AGRICULTURAL.

Leaner Hogs for Bacon.

The following circular has been sent out to proprietors of cheese factories in Canada, by a Toronto provision firm. Our pork-makers will do well to study the requirements of the ideal bacon hog:

In view of the very large number of hog that have been fed in the past by you, and doubtless are still being fed, we think it wise to caution you as to the kind of store hogs that you buy for this purpose. You are, of course, aware that fat hogs, no matter what weight, are at a serious discount. They entail nothing but loss on the pork-packer who buys them, and dissatisfaction and grumbling on the part of the dealers and consumers, except those who use it in the lumber-camps, where, of course, in the depth of winter, nature craves the grosest and most heat-producing food. A large number of store pigs are short, chunky animals that are unprofitable as feeders and unsatisfactory when fat. Therefore, it will be wisdom on your part to make a selection when buying, inflexibly refusing the runts described above, and choosing long, rangy, growing shoats.

We would like also to caution you against making your hogs too fat, and in doing so we are advising you for your own good, as experiments at the various agricultural stations demonstrate that, after the animal has attained a certain point of fatness, the food given does not produce the same amount of flesh as before. We feel sure that you should aim to turn out three hogs for sale where heretofore you have turned out only two. Give us nice, smooth, long, what we used to call half-fat, hogs, and you will receive better prices and obtain a better return for the food given.

The following extract from an article in the National Provisioner, published in New York, confirms what we have written: "The difference between Irish and American bacon, and the superiority of the former, is not a matter of 'cure' and 'cut' but of 'breed' and 'feed.' The ruling breed in Ireland is the Yorkshire White—very uncouth-looking animals, with long, flat, deep sides, shoulders and hams, and coarse, long necks, heads and legs. When dressed, with their heads and legs off, they look much better, and one decided advantage which they have over the American is that they cut 'lean,' and throughout the fat and lean is much more evenly divided."

Canada bacon is at this time under a cloud in England, because of its overfatness, also because there have been so many converted into bacon that are too light. We ought to have nothing under 100 or over 200 pounds, to bring the highest price. There is a mistaken idea abroad that the English people are in a state bordering on starvation, and requiring meat and grain from all the food-producing countries in the world. In a sense this is true; but, like most half-truths, it is more dangerous than an utter falsehood. It is true that Great Britain does not raise enough for her own consumption, but her ports are open to the whole world, and the whole world unloads its surplus onto them; hence everything in the shape of food is at very low prices. Before the writer lies a letter from a London dealer, who states. "We are suffering from an over supply in all kinds of meats, not only hog product, but imported beef and mutton, which is selling very, very cheap, Danish bacon is so cheap now that many buyers will not touch Canadian. They say Danish is cheap enough, and good Canadian bacon has not smashed predjudice enough yet for buyers to take it on a near platform to Irish and Danish."

In view of the above facts, we again urge you to study your own interests by feeding only such animals as we have described above. We will not pretend that it is your interests that we are anxious about, but we do say that in this regard your interests and those of the packers will be furthered by the course recommended.

Clean Milking.

The filth of cow stables which contaminates the dairy products, is a disgusting evil which is intensified by carelessness. It is bad enough at best, but when no pains are taken to prevent the offensive odors from reaching the inside of the pail, the fault becomes intolerable. Great care is necessary as Mr. A. L. Crosby expresses it in speaking of clean milking, when he says: I don't mean getting all the milk the cow may have in her udder, though that is very important, but keeping the milk you get perfectly clean. When we hear about "animal odor," "cowy odor," etc., it simply means in ninety-nine cases in a hundred, cow manure in the milk. I believe that the chief cause of the manure getting into the milk is because of the nasty practice of milking with wet hands. If a cow that is about to be milked has a little manure dried on the teats there is not much chance of its getting into the milk pail if the teats are carefully wiped with a coarse dry cloth and the milker milks with dry hands; but let the milker begin operations by squirting a little milk on his hands, then from time to time dip a finger or two into the milk pail to keep the hands wet, and you will soon see that manure on the teats slowly trickling down into the pail in foul, dark-colored drops. In a dark stable the milker doesn't notice this and he may think himself a very careful and cleanly milker, but it is just what often occurs and what always will occur among those who practice wet milking. I don't mean to imply that it follows as a matter of course that wet milking means dirty milking, for such is not the case; wash the cow's teats perfectly clean and wipe them dry and there will be no manure to dissolve and run down into the milk even though the milking be done wet handed. But where is the moisture to come from to keep the milker's hands wet? Well, he could carry a cup of water to dip his fingers in—but he won't, but will wet his hands with milk, either by squirting the milk on them directly from the teats or by dipping into the pail.

I see no advantage whatever in wet milking over dry, but see many advantages dry milking has over wet. In the winter cows milked wet are liable to have their teats get chapped and sore if they are turned out into the cold yard directly after being milked, as so many of them are, and it is hard to cure these chapped teats so long as they are wet; and left wet twice a day. Those who were taught to milk dry-handed make just as expert milkers as those who were taught to milk with wet hands; and the latter class can easily learn to do their milking dry if they will make the attempt in earnest. One reason why some milkers wet their fingers while milking is because they think they can strip so much easier and better; my experience is just the contrary, for if a cow is regularly milked dry-handed her teats will become so soft and smooth that there will not be the slightest necessity of wetting them, in fact, wetting would be a disadvantage. If those who have complaints about the bad odor of the milk they sell will investigate the way the cows are milked I believe they will nearly every time be able to trace it to manure that gets into the milk in the way I have stated. This manure doesn't show itself on the strainer cloth nor can it be noticed that the milk is the least bit discolored nevertheless the manure is in the milk and the "cowy" odor also.

NO DANGER.

How an Ingenious Frenchman Cleared the Hall With a Sardine Box.

The Parisians are so fond of a joke that they manage to extract amusement even out of the shocking attempts of Anarchists to destroy life with dynamite bombs. Most of these dynamite jokes are in rather poor taste; but one unintended pleasantry is related which is really amusing.

Not long ago the city of Paris issued a loan, and the bonds were immediately subscribed for by a large number of people in Paris, many of them workingmen and women, who were glad to put their savings into an interest-bearing bond.

One hard-working fellow in a blouse wished to subscribe. He looked at the long line of people waiting for their turn to pass in their subscriptions, and made up his mind that it would take him all day to get to the window.

"I must have something to eat," he said.

So he went and procured a good-sized box of sardines, put them in his pocket, and took his place at the end of the line. There was a great crowd ahead of him and all about him.

He waited patiently, and at last twelve o'clock sounded on the bells.

"Noon!" he said. "Why, I must get out my box."

Then he took the sardine-box out of his pocket, and got his big pocket-knife ready

to open it with, when all at once there was a great rush away from him, and in a minute the hall was clear of people.

"Upon my soul!" he said. "What's the matter with 'em? Well, I'll go up and get my bonds."

So he stepped up to the window and bought his bonds. The people had taken him for an Anarchist with a bomb; but as the gendarme could find on his person no machinery more deadly than a box of sardines, he went home to dejeuner with his fish and his bonds, and saved the rest of the day.

IMPROVED CARS.

Making Them Safer and Stronger in Parts Heretofore Found Weak.

One of the evidences of improvement characterizing present methods of our construction, according to the Railway Review, is the more extensive use of iron, iron plates being quite freely employed, and in the case of some passenger cars the sills and end timbers are provided with heavy iron plates, bolted thereto for the purpose of strengthening them to prevent their being broken in case of collisions; and as to the efficiency of this latter resort, the statement is made that in collision, where ordinarily a car would be telescoped, such an arrangement of the end—though the latter itself become badly broken—will preserve the remainder of the car and save passengers from severe injury.

A construction such as this, which is declared to be one that unquestionably saves life and property in case of wreck, does not materially increase the cost of the car, besides making a very strong car end, and one which, consequently, requires fewer repairs. Some car builders express the opinion that the next important step that will be taken in the interest of safety is that of doing away entirely with the platform—that is to extend the sills and place the draft gear directly on them, abolishing the use of platform timber, and rounding off the end of the car, necessitating the use of extension steps of course.

Submarine Cables.

Those were astonishing figures given by Sir John Pender at the celebration of the twenty-fifth anniversary of the laying of the Atlantic cable. Sir John, who is the English pioneer of submarine telegraphy, said that the cable company's nucleus twenty five years ago was 900 miles of cables and 260,000 pounds sterling capital. Now it is 51,325 miles of cables and a capital representing nearly 15,000,000 pounds sterling. At present the total mileage of submarine cables is, in round numbers, 152,000 miles, of which 90 per cent. have been provided by private enterprise, costing altogether over 40,000,000 pounds sterling. The total length of land wires throughout the world is over 2,000,000 miles, estimated to have cost about 65,000,000 pounds sterling. If the cables and land lines are added together a combined capital is represented of 106,000,000 pounds sterling.

THE WHY AND THE WHEREFORE.

The "Because" of Many Things Which You Have Time and Again Wondered About.

The mane of the lion is useful to that animal, because, hanging over his shoulders, it protects his powerful muscles from changes in temperature and keeps them ready for use.

The voice can be heard to a greater distance through a speaking tube than through the air because the sound is confined to the air within the tube and the tube itself is a good conductor.

The horse's eye has a thick glutinous secretion because his eye, being large and much exposed to dust, the viscid secretion cleanses it more effectually than would one more watery agent.

The snipe has nerves clean down to the tip of his bill because he digs for his living, and, not being able to see his food, has these nerves provided to enable him to ascertain its presence.

The perfume of flowers is more clearly perceived just before or just after a rain because the air, being then laden with moisture, better conveys the essential oils that constitute the perfumes.

The apparent depth of water is always deceptive, because the light reflected from the bottom is refracted as it leaves the water. Water is generally about one-third deeper than it appears to be.

White spots appear on the nails because the vascular tissue underneath is attached to the substance of the nail, but from some accidental cause, such as a blow, occasionally becomes separated.

The day after a heavy snowfall is usually very clear because the snow in falling brings down with it most of the dust and impurities of the air and leaves the atmosphere exceedingly pure.

A closed room is bad for sleeping, because air once breathed parts with a sixth of its oxygen and contains an equivalent amount of carbonic acid gas; air breathed six times will not support life.

Piercing the flesh with even the finest needle hurts because the nerves are so thickly matted just under the skin that not even the finest point can be introduced without wounding one or more.

The ears of most defenseless animals like the rabbit are turned backwards, because these creatures are in constant apprehension of pursuit; hunting animals have their ears turned forward.

Green wood hisses and splutters when burning because of the large amount of water contained in its fibres, which is changed into steam by the heat, and bursts off tiny splinters in making its escape.

Chimneys smoke because the carbon of the coal is disintegrated and drawn off by the heat instead of being consumed in the fire. A furnace properly tended would not smoke, as all the fuel would be consumed.

A cat is enabled to send out or to retract her claws, because the bone to which the claw is attached has a rotary movement on the bone above, and a powerful ligament draws the former down and exhibits the claw.

The snow huts of the Esquimaux are the warmest dwellings that can be constructed in polar regions, because snow is the poorest conductor of heat that can be found there, and keeps the warmth of the fire within.

Water dissolves various substances because the atoms of water, being very minute, penetrate the spaces between the atoms of many substances, and overcoming their cohesive attraction, causes them to fall apart.

Charcoal is a powerful disinfectant because the carbon of which it is composed readily absorbs and combines with many different kinds of noxious gases, thus removing unpleasant odors and harmful substances from the air.

People hiccough because of a muscular contraction of the diaphragm. It is supposed to be sympathetic and to arise from an effort of the diaphragm to assist the stomach to get rid of some indigested or disagreeable matter.

Cropping a cat's ears keeps her at home because in prowling at night among bushes and grass drops of water falls in her ears, and she perfers to stay at home rather than spend the time scratching her head to get the water out.

Clouds that move in a direction opposite to that of the surface current indicate a change of weather, because they prove the existence of two air currents, one warm and the other cold, and the mingling of these often causes rain.

The strongest muscle is in the calf of the leg, because locomotion is one of the most necessary functions. The great muscle of the calf has been found, by actual experiment, to be capable of sustaining seven times the weight of the body.

Many persons lay a poker across the top of a grate to make the fire burn, because of a popular superstition, once credited, that a stubborn fire was due to the devil. Two pokers were used, and were laid across the fire in the form of a cross.

The human system can endure a heat of 212 degrees, the boiling point of water, because the skin is a bad conductor and because the perspiration cools the body. Men have withstood without injury a heat of 300 degrees for several minutes.

The oil glands of the skin are most numerous in races living under the tropics, because the oil is nature's protection against the heat of the sun. In hot countries its action is often assisted by the applications of vegetable or animal oils.

Sounds can be heard over water to much greater distances than on land because the smooth surface of the water offers less impediment to the passage of the air vibrations. On calm days the booming of artillery at sea has been heard for 250 miles.

Bunches of dried sea weed, window cords, crackers, tobacco and similar fibrous substances indicate the approach of rain, because their fibers become soft by absorbing the moisture of the air when the atmosphere is approaching the point of saturation.

A flash of lightning is generally succeeded by a heavy fall of rain, because, it is supposed, the discharge of electricity destroys the vesicles of the mist and vapor in the air, the thin films are concentrated, unite with others and descend in the form of rain.

The primrose is yellow, because, as the scientists say, it alters the vibrations of white light from 37,640 in an inch to 44,000 in an inch, and the number of a second of time from 458,000,000,000,000 to 535,000,000,000,000 but nobody understands how or why.

The vital principle is preserved in seeds and eggs, fruits and vegetables during cold weather because they have a heat of their own. The temperature of an egg or apple, down to the freezing point, is always several degrees above that of the surrounding air.

The toy called the weather-cock is made with a piece of catgut, because this material becomes longer or shorter as it absorbs or parts with moisture. When it shrinks, it turns a rod which sends the man out of the house; when it dries, the action is reversed and the woman appears.

Rats often desert a house before it falls down, because it is probable that the settling of the beams and stones cause noises that, inaudible to human beings, are perfectly so, and very alarming besides, to the rodents. Rats have been known to desert mines shortly before earthquakes or cavings occurred, probably for the same reason.

OUR EGYPTIAN YEAR.

The Practical Separation of the Month, and Days we Owe to the Egyptians.

The division of the year into three hundred and sixty-five days and a quarter comes to us from the Egyptians. So far as history reaches back into the darkness of the early ages we are led to believe that the dusky brown people by the banks of the Nile were the first to study the motion of the sun and stars and make them the measure of time. And some recent discoveries in Egypt, by careful students, seem to show the way in which the early astronomers were enabled to count the days in the solar year. The great temples on the Nile were built with a long entrance of columns leading from the river to the interior shrine—a kind of tunnel; sometimes it was lined with sphinxes or huge granite figures. Its mouth was turned towards a certain part of the heavens where the light of the setting sun could enter in it only once a year. It was either at the summer solstice, when the sun was farthest in the north, or at some other periodic position of sun or star.

We may imagine the Egyptian astronomer watching in the inner shrine for the opening of new year.

THE LONG LINE OF COLUMNS

served as a telescope by which he could catch the first beam of the setting sun. Suddenly the red light would flash through the tunnel up to the Holy of Holies; the moment it reached the shrine the philosopher would mark the hour, and know that another year had begun. From that point in time he could count day after day, until, when the three hundred and sixty-five days had passed, once more the red beam of light streamed into the tunnel, and another year had passed away. In this way it seems probable that our days were first counted and divided.

Other nations, and even the Greeks and Romans, used the moon as their guide, and divided the year into lunar months. But it was found, as time passed on, that great irregularities crept in; the months no longer corresponded to the seasons; April became June, and the autumn months winter. The Egyptian sun-year was then generally adopted. But even this was disordered and altered by the ignorance of the Roman priests; and at last Julius Cæsar, who was fond of astronomy, resolved to correct the calendar; it is his year that we now use, and to his friend, the Egyptian Sosigenes, we owe our division of time. Astronomy was a favorite study with the cultivated Romans, and from Egyptian Alexandria, the scientific centre of the time, they drew their chief masters and books on the stars. Cæsar fixed upon the 1st of January as the beginning of his year—a season of feasting and joy with the Egyptians and all modern society.

Another mode of calculating the days of the year in Egypt was by the rising of the dog-star, Sirius. This was known as

THE SOTHIC SYSTEM,

and is another proof of the careful study the Egyptians gave to the starry skies. It is suggested that the pyramids were built under the guidance of the astronomers, and that many of the smaller temples were directed toward some particular star. But it is probable, as modern research seems to show, that the sun, or Ra, as it is called in Egyptian, was in the most civilized period the chief deity, and its revolutions the only measure of time. The Pharaohs claimed, like the Incas, that they were the children of the sun; on the cartouches the sun stands a circle at the top, and a goose, the symbol of an offspring or son, below it. Ra was the parent of the Rameses, the chief Egyptian conquerors and builders, and their enormous statues still guard the banks of the Nile. From the Egyptian Ra we have learned to divide time, and the New Year's festivities and the more practical separation of months and days we owe to the active astronomers on the banks of the Nile.

A Remarkable Operation.

Dr. A. H. Levings of Milwaukee, has performed a remarkable operation on a year-old boy who has been an idiot since his birth. The child has not even learned to talk, and has been unable to care for himself in any degree. Dr. Levings examined him and found that a piece of his skull was pressing against his brain. He removed the piece, which was a strip about half an inch wide and extending from the forehead half way around one side of the head. The operation was performed several days ago and the boy is rapidly recovering. There has been a marked difference in his behavior since the bone was removed, and it is believed that he will now learn as other children learn and become intelligent.

Getting Acquainted.

Relative—"I notice that you have at last got acquainted with your next-door neighbor who has lived alongside of you for the past ten years."

Mrs. D'Avnoo—"Yes, we were introduced to each other at the Pyramids of Egypt, and I found her a delightful companion. We became very intimate."

Blood Poisoning

Mrs. Mary E. O'Fallon, a very intelligent lady of Piqua, Ohio, was poisoned while assisting physicians at an autopsy 5 years ago, and soon **terrible ulcers** broke out on her head, arms, tongue and throat. Her hair all came out. Her husband spent hundreds of dollars without any enefit. She weighed but 78 pounds, and saw no prospect of help. At last she began to take Hood's Sarsaparilla and at once improved; could soon get out of bed and walk. She says, "I became perfectly cured by

Mrs. M. E. O'Fallon.

Hood's Sarsaparilla

and am now a well woman. I weigh 128 pounds, eat well and do the work for a large family. My case seems a wonderful recovery and physicians look at me in astonishment, as almost **like one raised from the dead.**"

HOOD'S PILLS should be in every family medicine chest. Once used, always preferred.

NIGH TO DEATH'S DOOR.

How a Young Lady Was Cured of a Terrible Malady When Near the Brink of the Grave.

The large, pretentious brick residence at 86 Miami avenue, in this city, is the home of the heroine of this interesting story. She is Miss Margaret Stenbaugh, and her interesting experiences during the past four years are published here for the first time.

"Four years ago," she said, "I was a sufferer in all that the term implies, and never thought of being as healthy as I am to-day. Why, at that time I was such a scrawny, puny little midget, pale and emaciated by an ailment peculiar to us women, that my father and mother gave me up to die. The local practitioner (I was at that time living at Scotland, Brant Co., Ont.,) said it was only a matter of days when I would be laid away in the church yard, and as I was such a sufferer I cared not whether I lived or died; in fact, think I would have preferred the latter. I could not walk, and regularly every night my father used to carry me up stairs to my room. I remember my telling him that he wouldn't have to carry me about much longer, and how he said with tears in his eyes, that he would be willing to do it always, if he could only have me with him. It was evidently foreordained that I should not die at that particular time, as a miraculous transformation in my condition was the talk of the neighborhood. I read, of the wonderful cures that were being wrought by Dr. Williams' Pink Pills for Pale People, and my father went to Brantford, where he purchasd a couple of boxes from Jas. A. Wallace. I commenced taking them, and I thought for a time they did be no good, as made me sick at first, but very shortly I noticed a great change. They began to act on my trouble, and in the short space of six months I was able to walk. I continued takings the pills, and in the six months I was in the condition you see me now. I fully believe that they alone saved me from the grave, and you will always find myself and balance of our family ready to talk about the good Dr. Williams' Pink Pills did for me."

Sworn and subscribed to before me this 15th day of December, 1893.

D. A. DELANEY, Notary Public,
Wayne Co., Michigan.

Sold by all dealers or sent by mail, postpaid, at 50 cents a box, or six boxes for $2.50, by addressing the Dr. Williams' Medicine Company, Brockville, Ont., or Schenectady, N. Y. Beware of imitations and substitutes alleged to be "just as good."

WHY JAPAN AND CHINA FIGHT.

The Seat of the Trouble is Years Old and Deep Seated.

While some disorder within Corea or chance conflict between Chinese transports and Japanese cruisers may serve as an immediate excuse for a declaration of war, the seat of the trouble is years old and deep seated. Japan has been growing by leaps and bounds into civilization, in wealth, in commercial activity during the last quarter of a century. Her influence in the neighboring kingdom of Corea, from which Japan is separated by a few hundred miles of sea, has increased proportionately, and the Coreans themselves have come to regard the Japanese as their natural allies and protectors against the greedy giant China, whose only interest in her small neighbor has been the amount of tribute that could be wrung out of her from time to time. Lying on the northern frontier of China, Corea has for centuries submitted to the domination of that empire, but during the last decade the latter's assertion of the right of suzerainty has been spasmodic and frequently in dispute. Japanese influence has sprung up wherever that of the Chinese has been cut down, and sooner or later the question must have come to this critical point. Shall China or Japan shape the destinies of Corea?

Japan has evidently decided that the present time is good enough to settle who shall dominate the Corean peninsula. Japan is ready for war. China never is and never will be ready for any action. Geographically Japan has the whip hand. The base of her supplies is nearer the Corean capital than that of any Chinese army can be for months; and Japan commands the sea, if European experts in naval matters may be believed. The Coreans themselves appear to cut a small figure in the dispute. They are placid people, whose necks are accustomed to yokes. Not much aid or hurt to either belligerent are they likely to be. Their lot must be bettered if Japan is victorious. No civilized nation, except for purely selfish reasons, can regard the enlargement of China's influence with anything but horror.

Forty families in Junction City, Kansas have their cooking done on the co-operative plan, and find it more satisfactory than the old custom, and less expensive.

Consul General of the Netherlands J. R. Planten, is engaged in an interesting search for Sophie Neumann, a subject of Holland, of whom all direct trace has been lost for fifteen years, and who is the heiress to a large sum of money and valuable property left her by a brother. She eloped from Paramaribo, Dutch Guinea, in 1876.