in five parts of boiling water, and, after drying thoroughly, is rubbed and polished. The color is thus said to be fixed in the wood to a

depth of one or two lines, and, in the case of red beech or alder, for instance, the walnut appearance is most perfect.

**A NEW DYE.**—The *Scientific American* sends out to its subscribers, with New Year compliments, a sample of a new aniline dye known as "Uranine," and said by chemists to be the most highly fluorescent body known. It is in the form of a red powder, which, when sprinkled on the surface of water in a clear glass at once sends down slender streamers of vivid green, and speedily pervades the entire fluid with a fine green and amber tint exceedingly beautiful to behold. So great is its coloring power that a single grain, it is said, will perceptibly tint over three hundred gallons of water.

## DOMESTIC.

**CUSTARD PIE.**—The yolks of three eggs, two tablespoonfuls of sugar, one tablespoonful of flour, beat hard, flavor, add two cups of milk and bake. Beat the whites of the eggs to a stiff froth, add two tablespoonfuls of sugar, and when the pie is done spread this evenly over the top and put it back in the oven until it is a nice light brown.

**SPANISH CREAM.**—One-half box of gelatine, quart of milk, the yolks of three eggs, and one small cup of sugar. Soak the gelatine an hour in the milk, put on the fire and stir well as it warms, beat the yolks light with the sugar, add to the scalding milk and heat to boiling point, strain through thin muslin, and when almost cold put into a mould wet with cold water. Flavor with vanilla.

**HOW TO WASH WINDOWS.**—Have a pail partly filled with clean tepid water; throw in a teaspoonful of powdered borax; have one small chamois dipper in the borax water, to wash the windows; then with a dry chamois rub the window dry, and polish. In this way windows may be cleaned in a very few moments and not wet the carpets or tire the person.—*Western Rural*.

**OMELET.**—Break the eggs in a bowl (six will make a good-sized one), add one tablespoonful of sweet milk to every egg, whip the whole as for sponge cake. Have the omelet pan so hot butter will melt and almost brown in it, pour in the omelet and place it over the fire. If it is nice the whole mess will puff and swell and cook in about three minutes. It is not necessary to cook till wholly done, for its own heat will finish it after it has left the fire. I begin at one end and roll it over and over till it is all rolled up, then let it stand for a moment to brown. Must not put any salt in while cooking.

**GRAHAM BREAD.**—Take three good-sized potatoes, pare and grate them, one mixing spoonful of salt, one-half cup of sugar, and about two quarts of boiling water; stir all together, let it cool until luke-warm, then put in a cup of good lively yeast, and let it stand in a warm place until very light. Take about one quart of luke-warm water, one-half cup of sugar, one tablespoonful of lard, salt, stir in graham in the consistency of griddlecakes, then put in two-thirds cup of yeast, and let it rise over night. In the morning stir in wheat flour enough to make it about as stiff as you can stir it, stir thoroughly, put into your pans, let it rise, and bake.

**BALTIMORE PUDDING.**—One cup of suet, chopped fine, or two-thirds cup of butter, one cup of boiling water, one cup of molasses, one cup of stoned raisins, three and one-half cups of flour, one teaspoonful of soda, a little salt, and all kinds of spices. Steam three hours. *Sauce for Baltimore Pudding.*—One large tablespoonful of flour wet with cold water and beaten very smoothly, one and one-half cups of boiling water, let these boil gently for half an hour or longer; while boiling add one cup of sugar and a little salt. Have ready in the dish the sauce is to be stewed in one egg beaten very light; strain the contents of the basin over the egg, stirring rapidly. Flavor with vanilla.

**TO UTILIZE OLD FRUIT CANS.**—The *Scientific American* publishes a plan which looks as though it might reduce the chances that the earth's surface will shortly be covered with old tin cans in a battered and useless condition. The can is pierced with one or more pin holes, and then sunk in the earth near the roots of the strawberry or tomato or other plants. The pin holes are to be of such size that when the can is filled with water the fluid can only escape into the ground very slowly. Thus a quart can, properly arranged, will extend its irrigation to the plant through a period of several days; the can is then refilled. Practical trials of this method of irrigation leave no doubt of its success. Plants thus watered flourish and yield the most bounteous returns through the longest droughts. In all warm localities, where water is scarce, the planting of old fruit cans, as here indicated, will be found profitable as a regular gardening operation.