

happiness, or working powers. I never "take a holiday," but I take a holiday every day, and my advice, not only for physical but notably for mental health and happiness, is accordingly that we should not try to better or over-ride the rhythm which has been imposed upon our constitution by the diurnal rotation of the earth, but that, as we wake and sleep, so we should work and play, in a daily rhythm.

The business man may very truly reply that, for various reasons, he cannot follow the advice of the student who can arrange his time as he will. No doubt that is partly true, but the fact does not alter the needs of the nervous system nor the tempo of its natural rhythm. We must, therefore, do the best we can in the circumstances, and most of us could do better than we do.

The Value of Sleep

For instance, we might have the sense to see that the supposed recreation which leaves us so very far from recreated that we need artificial means to "pull us together" is worse than useless. The proof of the exercise is in its results. There is no magic in exercise "as such." If we ask what is that thing which, incomparably, restores, recreates, refreshes, rejuvenates, the answer is "sleep"—the very negation of exercise; sleep, in which all the voluntary muscles are at rest, and the muscles of respiration and even the heart-muscle all contract more slowly and gently.

Once we get down to sound physiological foundations we can begin to build up a system of personal hygiene that will stand. If sleep—not at week-ends, but every night, of course—be so fundamental, then the value of exercise or of anything else will depend upon, and must be appraised by, the quality (far more than the quantity) of the sleep which follows it.

Thus, if we want to sleep every night we should work and play every day. But the play must be play in its essence—that is, we must enjoy it. To play is a state of the mind, not of the body. If the solemn discipline of golf amuses you, then it is play for you, and valuable accordingly, just as solving chess problems may be play and therefore valuable for your neighbor. The old view that anything we enjoy is bad for us was false. Nature is not so diabolically contrived as that.

Does Coffee Drinking Prevent Sleep

Few persons would answer this query in the negative, so well grounded is the idea held by our grandmothers that sleeplessness is invariably produced by indulgence in the cup that stimulates.

Recent experiments by Dr. H. L. Hollingsworth on sixteen individuals to ascertain the action of caffeine, the chief active principle of coffee, on the nerves and mind, demonstrate that the popular idea that coffee stimulates mental processes and counteracts the depressing effects of fatigue is correct, but that the induction of wakefulness by coffee is not proved. The individuals experimented upon were students ranging between the ages of 19 and 39, to whom were administered measured doses of caffeine mixed with sugar of milk in capsules. These individuals were carefully watched to avoid error. It was demonstrated that the effect was produced more readily in the evening than in the morning, and that it always began to be noted within ninety minutes after administration, and it persisted from one to four hours. Small doses (one to three grains, the contents of a good cup of coffee) stimulated a typewriter to rapid execution, double doses retarded it, but the quality of the work with regard to error was improved by the coffee.

The effect on sleep was striking by the absence of confirmation of the common idea that wakefulness is induced by coffee. Even doses reaching four grains, an estimated equivalent of a pint of strong coffee, had no appreciable effect except in a few individual cases. And this result is in accord with ordinary observation by unbiased observers. Many persons who drink coffee several hours before retiring to bed insist that their wakefulness is due to coffee, without realizing that caffeine, like other drugs, is absorbed within two

hours and that its effect passes off within four hours, so that when it is taken at 8 p. m. its effect must disappear by midnight. If this were not, true coffee would differ from all other stimulants, the characteristic of which is the brief duration of their effects when the dose is not renewed.

The result of these and other observations is that coffee stimulates the system to bring out its reserve supply of energy, which always lies dormant until called upon in an emergency, that its moderate use is absolutely harmless in health, and its immoderate use (in repeated or large quantities) may produce overstimulation, resulting in exhaustion. From the experiments here cited half a pint of coffee does not contain enough caffeine to damage a healthy person. This would be equivalent to two large cups a day.

The Ideal Clothing

The skin should never be absolutely dry nor appreciably wet. Of course, a bank clerk must work in a warmer room than a butcher, and must have less clothing, but either would be over-clothed were he to exercise violently and would be underclothed if he were to sit outdoors in a snow-storm. The athlete when exercising is sufficiently clothed in "running pants," and likewise those who must work in warm rooms need astonishingly little clothing. Horsemen know that a heavy coat of hair keeps a stabled horse too hot and also is too hot for exercising. So the animal is clipped in winter and clothed only when at rest to prevent the "colds" due to cooling off a sweat-soaked coat. American physicians have called attention to the few colds among the scantily clad women living in our overheated houses, while the English think the women underclothed in their cooler houses are injured by it. There is no question, then, that it is solely a matter of the environment, and those

whose daily life submits them to rapid changes must have outer garments to don or doff as occasion demands. Even those who stay indoors or outdoors must vary the amount worn to avoid visible perspiration, which soaks the undergarments and causes chilling.

The use of wool next the skin seems to be disappearing, and the use of vegetable fibers becoming more common. Cotton absorbs extra perspiration like a towel, and evaporates it to the outer layers much more quickly than wool, which becomes sodden. The woollen garments, then, seem to keep the skin too wet and subject to "colds" from chilling, while the skin under cotton is dry. Wool seems to be designed by nature to keep outer dampness from reaching the skin, and no wool-clothed animal has sweat-glands. So the ideal cold-weather clothing seems to be cotton underneath and woollen outer garments, but all varying in weight and number of layers sufficient to retain warmth but keep the skin dry. The man who dances in a hot ball-room, wearing heavy woollens under his dress-suit, is sure to be overheated and so drenched with perspiration that chilling is sure to occur on the way home when he is fatigued and specially susceptible to infections. There is some sense, then, in the fad for wearing cotton summer undergarments in such a tropical environment. The skin is dry, and a heavy ulster on the way home prevents chilling. There is also a great deal we can do in regulating the absurd clothing of business men.

Precautions for the Nurse

The nurse should take precautions to avoid contracting the disease. She should sleep near an open window, never with the patient between her and the window. She should be out of doors as much as possible when off duty. She should bathe and change her clothing frequently and spray her

mouth, throat and nose with an antiseptic solution. Her dishes should be separate from those used by the patient. After the patient is well she should bathe, wash her hair and put on clean clothing.

Artificial Limbs

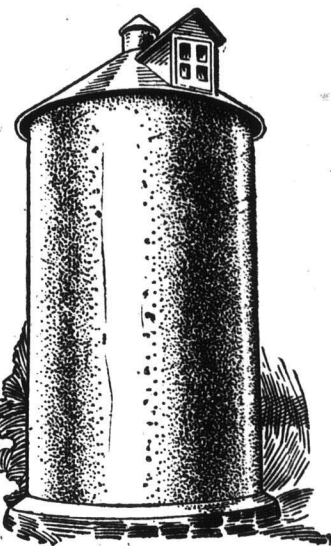
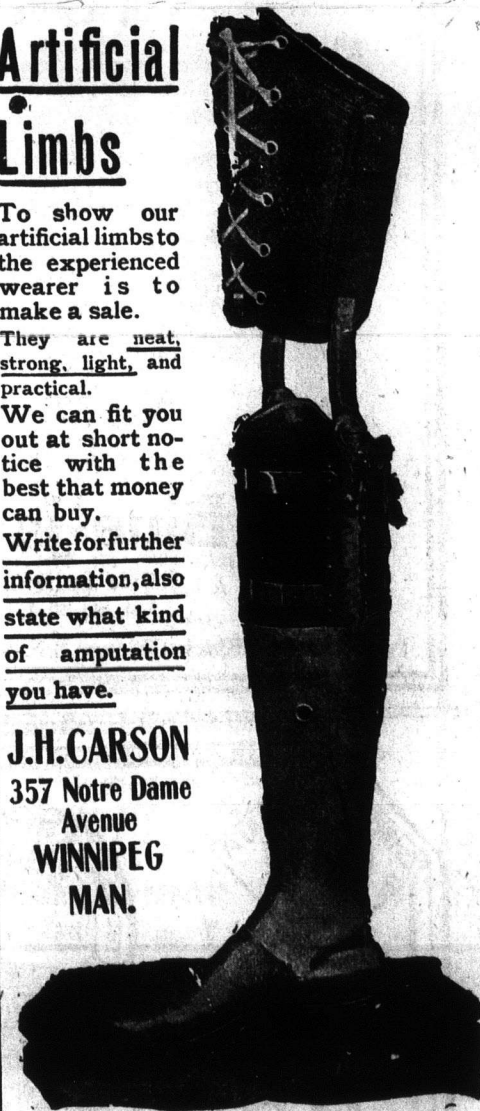
To show our artificial limbs to the experienced wearer is to make a sale.

They are neat, strong, light, and practical.

We can fit you out at short notice with the best that money can buy.

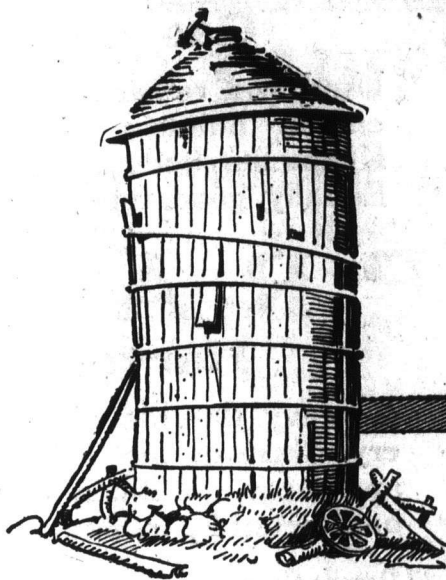
Write for further information, also state what kind of amputation you have.

J.H. CARSON
357 Notre Dame Avenue
WINNIPEG MAN.



What kind of a silo will yours be?

Wood—or Concrete?



IF you were to build two silos—one of wood, the other of concrete—side by side, and then could see them as they will look after five years of service, you wouldn't have to think twice to decide which is the best material. In a few years more there wouldn't be much of the original wooden silo left—the repairing you'd have to do would be as troublesome and cost as much as the building of an entirely new one. But the passage of five, ten, fifteen or even twenty years will make no difference to the hard-as-rock wall of the concrete silo.

CONCRETE SILOS LAST FOREVER

WIND, rain, fire and lightning are alike defied by concrete. You need no insurance against its destruction, because it cannot be destroyed. Concrete silos are best for another reason. The concrete keeps the ensilage at an even temperature, so that it "cures" better, and therefore contains more food-value for your stock.

YOU CAN BUILD ONE YOURSELF

NO matter whether you have ever used concrete or not, you can build a concrete silo. Our book, "What the Farmer Can Do With Concrete," gives all the information you will need, not only about silos, but about scores of other uses for concrete on the farm. It isn't a catalogue, nor an advertising circular. A handsome book of 160 pages, well illustrated, and written for farmers. It is free. Just send your name and address on a postcard or in a letter and the book will be sent free by return mail.

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