TO PREVENT CANCER

Indigestion Frequently its Forerunner, Therefore do Not Neglect Stomach

Indigestion is one of the most com- and because it is so com- of us are apt to regard it vitable result of eating for licine can do little good. We either suffer in silence or take a few home rem-dies, and let it go at that.

This is all wrong. Indigestion, however slight, should receive careful medical attention, for it is often the forerunner of gastric ulcer, and this in turn leads to a surprisingly large number of cases of cancer of the stomach.

Out of 566 consecutive cases of cancer treated at a leading hospital over 60 per cent. began with indigestion, and in nearly all of these this had been followed by chronic ulcer. Figures like these leave no doubt of the importance of giving due attention to even the most trivial derangement of the stomach. Indigestion, dyspepsia and gastric ulcer are the warnings which nature gives us in the order named of the approach of cancer.

Added support of this idea is found in the fact that cancer is more prevalent in the country districts than in the cities. It is in these districts that the most inddigestion is found. In the rural districts over-eating, too much fried food and rich pastry ruin more stomachs than the "high living" of the cities, which is generally supposed to be so harmful.

The length of time during which indigestion is suffered from before cancer of the stomach appears is, on the average, eleven years. One reason why many persons neglect their stomachs and lay themselves open to the danger of cancer is the common belief that cancer is a hereditary disease which can hardly be escaped if it is "in the family." The most reliable authorities at the present time, however, are agreed that there is no proof that heredity plays any part whatever in causing cancer. This conclusion, is of course, liable to modification, for cancer remains one of the diseases about which we have the least definite knowledge.

A NEW GARTER

Top of Stocking is Caught in Slot of Metal Hook

Now comes a new type of garter. To the casual observer it would seem to have no particular advantage over several kinds now in use, but, at least, it is different. There is, of course, the usual elastic band to fit around the upper part of the calf of the leg and prevent slipping. From the center of this band depends a metal hook with

VERY SIMPLE TO FASTEN.

an open end and a narrow V-shaped slot formed by this end. The feature of this garter would appear to be its simplicity, for the fastening of the stocking in it is the matter of an instant. A little end of the stocking top is gathered up, slipped into the slot of the hook, and there you are. The inventor claims that a stocking fastened in this way will not pull out and will not be damaged in the least.

Safe Rubber Gloves

Two French hospital attaches have succeeded in impregnating rubber gloves with the salts of certain metals to make them impervious to X-rays for the protection of persons handling the rays.

For Wind Shields

wind shields on auto- now and sleet a Wash- invented a rotary brush ided with power thro- ft by a car's motor,

A BORN GOLFER

Francis Ouimet, who at the age of twenty won what practically amounts to the golf championship of the world, has been a golf enthusiast since he was six years old, when he would sit for hours watching the members of a club near his home playing. When only a little older, his mother was unable to prevent him becoming a caddy. He always tried to caddy for those whom he considered the best players. He used to copy them, and soon began to play himself.

Then he had to go to school, but his mother says that his heart was really in golf and nothing else. When he used to come home from school in the evenings, and after he had gone to bed, his mother used to wonder what was the cause of the noises that came from his bed room.

One night she went up to find out, and found him practising putting!

MARKINGS ON MARS

Do These Indicate Land and Water, Snow and Ice?

There is no doubt that the main features of Mars are to be regarded as well established and some astronomers have given names to all the prominent objects. The markings on the surface of the planet are of two kinds. Some of them are iron-gray in color verging on green and the others are generally dark yellow or orange, sometimes verging on white. It seems natural to think that the former represent the oceans and the latter the continental masses of Mars.

It had been noted by early observers that each of the poles of Mars was made conspicuous by a white spot. To William Herschel we are indebted for the first systematic study of these extraordinary polar caps. He discovered that these arctic tracts on Mars vary both in extent and distinctness with the seasons of the hemisphere on which they are situated, attaining a maximum development from three to six months after the winter solstice on that planet and then shrinking until they are smallest about three to six months after the summer solstice. This paralleling of the behavior of the snow and ice which surround the earth's poles is remarkable and there is scarcely any question but that the white polar spots of Mars are about like ours.

Mars having a year of 687 days, the seasons on that planet are also like the year, much longer than ours. In Mars' northern hemisphere the summer lasts for 381 days and the winter must be 306 [illegible]. During the summer time the polar cap at the north diminishes from its winter diameter of 50 degrees to about five degrees, while the south polar cap, being placed to one side of the exact pole, appears to be quite free from ice and snow once a year.—Toronto World.

"Bone-head" Column in Box Scores

"I believe," says Secretary John Heydler, of the National League, "that the day is not far distant when we will see a new column in the box score to record the errors of judgment made by ballplayers. Errors of judgment are frequent, and they have far more importance on the outcome of games than the ordinary mechanical errors a player makes. It seems to me that more attention is being given to scoring each year, and the recording of errors of judgment will follow before many more seasons."

Lens For Railway Lights

For railroad signals and locomotive and car marking lamps a lens has been invented that spreads the light over an angle of 90 degrees, making it visible in any position it is likely to be needed.

Portable Electric Pump

A portable electric pump invented in Germany for many uses is mounted on a push cart, takes current from any convenient source and throws water lifted from wells or streams to a considerable height.

Luminous [illegible] For Light

To aid in [illegible] an electric light switch in a d[illegible] a Philadelphian has patented [illegible] containing a luminous composition to shine in the dark.

HORSE VS. MOTOR

Cost of Hay and Oats Away Above That of Gasoline

Thomas A. Edison is authority for the statement that the horse is the poorest motor ever built, and motor car manufacturers are finding that "the wizard of East Orange" knows whereof he speaks. Recent thorough research has shown that the average work horse will eat nearly eight times his own weight in a year. And yet the hauling power developed represents only about 2 per cent. of what should be expected from this expenditure.

It is safe to say that there is not a successful business man to-day who would be satisfied with a return of 2 per cent. on the money he invests in upkeep cost of any machine he operates. Any manufacturer would immediately discard a machine on which the maintenance cost was 49 times greater than the power returned. And yet because the "horse-habit" is so firmly fixed, industrial concerns pay a tremendous price for their motive power.

A horse eats ten pounds of food for every hour he works. He eats 12,000 pounds of food every year. A motor truck consumes no fuel—and this is the food of the vehicle—when it is not working. The minute this motor stops the feeding cost stops. The superiority of the motor is shown, too, in the power developed. The 35 horsepower truck will carry 1,500 pounds of merchandise from six to ten miles on a single gallon of gasoline. This is a vastly greater return in energy for the money expended than the 2 per cent. showing the horse makes.

WHY GRASS IS GREEN

Pigment Which Gives This Shade Has Other Properties

Science long since revealed many of the functions of color in the scheme of Nature. The stripes of the tiger, for instance, so blend with the hues of the jungle in which he lives as to assist in his concealment. The scant vegetation of the desert resembles the desert itself in the matter of color. It is thus more difficult to perceive and therefore less likely to be destroyed. Many of the most defenseless creatures are identical in hue with the more aggressive and in this lies something of immunity from attack.

It is thought that the brilliant tint of the flowers serve to attract the attention of the insects that live upon them. It is not so generally known, however, that the universal green which in a multitude of shades characterizes vegetation everywhere, serves a purpose of the first importance in preserving life upon the globe. Such, at any rate, is the conclusion of Hansom, who affirms that this pigment, chlorophyl, is in vegetation not because it is green, but on account of its chemical properties. Under the influence of the sunlight it manufactures the sugars and starch indispensable to the life of plant and animal alike.

It is found, he declares, even in the vegetation of the deep sea, where in the dense shadow sufficient light for its chemical action is furnished by the bright reds of other growth—another admirable instance of the function of color.

SCIENTIFIC NOTES

Recent statistics credit Spain with more than 3,500,000 goats.

A novel umbrella is equipped with a storage battery electric light in its handle.

Cables linking British and North American ports convey about 30,000,000 words a year.

An adjustable attachment for a baby's chair to hold a nursing bottle has been invented.

Vinegar heated to the boiling point will soften paint brushes that have become dry and hard.

New suspenders are broadened at the front to resemble a vest, thus making two garments in one.

Argentine has the longest piece of straight railroad track in the world, a stretch of 174 miles.

Paper circular saws have been invented which are said to work better

A new [illegible] is made of cocoanut oil, egg yolks and a small proportion of cream.

Ninety-five per cent. of the steel pens manufactured in the United States are made at Camden, N.J.

The same steam engine has been pumping the water out of a coal mine in England for more than 100 years.

What is claimed to be an unbreakable telephone receiver has a steel skeleton within the rubber covering.

SWEAT SHOP FACTS

A Woman Gets Eighteen Cents For Making Twelve Shirts

The Duchess of Marlborough gave a most remarkable object lesson regarding the English sweat shop system, at her home, Sunderland House, when a dozen representative sweated workers told their stories to a large audience.

The first woman said she had been a chain maker for fifty-two years. Holding up a heavy chain, she simply said, "This used to be 87 cents a hundred; now it is $1.25." Next she showed thirty-one links attached to a ring which were made for two cents—"a good lot," as she described it. She gave place to the match-box maker, who said she was now paid six cents a gross instead of the four cents, which was previously given. "It takes one and a half hours to make a gross, not losing a minute." Shirt-making was represented by a woman from the West End of London. Unfolding a coarse shirt, she remarked, "A dozen of these right out before earning 18 cents! Last week me and my husband sat from 5.30 in the morning until 11 at night and made fourteen dozen shirts, which came to $2.62, out of which we had to pay 37 cents for the machine, and 45 cents for cotton."

Another woman had quite a cheerful countenance. Holding high above her head the uppers of two shoes, she remarked, with a laugh, "These are what are commonly called 'pumps,' but what we call in our factories 'patent dress shoes.' I get 20 cents for twelve pairs, and it takes me an hour to make two pairs." The most I can earn is $1.50 or $1.75 a week, working very hard from morning till night, and finding my own machine and cotton.

COLORS IN PICTURES

A Violet Line Gives an Impression of Shading or Projection

In looking at a picture the eye cannot assess each color which makes up the pattern at its exact value. This is chiefly due to the irremediable restlessness of the eye, and to its memory, which is always impressed with an after-image of any color at which the eye's lens is directed. Add to this that the eye focuses differently for different colors, and that all portions of the retina are not equally susceptible to color—and it will be realized that hardly any color in a picture, or a landscape, leaves the same impression that it would have if detached from all surroundings. These are some of the obvious truths of which painters make empirical use on their canvases.

A physiological explanation is attempted regarding the violet line which the post-impressionists use to outline objects in order to give the impression, without shading, of rotundity, or of projection. The effect of such a line is best shown in one of those numerous "still-life" studies where a vase stands among fruit. If the picture is viewed at such a distance that the line just disappears the vase will not only stand forward from its background, but also will appear to be shaded at is edges. The effect is most marked if the vase is painted in a yellow, or in some color well removed from blue, or, which will answer as well, in some washed-out color approaching a grey.

There are actually several factors producing the illusion. One is that when, for example, the prevailing hue of the colorfield of the picture is yellowish, the rays reflected from the yellow are mixed with those reflected from the blue, and the retina of the eye, which is the palette where they are mixed, receives an impression of grey. It is thus deceived into believing that some space exists between the object and its surroundings.

Protecting the Health of Canadian Live Stock.

The Report of the Health of Animals Branch of the Dominion Department of Agriculture for the year ending March 31st.. 1813 is out.

This is the first report issued by Dr. F. Torrance, as Veterinary Director General. This Branch of the Federal service has assumed large proportions covering as it does, the control of import quarantine stations, the control of movements of animals within the Dominion with regard to contagious diseases and the inspection of meats and canned foods. The inspections from the United States and Newfoundland amounted to 43,154 horses, 2,571 mules, 14,795 cattle, 224,115 sheep, 1102 swine, 249 goats, 17 asses, 29 buffalo, 11 camels, 2 yak, 1 zebra, 1 deer and 3 reindeer. The imports from Europe and elsewhere for the same period were 2,245 horses 106 cattle 85 sheep, 3 mules, 29 swine and 6 goats.

Refering to diseases within Canada, the reports show that satisfactory progress was made in reducing outbreaks of such diseases as glanders in horses, mange in cattle, sheep scab. anthrax, rabies etc. The report states that information has been accumulated which will be of use in forming plans for the control of tuberculosis a task which should soon be undertaken.

Thirty two establishments are shown to be under federal meat inspection. In these there were inspected and passed 2,506,520 carcasses. The number of condemnations as well as much additional interesting information are also given.

This report is published for free distribution by the Publications Branch of the Department of Agriculture at Ottawa

New Altitude Record With five Passengers.

CHARTIES, France, Feb. 5.—The French aviator Gariax yesterday established a new altitude record with five passengers, ascending to a height of 7,382 feet. He made the flight in the new biplane built by Paul Schmitt, an engineer, which Tuesday reached a height of 5,000 feet with seven passengers.

The previous record for altitude with five passengers were made by the Austrain aviator Sablatnik, last October, at Johanniethal, who reached an altitude of 3,281 feet.

James H. Smith, of Brookline, Mass., benefits by the will of his stepfather, the late Lord Strathcona. The income of $125,000 is placed in trust for him, and he receives outright real estate in Pictou, N. S.

"The darkest day, live till to-morrow, will have passed away."

LABOR CRISIS REACHED IN NORWAY.

CHRISTANIA, Norway, Feb. 6.—The labor troubles which have been steadily extending over Norway for a long time past are expected to reach a crisis to-morrow. which is the day set by the Norwegian Employers' Association for putting into effect a general lockout against the organized laborers in Northern Norway. The introduction of syndicalism into Norway is declared by the employers to be at the root of the present troubles. Until its introduction, it is declared, the workingmen's associations felt bound by any contract that they entered into, but recently it is said that they have disregarded their obligations and engaged in strikes in violation of existing agreements. As a result of strikes now on in Christiania, Trondhjem and other industrial centres thousands of workingmen employed in the engineering, wood pulp and cellulose industries are idle.