CACNER NOT A MYSTERY,

MARVELLOUS DISCOVERY BY DR LAMBERT-LACK.

London Pathological Doctor's Declaration—Disease Caused by Injury to "Basement Membrane."

Cancer is no longer a mystery, according to the deliberate verdict of the London Pathological Society. Dr. Lambert Lack, the eminent throat specialist, is credited, by his learned colleagues, with having solved one of the most momentous and perplexing problems known to medical science, says a London letter.

The scientific world is much wrought up over Dr. Lack's discovery, which is pronounced one of the very greatest of modern times. Various European savants have from time to time announced the isolation of the micro organism of cancer—some of them very recently—but their conclusions have been disputed by other scientists, and not one of them has won the support of such a weighty body as the London Pathological Society.

DR. LACK'S THEORY.

Lambert Lack, whose name bids fair to become as famous as that of Pasteur, is honorary surgeon to the Golden Square Throat Hospital, one of the most noted institutions of its scope in the world. For a long time he has been investigating the origin of malignant growths, with particular attention to cancer.

Holding with the accepted scientific opinion that cancer was the result of a germ, he nevertheless worked along lines radically different from those pursued by the majority of investigators in this field.

After a series of tests covering several years, he discovered that the dreaded disease invariably began with an injury of a particular character to what is known as the basement membrane of the mucous membrane and its allied structures.

Having arrived at this important truth, he set to work to produce cancer in the lower animals, and succeeded.

NO CURE FOR IT YET.

To produce a disease at will is the first step toward finding the cure for is—such is the paradox on which the entire fabric of bacteriology rests. Hence it is reasonable to expect that in a short time Dr. Lack will be in a position to give the world a serum for the cure of cancer and thus take rank among the immortal benefactors of the human species.

Like a true scientist he hastened to present his discovery to mankind. No sooner did he consider that his tests were conclusive than he submitted the whole thing to a select committee of the London Pathological Society.

And now the society itself has declared its conviction that Dr. Lack has disclosed that secret for which savants have been groping ever since men first began to enquire into the nature of disease.

CANCER A MYSTERY.

During the past quarter of a century, while medical science has been marching forward nobly in other branches, it has been at a standstill so far as the knowledge of cancer was concerned. The primary cause of this horrible disease was a mystery as deep as the origin of life itself.

Surgery, on the other hand, has progressed wonderfully in its relation to cancer, and in the surgeon's knife has rested the only hope of those afflicted.

It is only a few months since Dr. Bra, of Paris, believed that he had isolated the cancer germ, which was described as a parasite of the fungoid type. This alleged discovery was discredited, however, by the learned Professor Curtis, of Lille.

THE GREAT WALL OF CHINA.

Proposal to Tear It Down for the Building Stone It Contains.

Four or five companies, European and American, are said to be interested in the proposed tearing down of the Great Wall of China. The wall happens to be in the best state of repair, in districts that are most accessible and populous, and it is believed that building stone from the wall will be worth fortunes to those who may secure the concession to tear it down. There are supposed to be fully 4,000 million cubic feet of masonry in the great structure, which has a total length of about 2,000 miles, including its many windings and the double and triple lines of wall that are constructed at some places.

In the end the wall was a failure, for it could not keep out of China, the hosts of Genghiz Khan, who swept over it and conquered the country in the thirteenth century. After that time the wall ceased to have any strategic importance, but for fourteen centuries before the great conqueror lived the wall had well served its purpose. It stretched all along the northern frontier of China and none of the hordes of the north had been able to pass it. Day and night for centuries Chinese guards were mounted on the towers that overtopped the wall, and they always gave timely notice of the approach of an enemy. Garrisons were stationed at every gate and natural passage through the walls, and towns sprang up at these encampments, many of which became important market places. Thus the wall really helped China to develop into a strong nation, for during the process the great barrier was of much assistance in keeping outside barbarians from molesting the country.

Time has left its marks upon this hoary monument of China's early civilization. The climate is severe, and the fierce winter blasts from the Mongolian plains alternating with hot winds from the south in the change of the monsoon are enough to crumble the best of masonry. A good deal of the earliest wall has undoubtedly disappeared, and from century to century much of the structure was repaired or entirely rebuilt. In the course of this work the lines of the wall for long stretches were wholly changed, and the work of different generations is apparent in the various architectural aspects of the structure. The eastern part of the wall, north of Pekin, is supposed to have been the latest to be repaired and rebuilt, and it is now in a very good state of preservation, while for stretches further west it has disappeared entirely.

The Chinese are much given to walls. The word for city in the Chinese language means a walled town, and the law of the empire requires that every city be surrounded by a wall of specified height. This law, however, is not strictly observed, and the walls around many cities have been allowed to crumble and afford no protection whatever. It happens sometimes that a city fears an attack, and then there is a great bustle at the walls, for a large force of men is put at work repairing them.

A PERSISTENT SUITOR.

Kitty—I can't imagine anything more disagreeable than a proposal from that man.

Ruth—I can.

Kitty—What, for goodness' sake?

Claire—A half dozen.

Jeremy York.

Eight months have passed, and the scene is now on the broad equinoctial ocean, with the fiery atmosphere of the Antilles in every cat's-paw that tarnishes the polished heaving mirror let the faint air blow whence it will; a sky of copper brightening into blinding dazzle round about the sun, that at his meridian shines almost directly over the mast-heads, and transforms the vast spread of sea into a sheet of white fire, trembling into the blue distance faint with the haze of heat.

There was a small West Indiaman named the City of Glasgow, that had been lying stagnated on these fervid parallels for hard upon four days. There was no virtue in awnings, in wetted decks, in yawning skylights, in open portholes, and the heels of windsails to render the atmosphere of the 'tween-decks and cabin tolerable to the people aboard the ship. The air was sickly with the smell of blistered paint, the brass-work was fiery hot, and took the skin off the hand that for a moment unconsciously touched it; ther pitch was like putty between the seams; the fresh water in the scuttle-butts was warm as newly-drawn milk, but quite without dairy fragrance. It was time, indeed, for the wind to blow. The mere detention was nothing in those pleasant times of groping. In cooler climes the mate would have been satisfied to whistle for wind for a month, and go below every time his watch was up with a feeling that he had done everything that was necessary and that all was well. But the heat made an enforced resting-place off the Cuban heights insufferable.

It was half-past eight o'clock in the morning watch; the hands had come up from breakfast and were distributed on various jobs about the deck. There was not a breath of air; but there was a run of glassy folds from the south-west, which within the past hour had somewhat increased in weight; and upon these long-drawn heavings, the ship, that was a mere tub in form, as all vessels were in those days, saving, perhaps, the piratical barco longos, rolled as regularly as a pendulum swings, swelling out her canvas to one lurch, only to bring it in to the masts again at the next with sounds like the explosions of nine-pound ers in the tops.

The captain of the City of Glasgow was a small fiery-faced man, with deep-set eyes that glowed liked cairn-gorms under the shaggy thatches of the brows, a nose that not a little resembled a small carrot both in shape and hue, and a mouth with a set of the lips that indicated a highly irritable temper. He walked to the mate, who stood near the wheel fanning himself with a great straw hat.

"When is this going to end, sir?"

"I don't know, sir."

"Blood, sir! Is there no limit to calms? Thunder and slugs! If this goes on, we must tow—d'ye see, tow, I say—get the long-boat over and crowd her with men. What though they frizzle? We must get out of this, or!——"

He was probably about to launch into a piece of profanity, but he was interrupted by a cry coming down from aloft, delivered by a man who had been sent on to the mainroyal yard to repair some defect that the vigilant eye of the boatswain had detected, 'Sail ho!'

The little fiery-faced captain started and looked as if he scarcely credited his hearing; then running to the rail, he thrust his head clear of the awning and bawled up to the fellow, "Where away?"

"Right astarn," was the answer of the man, swinging with one hand from the tie as he pointed with the other directly over the taffrail to the gleaming haze of sea-line there.

"Well," said the skipper, "that should be a sign there's wind somewhere about."

"It is some craft," said the mate, "that may be bringing a draught of air along with her."

"Don't talk of a draught of air, sir," said the captain passionately; "what we want is wind, sir, a fresh breeze—a gale—a howling hurricane, by thunder! H'an't we had enough of cat's-paws? Draught of air!" he muttered under his breath with a look of loathing in his eyes as he made them meet in a squint upon the compass card.

But the mate was right on one side of his remark at all events. What the fellow aloft had sighted proved to be a ship climbing the shining slope to the impulse of a breeze; but it was not until her royals were trembling like stars above the horizon, with nothing else under them showing, that the people of the City of Glasgow caught sight of the line of the wind darkening the waters in the south-west. In half an hour's time it was blowing into the canvas of the West Indiaman, raising a pretty tinkling sound of running waters all around her; and though it came warm as the human breath yet, after the long spell of hot and tingling calm, it put a sense of coolness into each fevered cheek turned gratefully to the quarter whence it came. If ever the crew of the City of Glasgow desired an illustration of the ponderous sailing qualities of the clumsy old castellated wagon that navigated, they might have found it in the rapid growth of the stranger astern. By noon she had risen to the reefband of her forecourse, with her flying jib yearning fair over the water-line. She was clearly making the same course as the West Indiaman. Indeed, it took rather the form of a pursuit; for, when first seen, she was apparently headto the north-west; but scarcely had the West Indiaman to the first of the breeze trimmed yards for the northeast, than the stranger was observed to also haul her wind.

The fiery little captain did not like it. What was she? A Spaniard? A Frenchman? A Dutchman? He packed on studding-sails, but to no purpose, for the fellow astern came along hand over hand, as though her crew were warping her up to a stationary object. Presently she was showing fair on the water, a big yellow craft, with great curling headboards and a double line of batteries. Then, when she was plain in view, puff! blew a white ball of smoke from a forechaser, followed by the dull thud of the distant gun; and a minute after, the mate, who was working away at her through long perspective glass of the period, cried out that she had hoisted the Union Jack at her fore.

"Well, and what's that to me?" bawled the fiery little captain.—"Anybody observe if that gun was shotted?" There was no answer. "What do they mean by shooting at us? Wounds, but it may be a trap! Hoist away our colors and keep all fast.

Five minutes later, the stranger fired again; but observing that no notice was taken of the summons, she waited until she was within range, then, yawing, let drive with such good aim as to bring the West Indiaman's mizzen topgallant-mast down with a run. The sight of the wreckage struck a panic into the soul of the little fiery captain.

"Down stun'-sails; man the braces!" he roared; "bring her to, or he'll founder us."

In a few moments the City of Glasgow lay with her foretopsail to the mast, docilely waiting for what was to happen.

It was not long before the ship had ranged alongside, and she then proved to be a great fifty-gun man-of-war, an Englishman on a West Indian cruise, with crowds of pigtailed heads looking over her bulwarks forward, and a quarter-deck brilliant with the quaint naval uniforms of that day—if, indeed, it can be said that any approach to a uniform was then established. A stout man in a cocked-hat, white silk stockings, handsomely laced coat, and a big white wig, mounting on to the rail of the man-of-war, clapped a huge copper speaking-trumpet to his lips and bawled out, "Ship ahoy! What ship are you?"

The little peppery captain sprang on to a hencoop and answered, "The City of Glasgow of London, from Havana."

"Keep your topsail to the mast; I'll send a boat," cried the other.

"A boat!" cried the little chap, turning to his mate. "What does he want to send a boat for? Does he question my papers?—Zounds! if there be any sort of law still agoing in the old country, I'll make him pay for that mess up there;" and he sent a fiery glance at his topgallant-mast.

The boat plunged from the man-of-war's side; a crowd of sturdy fellows armed to the teeth, jumped into her; a young marine exquisite, with a hanger on his hip, and a cambric pocket-handkerchief in his breast, his laced hat airily cocked upon his head, and a flash of jewels upon his fingers, took his place in the sternsheets, and with a few sweeps of the long oars, the boat was alongside. The dandy lieutenant stepped aboard.

"Why did you not heave to," he exclaimed in an affected drawl, "when you were summoned by our cannon?"

"How did I know what you fired for?" cried the irritable captain. "Look how you've served me;" and he pointed aloft.

"'Pon honour!" exclaimed the lieutenant, "you deserve that we should have sunk you." He applied the scented pocket-handkerchief to his nose, as though he could not support the smell of the hot pitch and blistered paint rising into the atmosphere from off the Indiaman, and exclaimed in a voice as if he should swoon, "Muster your men, sir, and for the Lud's sake be quick about it."

The little captain fully understanding the significance of this order, was about to remonstrate, but seemed to change his mind on catching the glance that was shot at him from under the seemingly sleepy lid of the languid, perfumed sea-dandy, and repeated the lieutenant's order to his mate, turning sulkily on his heels afterwards, and starting off into a sharp fiery walk betwixt the binnacle and the mizzen rigging.

The boatswain's pipe shrilled to the silent hollows of the canvas aloft; the men stood along the deck, and the lieutenant with six armed seamen at his back fell to picking and choosing. The man-of-war wanted twenty men to complete her complement, and of these the Indiaman must contribute ten. There was no help for it; and the little captain had presently the mortification to witness ten of his best seamen descend the side with their bundles and bags and enter the boat, which forthwith carried them aboard the fifty-gun ship.

One of these ten men was a tall handsome young fellow, whom no one who had before known him could have failed instantly to recognize as Jeremy York, spite of his assumption of the name of Jem Marloe, of his long hair being cut short in front and rolled into a tail down his back, and of the hue of it, that had been a sunny auburn, being now whitened as though dusted with powder. He was the second of the ten men to step on board. It was not only that he was the most conspicuous of them all by reason of his stature and beauty—for his frame had long since erected itself into its old manly port in defiance of the stoop and depression of ill health; he was specially noticeable besides for an air of profound indifference. Most of the others glanced insolently and mutinously about them, savagely resentful of this impressment and of their liberty as merchant seamen being abruptly ended without regard to wages, to cherished hopes, to their homes, their wives, their sweethearts, their children ashore. A number of the ship's crew stood near the mainmast watching these new hands as they went forwards marshalled by the boatswain. On a sudden Jeremy York was seen to come to a dead stand with his eyes fixed upon one of these sailors; his bundle fell from his hand, his face turned to a deathlike white, shiver after shiver chased his form, they saw his fingers convulsively working, and his eyes, filled with horror, dismay, incredulity, seemed to start from their sockets with the intensity of his stare. They believed he was seized with a fit and would fall to the deck in a minute; and amongst those who sprang to his assistance was the fellow on whom his gaze was riveted. He shrieked out at his approach, and fell upon one knee trembling violently, swaying to and fro, to and fro with his hands pressed to his eyes in the posture of one wild almost to madness.

"Is the man ill?" bawled a lieutenant from the quarter-deck. "If so, bear him, below, and let the surgeon attend him."

York staggered on to his legs, and looking at the man at first sight of whom he had appeared to have fallen crazy, he cried, in a weak, faltering voice, "Your name is Worksop? You were bo'sun of a West Indiaman."

The other, full of amazement, with a slow bewildered stare at York and then round upon his shipmates, answered in a hurricane note, "That's so: I ain't ashamed. My name's Worksop, and I was bo'sun of a West Indiaman, as ye say."

"Look at me!" cried York. "O man, look at me! What have I suffered through you! Do not you remember me?"

Anyone would have laughed outright to have witnessed the perplexity that lengthened yet the longdrawn countenance of Worksop.

"What's all this?" cried the lieutenant in charge of the deck, coming forward angrily.

"Sir," shrieked York. "I have been hanged for the murder of that man!"

"Mad, by Heaven!" cried the lieutenant, sunstroke, no doubt. Take the poor devil below, and see to him."

"Sir," cried York, clasping his hands, "I beg you to listen to me one minute. I am not mad indeed. Mr. Worksop there will remember that one night more than eight months ago he gave me a share of his bed at an inn at Deal called the Lonely Star."

Worksop started and looked intently at the speaker.

"I quitted the bed to get some water; when I returned, my companion was gone. Blood was found in the bed; there were bloodstains down the staircase, along the roadway to the beach; there was blood upon my shirt, although as God is my witness, I knew not how it came there. They found his knife upon me, which I had taken from his pocket whilst he slept to prise open the door with; and also a gold coin belonging to him they found, though how I came by it, I vow, before Heaven, I know not; and on this evidence they hanged me!"

He faltered, hid his face, and fell to the deck in a dead faint.

"Hanged him, hanged him for me!" shouted Worksop in the voice of a man about to suffocate. "Hanged him for me!" he repeated. "But, lor' bless my soul and body! I was never murdered, mates!" and in a very ecstasy of astonishemnt, he hooked an immense quid out of his cheek, and flung it overboard.

"Rally this poor fellow, some of you," exclaimed the lieutenant, and hastened aft to the captain to make his report.

A bucket of cold water topped with a dram of rum served to restore York to consciousness; and when he had his wits, he and Worksop were conducted by a midshipman to the captain's cabin.

"What is all this?" inquired the gray-haired commander, levelling a piercing glance at York, as though he made up his mind to be confronted by a madman. "D'ye mean to tell us that you've been hanged for the murder of yonder seaman alongside of you?"

"Yes, sir; I've been hanged as his murderer;" and thus breaking the silence, York proceeded. He told his story in good language, plainly and intelligently, with an occasional catch of his breath and a sob or two when he spoke of his sweetheart.

"You were hanged," cried the commander, watching him with a fascinated countenance, for the corroborative looks and nods of Worksop as York delivered his tale had soon abundantly satisfied the captain that the poor young fellow was speaking the truth—"you were hanged," he repeated, "strung up by your neck in the customary style, I suppose, and left to dangle for the usual time. And yet you are alive!"

To be Continued.

HOMESICKNESS.

A Disease That in the Intense Form Affects Other Races Than the Anglo-Saxon.

There is a malady which boasts of a learned appellation compounded of two Greek words, but which is better known by a homelier and far more expressive name in the vernacular, and yet although this binomial disorder is described in the dictionaries as "A vehement desire . . . . affecting the physical health," it has not been assigned a place in the Nomenclature of Diseases for which the Royal College of Physicians of London is responsible, says the Lancet. The fact, too, that homesickness, if impervious to drugs is nevertheless in the highest degree amenable to treatment, might credibly seem to still further justify its inclusion in the official glossary of the 1,053 natural shocks that flesh is heir to. With regard to the etiology of this unqualified complaint there still remain several points requiring elucidation, albeit in its genesis no bacillus is concerned, nor for its adequate diagnosis is there any need of either microscope or test tube.

Shortly stated the essential factor in the production of nostalgia is an environment differing from that amidst which the affected person passed his or her early days. When this is the case some intangible influence is generated which reacts upon the victim, but just as happens in many official maladies there must first be innate receptivity or preparedness of soil on the part of the individual who succumbs. This receptive state is favored by at least three separate things—race, education and temperament—but of these predisposing causes the last possesses less power than either of the other. Caeteris paribus,

PHLEGMATIC SUBJECTS

are more likely to experience homesickness than their sanguine compeers. A tendency to despond, without sufficient cause undoubtedly subserves toward nostalgia, but ardent, enthusiastic people who continually look forward—who never are, but always to be happy, can take no advantage, if advantage it be, of remaining immune.

Education, or rather the want of it, is more potent than temperament, the tend of civilization, which is equivalent to education, being distinctly in the direction of cosmopolitanism. The deeper the ignorance, the ruder the conditions of life under which a human being exists, the greater the probability when exposed to its influence of his acquiring nostalgia. If an islander from Tierra del Fuego, for instance, were to be transported to the comparative paradise of the Gilbert Islands in the Pacific Ocean which have been described as "a cluster of pearls hung upon the equator," he would very likely bewail his hard lot and pine for his own inclement and inhospitable wilderness, and if in like manner a Pacific Gilbertian were to be promoted to, say, Pall Mall—which, without wishing to, speak disrespectfully of the equator, we maintain to be the more desirable abode of the two—he also would no doubt soon break his heart longing for the delights of his sweltering hut in Micronesia.

But of the three predisponents race it is which is the strangest and most inconsequential. Anglo-Saxons and their Celtic brethren vary their manners and customs while abroad to a less extent probably than people of any other nationality, and yet in spite of this they make the best colonists. There is no human being in existence who can appreciate the charm of a home more exquisitely than the Celtic-Anglo-Saxon, and yet he is to be met with in every corner of the world. He loves his own native place beyond words, but he can endure enforced expatriation without giving in to nostalgia. The fact is he recognises the futility of kicking against the pricks and so makes his mind up to sacrifice a portion of his life or even, if the worst, come to the worst, the whole of it. For nostalgics we must turn to some other tribe. When all is said they remain a narrow-minded crew whose mental processes run in grooves. They may call their failing by the high-sounding name of patriotism, but such it is not.

Nostalgia is the cat's complaint, a purely selfish disorder, whereas love of country can flourish anywhere and takes no account of self. And so after all our masters in medicine are perfectly right. Nostalgia is righteously excluded from a list of the shocks that Anglo-Saxon flesh is heir to.

BLUSHING A DISEASE.

The general idea that blushing is due to fullness of blood in the brain is incorrect—according to the new theory of a French expert. It arises from the relaxation of the arteries, of face, neck and breast, thus allowing an extra quantity of blood to rush to the skin. Those arteries have in their walls a layer of rings of muscular fiber, which contract or relax according to the condition of the patient, and so permit the arteries to become more or less full of blood. When they are extra full which occurs in weakness, the patient blushes.

Blushers are more liable to redden in damp or stormy weather than in the cold days of winter or the hot days of summer. If this glowing of the face were the result of emotion, why this difference? If it be due to weakness, the fact assumes the appearance of probability.

There are two closely allied causes of blushing. One is named "ereuthophobia," that is the ordinary cause—weakness, and the extreme sensitiveness and other conditions caused by it. The other is designated "erythrophobia," and is the fear that one will blush unconsciously at awkward moments.

The latter is a peculiar form of the disease. The individual in question, although not given to blushing becomes gradually possessed with a fear that he will do so at some inopportune time, and this fear grows upon him until it completely masters him and makes him grow red in the face when there is not the slightest reason for it.

At the most simple question the color rises and he is placed in the most absurd situation. He is looked upon with suspicion, because other people accept his confusion as consciousness of guilt, he recognizes the fact, and, of course, his condition grows worse. Weakness is responsible in this case also for the deplorable state of things, for when the sufferer is taken in hand and gets "braced up," he smiles at his former fears.

It must be a very strong emotion that causes a flush to come to the face of a really healthy man or woman. Whatever they may feel they will not show it any more than they will show fear when confronted by great danger. In the latter case there is no doubt about the danger; it is fully understood that there may be a feeling of fear within, but it is not shown by the face. A similar remark applies to the sense of shame under reproach. That feeling will not be betrayed by a blush, because the individual is not afflicted by the disease.

It is estimated that there are 30,000 pupils in the agricultural schools of the United States.

HINTS FOR THE FARMER.

BARN CONSTRUCTION.

A gentleman whose barn was recently burned asks us for the names of books devoted to plans of barns and if there are architects who make a specialty of barn construction.

To both of his questions we must answer that we know of none. The reason for lack of publications especially devoted to barn construction is that ideas have been changing so rapidly during the last few years that nothing thoroughly up to date has been published in book form. The most progressive ideas on the subject are in the files of the best class of agricultural newspapers. So far as architects are concerned we know of none who make any speciality of barn construction, for the reason that an architect to understand his business thoroughly must be something of an expert in some of the technical details of the use to which the structure is to be put. The more modern and best arranged barns that we know anything of have been constructed by practical dairymen.

The changing ideas relative to barn construction are due to a growth of the feeling that cattle must have more light, more air, and better air than was formerly supposed to be necessary. Growing out of this feeling has come a condemnation of the former practice of a dark, noisome manure cellar in the basement, cattle above that, and then hay and other fodders above the cattle and manure.

The essential principle of modern barn construction is that there shall be a main building for storage only, with one story ells to be used exclusively for stock.

There are many adaptations of this principle, according to circumstances, the lay of the land, the size of the dairy and the means of the owner. In a number of instances where these modern barns have been built, the land is of such a slope, as to allow of a light, dry, airy basement under the whole of the main barn which affords an excellent storage place for wagons and farm machinery. In some instances the lay of the land is such that loads can be driven not only on to the main floor of the barn, but also on to an upper floor. In the latter case much of the grain, etc., can be unloaded so as to drop by gravity to the bins, saving a great deal of manual labor. Many of these new barns are fitted for the use of a fork for unloading hay. In some cases the silo is built in the barn, the silo being rectangular and occupying a corner of the barn, or being circular and enclosed in the barn, according to the tastes of the owner. The circular silo seems on the whole to be growing in favor.

The ell for the stock will be of such length as is necessary to accommodate all the animals to be kept; there may be more than one if needed. This ell is usually of sifficient width to allow room for the passage of a wagon loaded with green crops through the centre, with a row of stalls on each side, and liberal passage ways in the rear. These ells are usually built with monitor roofs, well supplied with windows which can be opened from the barn floor by rods and gears. It is customary to open all on one side or the other, according to the direction of the wind. Each side of this stock ell has a row of windows, all of which are stationary at the bottom and arranged to swing inward a few inches at the top, thus any air through them will be given an upward tendency on its entering the barn, and will not come in a sharp draught upon the cattle standing near the window. In addition to this many barns have ventilating ducts for the admission of pure air from the outside. These ducts are useful, particularly in extreme weather, when it might not be considered prudent to open the windows behind the cows. Except in the coldest weather I prefer to keep the windows in the monitor roof slightly ajar for purposes of ventilation.

The floors of these barns for stock are made of wood, cement, or various kinds of artificial stone. In some mangers are built for feeding the cattle, while in others they are fed from the cement floor, a concavity having been shaped in the cement. At the end of the row is a waterpipe, and by turning a faucet running water will flow through the whole of this gutter in front of the cows for watering them, and also for flushing and cleaning the gutter. A similar device is frequently constructed in the rear of the cows for manure. Under this system of caring for cattle the manure must be carried from the barn every day, and in some instances is hauled at once on to the land. Some barns are fitted with a scraper, which runs the whole length of the gutter, taking up the manure and depositing it in a cart at the end of the row.

The latest notion as to stalls is in favor of box stalls. These allow the cows greater freedom, the idea being that cows do best when they are in the most contented frame of mind possible; anything that tends to promote absolute content and mental serenity is reflected favorably at the milk pail. Consequently, it is argued that a box stall for the cows pays better.

In the newest barn that we have seen the partitions between the stalls are constructed of two-inch galvanized iron pipe. This is cleanly, and removes any objection that might be raised to plank partitions.

Any person contemplating the erection of a barn can get more information from these ideas in practice than by any newspaper description.

AN ACRE OF HENS.

Go ahead and build one house that will accommodate one hundred fowls, writes Fanny Field. Put a partition through the middle, and keep your fowls in two flocks of fifty each. Divide your acre into four yards and use the yards alternately. In the fall plough up two of the yards and sow to rye. As soon as it is up a few inches put your fowls in those yards. The rye will furnish green food until snow comes, in winter whenever the fowls can get at the ground, and the first thing in spring. Should the rye be likely to grow too high in the fall, just turn your cow in for a little while, occasionally, and let her feed it down. Keep your hens on these yards until ploughing time next spring, then turn them into the other yards, where the grass will be nice and fresh. Plough under what is left of the rye, and plant the yards to corn and sunflowers. We have kept fowls in that way—fifty in a flock, one hundred in one house—and there was not a case of sickness among the old fowls during the entire year. And we made over one hundred dollars in clear cash from the sale of eggs from those one hundred hens; so we do not hesitate to declare that more than twenty-five fowls can be profitably kept in one flock. No; we didn't sell any of the eggs at fancy prices; they were sold at the average price of twenty cents a dozen. Ask yourself if you have an acre of land within the limits of your farm that pays one hundred dollars, or even fifty dollars.

PREPARING HORSES FOR MARKET.

No fixed rule can be laid down, but it is very necessary that the horses be well fed. They must come to the auction with glossy coats, smooth hair and must be well broken. While horses are being fattened for market they must be given an hour's exercise daily. It is very necessary that they should be taken to town occasionally so as to become accustomed to steam and electric cars. No horse should be younger than five years, nor older than eight to bring a good price.

THROWING THINGS AT CATS.

Mr. Glimmerton Notes That the Custom Has Not Been Abandoned.

"It's a long time," said Mr. Glimmerton, "since I've read anything in the papers about throwing things at cats. There used to be frequent mention about how men threw bootjacks, boots, water pitchers, coal scuttles and fire tongs at them. I knew a man myself once that threw a lighted lamp at a cat on a fence. He never touched the cat, but set the fence afire and had to pay $7.

"But the custom has not fallen altogether into disuse. There is a cat in our neighborhood that walks along the back fences at night, weeping and wailing in a manner most distressing to hear. For a long time these unpopular concerts were not disturbed, but night before last we heard the sound of a mighty blow upon the fence; it sounded like the crash of an immense rock. It evidently missed the cat, but it ended the concert. The cat didn't come back that night—we hope it never will. How the man got the rock over there, we don't know. Surely he never could have thrown it that distance. He must have rigged up a catapult of some sort; a catapult would be very appropriate for the purpose."

Date of General Election.

When is it to be? This question is disturbing the souls of politicians. In view of the material alteration in the commercial policy of the country which would be involved in a change of government it is a matter which concerns the general public. Meanwhile the aching corns of the populace cry for a remedy and the government give no heed to the demand. Look here! don't suffer this neglect to delay the use of means open to all and which removes the most painful and obstinate corns in two days. Painless, sure acting corn cure, Putnam's Painless Corn Extractor.

A WONDERFUL COUPLE.

A woman, says the Cornfed Philosopher, wonders why she ever married that kind of a man, while the man wonders why he ever married at all.

"Pharaoh 10c." Payne, Fraub, Que Cigar Manufacturer

GIRLS CAN'T MARRY.

Norwegian legislators propose that girls who do not know how to knit, sew, wash and cook should be refused permission to marry. Daughters of wealthy men are not to be excepted.

LUBY'S Gives new life to the Hair. It makes it grow and restores the color. Sold by all druggists. 50c. a bottle.

HER IDEA OF IT.

Housewife—But you have had a good many situations in a short time.

Servant—Yes, but that shows, ma'am, how much competition there is to secure my services.

O'KEEFE'S LIQUID EXT. OF MALT Invigorates and Strengthens. W. LLOYD WOOD, Toronto, GENERAL AGENT.

GOOD REASON.

Grandma—I wouldn't eat that hard apple in that way, Willie.

Willie—I shouldn't think you would, grandma, I wouldn't either if didn't have no more teeth 'n you've got.

La Toscana, 10c. RELIANCE CIGAR FACTORY, Montreal

NOW SHE'S COOL.

Mrs. Hiliver—This awful temperature is unendurable.

Mr. Hiliver—Scientists say, my dear that but for greater heat than we know anything about, there would be no diamonds.

For Over Fifty Years MRS. WINSLOW'S SOOTHING SYRUP has been used by mothers for their children teething. It soothes the child, softens the gums, allays all pain, cures wind colic, and is the best remedy for diarrhœa. 25c. a bottle. Sold by all druggists throughout the world. Be sure and ask for "Mrs. Winslow's Soothing Syrup."

WHERE CUSTOM FAILS.

In Paraguay a gentleman is enjoined by the laws of good society to kiss every lady to whom he is introduced. This sounds alluring unless you happen to have met a lady in Paraguay.

Hotel Carslake, European Plan. Rooms from $1 a day up. Opp. G.T.R. Station, Montreal. Geo. Carslake & Co., Props.

TREES AND LIGHTNING.

According to a recent investigation of lightning strokes in trees which a German has carried out, the beech tree is less often struck by the flash than any other. It is unwise to take shelter from a thunderstorm under any trees, but if it is a case of needs must the beech is the best and the oak or poplar among the worst.

WPC 982

$5 Tires
Double Tubes, give good service—Send in early—won't last long.
—Headquarters for
—Goodrich Single Tubes,
—C. & J. Detachable,
—Morgan & Wright,
—Bicycle Sundries, Saddles, Tubes, &c.
Dealers' prices on application.
American Tire Co., 164-168 King St. West, TORONTO.

"I would rather be first in a village than second in Rome" said Caesar. Blue Ribbon Ceylon Tea is easily first everywhere.

NEVER CHANGES—The Uniformly High Quality of
LUDELLA CEYLON TEA
is always maintained. Do you use it? If not, do so.
Lead packages. 25, 30, 40, 50 & 60c.

A BOON FOR THE LAME!
THE IVEY PATENT EXTENSION SHOE CO.,
Are anxious to secure the address of every lame man and woman in Canada whose lameness consists in one limb being shorter than the other, and are offering good paying employment to every lame person who will take the trouble to write for circulars and care to act as agents. Get one of the Extensions for yourself and you will, after wearing it a week, have no trouble to convince others of its value.
This Extension is by far the best of its nature ever placed on the market, and enables the wearer to walk upright, to walk with ease and comfort, to wear any ordinary store shoe, and gives them the same appearance as their more fortunate friends. Descriptive circulars free to all. Ask for terms to agents. Address
BEFORE AFTER 170 DAY STREET, - - - TORONTO, CANADA.

SAPLING LIFTS TONS.

The power of living seed over the inert weight of tons of rocks is very forcibly illustrated by a little sapling which is growing in Erstberg, Germany. The tree is slight enough to be bent with the hands, but is raising in its irresistible growth a mass of rock weighing four tons.

DISCOVERED AT LAST.

A wholesome, nourishing preparation which takes the place of tea and coffee cures indigestion, and all complaints caused by tea and coffee which are poisonous. "Rocko Health Drink" is absolutely pure and is used at your meals instead of coffee. A 10c. package will make 75 cups. Rokco also makes a delicious summer iced drink. For sale by grocers. Ask for it.

ALCOHOL FOR AUTOMOBILES.

The majority of motor cars are now driven by petroleum, but a French engineer recommends the use of alcohol instead of it, and motors are being altered so as to consume it. There is no fear of explosion with alcohol, and it is said to be less costly than petroleum. We might, therefore, paraphrase the national poet and say, "Put it in your cars to save your legs."

Beware of Ointments for Catarrh that Contain Mercury
as mercury will surely destroy the sense of smell and completely derange the whole system when entering it through the mucous surface. Such articles should never be used except on prescriptions from reputable physicians, as the damage they will do is ten fold to the good you can possibly derive from them. Hall's Catarrh Cure, manufactured by F. J. Cheney & Co., Toledo, O., contains no mercury, and is taken internally, acting directly upon the blood and mucous surfaces of the system. In buying Hall's Catarrh Cure be sure you get the genuine. It is taken internally, and made in Toledo, Ohio by F. J. Cheney & Co. Testimonials free.
Sold by Druggists, price 75c. per bottle.
Hall's Family Pills are the best.

UNDESIRABLE HUSBANDS.

Dusenbuck—Going to the same place for the summer this year?

Busterbroke—Yes. Last year all my girls brought husbands home from there, and I'm in hopes they'll take 'em back and leave 'em where they got 'em this year.

CALVERT'S
Carbolic Disinfectants, Soaps, Ointment, Tooth Powders, etc., have been awarded 100 medals and diplomas for superior excellence. Their regular use prevent infectious diseases. Ask your dealer to obtain a supply. Lists mailed free on application.
F. C. CALVERT & CO., MANCHESTER, - - ENGLAND.

MONTREAL
The "Balmoral," Free Bus Am. Plan $1.50 & up
ONE NIGHT Corn Cure. Ask your druggist for it. Price 10c
Catholic Prayer Books, Rosaries, Crucifixes, Scapulars, Religious Pictures, Statuary, and Church Ornaments, Educational Works. Mail orders receive prompt attention. D. & J. SADLIER & CO., Montreal.
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Catarrh—We can cure any form of Catarrh. Price 50c & $1 per box. Write for circular and testimonials. Room 6, 146 St. James St., Montreal, Que.
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"BEAVER BRAND" Mackintosh never hardens & is guaranteed Waterproof. Ask for it take no other. Beaver Rubber Clothing Co., Montreal.
BUSINESS SCHOOL.
ALBERT COLLEGE, BELLEVILLE, ONT. $36 pays for Board, Tuition, etc., for one term of 10 weeks. Send for specimen of penmanship, etc. W. F. DYER, Principal.
WANTED.
AGENTS—Either sex, to handle our superior line of Crayon and Water Color Portraits, Frames, etc. Large and Electric Prints supplied to artists and the trade. All goods at wholesale prices.
POWELL & ORTH, Toronto, Ont.
FARMS FOR SALE—BRUCE COUNTY—Some Great Bargains. Apply to JAMES McK. STEWART, Drawer 15, Kincardine P.O., Ont.
WHITE'S PHOSPHO SODA
An Effervescing Phosphate, excellent cleanser for liver, kidney and stomach, takes the place of coal tar preparations in case of headache, its effect is immediate. Sold by all druggists, in 10c, 25c, 50c and $1.00 packages.
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HARRIS Brass Scrap, LEAD, COPPER, BRASS. Wholesale only. Telephone 1739. WILLIAM ST., TORONTO.
The Dawson Commission Co., Limited, Gen. West-Market & Colborne St., Toronto, Can. get you best price for your Apples, Butter, Eggs, Poultry, and other produce, if you ship it to them.
LAW Mills, Mills & Hales Barristers, etc., removed to Wesley Bldgs., Richmond St. W., Toronto.
CUTTING SCHOOL—Tailors and Dressmakers, send for catalogue. C. & D. SCHOOL CO., Montreal.
COMMON SENSE KILLS Roaches, Bed Bugs, Rats and Mice. Sold by all Druggists, or