THE FARM.

Lime as a Fertilizer.

Many persons in whose good judgment and sense everyone has confidence insist that lime is not a plant food, and is therefore useless as a fertilizer. Now, a plant food is considered to be anything that being contained in plants to a large extent, may be appplied to the soil to contribute to the supply of it for the crops. When we see that when such an element of plant substance is applied to the soil the following crop is greatly helped, we can hardly agree with the opinion that it is not a food for plants, writes a correspondent. He says:

If we study the composition of plants, we find that lime is the most important part of the mineral elements of nearly every one. The ash of a plant is made up of these miheral elements, and by examining the ash we may discover what kinds and quantities of mineral matters the plants require. And it is to be remembered that in the growth of plants every element found in them is indispensable. But now much more must it be so, if such a thing were possible, for one element to be more indispensable than another, for lime, which exists in such a large proportion, to be anything but indispensable?

And this must be thought so as we consider that in the ash of hay one-eighth part is lime. In the ash of clover more than a third of it is lime. In the ash of potato tops nearly one-half is lime. The ashes of wood, which we think so valuable on account of the potash in them, have several times more lime than potash, the lime amounting to from 30 to 70 per cent. And there is not one plant grown that has not lime in its ashes. The same applies to potash and phosphoric acid, and reasonably these are supposed to be food for plants. Why, then, is not lime a plant food? Surely it must be so considered.

The best farmed localities in the world are those where the soil contains a large proportion of lime, being derived from the decomposition of limestone rocks. But it is not so much on account of the lime in the soil that the land is so well farmed and so productive, but mostly for the reason that, lime being there abundant and cheap, the farmers burn the limestone and make lime and apply it to the land. Lime only is a plant food, but limestone is not, and the soil may be well filled with limestone and yet be quite poor. This is common experience. Now, lime is a very active chemical substance. This will be seen if some of it is put in some vinegar. This will foam up and boil over the cup, and a larger quantity of gas will be evolved. In the end there will be no more acid in the vinegar. And this is one effect of lime on the soil that is sour, such as swamp land, in which the excess of acid prevents the growth of any useful plants.

If we put some lime on a dead animal or any other organic matter, it will quickly decompose it and reduce it to its original elements, and this is one effect of lime when used in a compost, the matters thus decomposed then becoming good manure and useful food for plants. And this same effect is produced in the soil when quicklime is applied, as it usually is in the fall, when the land is prepared for wheat and grass and clover seeding. But the chemist may take some sand or other mineral matter and mix with it and then add water, forming silicate of lime, and by taking the silica from the potash or the phosphates or magnesia or the alumina, etc., that the soil is made up of, the lime renders these elements of plant food soluble and available for the crops.

Now, this is a small part of the natural history of lime as it is used in good farming. And with such a history we must realize its value to the farmer quite independently of the fact whether it is actually a plant food or not. And as this is the season when the land is in the best condition for the application of lime, as lime is most soluble in cold water and the wheat crop is most convenient for it, it is a question for all of us if it is not advisable to use it and gather the fruits of its good effect on the soil. The freshly burned lime only is used, and 20 to 40 bushels per acre is the usual quantity. It is left in heaps in the field, preferably of one bushel each two rods apart, and in a few days it falls to a fine powder by the action of the moisture of the air or a shower of rain, when it is easily spread quite evenly, so as just to whiten the surface, with a long handled shovel. But when the lime is thus used for the wheat it is not advisable to use superphosphate until the spring. It can then be used to advantage.

Veterinary Notes.

Never, in breaking a colt, hitch him by the side of a slow-walking horse, unless you want to spoil the gait of the colt.

Many know how disagreeable it is to ride after a horse that, as soon as he breaks the trot, is almost stone still on a slow mope of a walk, and, after once forming this habit, it is impossible to change his gait or improve upon it.

In feeding live stock, it is the excess given above that which is required for maintenance which yields a profit to the feeder. Do not try how little you can keep the stock alive on, but rather how much you can get them to eat and thoroughly digest.

Many horses could do excellent service as roadsters or for the carriage or the farm were it not for the fact that they are used up, so to speak, in trying to make fast trotters of them, when so very few of them can be brought up to the desired mark.

For farm purposes weight is a very great consideration; especially when he can get it without clumsiness, and combined with hardiness and qualities of endurance, the farmer is getting the kind of horse that is fitted for handling the heavy work on the farm to the best advantage, and at the same time he is getting about him the kind of horses that are in demand for the trade.

There is no better feed for young pigs than milk. After the litter is two weeks old the sow rarely gives all that they need, and we can very often begin feeding to advantage sooner than that. If enough skim milk cannot be had, make an oatmeal porridge to add to it, adding also small quantities of linseed meal, which will keep the pigs looking sleeker than any other feed, besides greatly assisting their growth.

Gentleness, docility and speed are like precious pearls. As long as the pearl is in the shell at the bottom of the sea, the pearl is of no use to mankind and can excite noa tteution. If brought to the surface and thesun shines on it, it will attract all eyes. The qualities in the horse must be developed, brought to the surface and made to shine, and then the value of their possessor is enhanced almo st beyond measure.

THE EASTERN WAR.

Figures Showing the Number of Dead, Wounded and Prisoners.

Mr. Matsui, of the Japanese Legation at Washington, has received advices from which he has compiled the following statement of the number killed, wounded and taken prisoners in the several battles of the Chinese-Japanese war:

July 24, 1894—Battle of Phung Do, Korea: Japanese, 3 wounded; Chinese prisoners, 83.

July, 29—At Songwan: Japanese killed, 33; wounded, 60; Chinese, 200 killed.

September 16—At Ping Yang: Japanese, 162 killed, 439 wounded; Chinese, 2,000 killed, 511 prisoners.

September 19—At Hai Yang To, China: Japanese, 80 killed, 186 wounded (this was a naval fight); Chinese loss unknown.

October 24—At Chin Lien Cheng, and October 29, at Hawang Twang Cheng Japanese, 35 killed, 111 wounded; Chinese, 300 killed, 10 prisoners.

November 6—at Kim Chow, and November 8, at Ta Lien Wang: Japanese, 16 killed, 50 wounded; Chinese, 400 killed.

November 22—At Port Arthur: Japanese, 40 killed, 270 wounded; Chinese, 1,500 killed, 355 prisoners.

November 25—At Sung Hwa Tsu: Japanese, 11 killed, 41 wounded; Chinese, 20 killed.

December 10—At Kim Ha Hwa Tsu: Japanese, 5 killed, 25 wounded; Chinese, 100 killed.

December 12—At Hsy Mo Cheng Chen: Japanese, 11 killed and wounded; Chinese, 100 killed and wounded.

December 13—At Hai Cheng: Japanese, 5 killed and 6 wounded; Chinese, 40 killed.

December 19—At Hong Hwa Chai: Japanese, 52 killed, 357 wounded; Chinese, 100 killed.

January 10, 1895—At Hai Ping: Japanese killed and wounded, 50; Chinese, 200.

January 18—At Hai Cheng: Japanese, 4 killed, 49 wounded; Chinese 50 killed.

February 1—At Wei Hai Wei: Japanese, 83 killed, 219 wounded; Chinese, 700 killed.

February 17—At Hsi Mo Cheng: Japanese, casualties none; Chinese killed, 3.

February 24—At Ta Ping Shang: Japanese killed, 29, wounded 245; Chinese killed, 200.

February 28—At Sha Hwo Yuan: Japanese killed and wounded, 98; Chinese, no record.

March 4—At New Chwang: Japanese killed and wounded, 200; Chinese killed and wounded, 1,880; Chinese prisoners, 500.

March 6—At In Kow, no record of casualties.

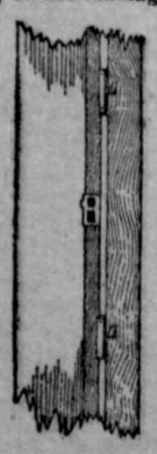
The number of Chinese wounded is not known with accuracy.

Disraeli's Marvellous Career.

With the dawn of a new era in English politics in 1832 Disraeli's strenuous public life began; and when, half a century later, he had his fill of life and honor, men began to appreciate how full the intervening years had been of indomitable strife, devoted to the gradual conquest of the ear of the House of Commons, of the confidence of the Conservative Party, of the good-will of the sovereign, and of the support of the nation. All these were finally won, and this extraordinary child of Israel, whose ancestors were unhappy refugees hunted from Spain to Venice, whose immediate forbears were poor immigrants into a London suburb, sat himself down in the seat of the chief of the house of Stanley, dictated his will to the proudest aristocracy on earth, posed as the representative of the English race among the assembled powers of Europe, took Great Britain into the hollow of his hand, clothed a nation boutiquiere with imperial purple, left behind him a cause identified with his name, and a party strong enough to defend it, and finally sank into a grave smothered with flowers by the hands of the people, and surmounted by a memorial inscribed by the hand of the Queen. The Napoleonic era of marvels furnishes no example more romantic of the triumph of individual capacity over hostile conditions.

A Door Cushion.

The art of closing the door with a bang is detrimental not only to nerves but to the plastered walls and ceiling of the building, and the door and its fastenings. A simple appliance can be used to deaden the sound and relieve the shock. It consists of pieces of rubber that are attached to the door at three different points where it strikes the casing, or attached to the casing itself, as shown in the sketch at *a a*. Use small screws for securing the rubber. Pieces cut from a discarded clothes wringer roll will do nicely. If no rubber is available take the strip that is always torn from the edge of woolen cloth, cut to the proper width and tack to the casing where the edge of the door strikes it. This deadens the sound and it prevents cold air from entering. Either plan costs nothing but a few moments' time and will prove a valuable addition.



MONTE CARLO GAMBLING.

The Bank Nets at Least $5,000,000 a Year From Its Victims.

The luxury of Monte Carlo seems all the greater by contrast, and causes reflection, says a recent letter. People seem to lose much of the sense of the value of money there. At any moment in the rooms one may see the most reckless wagering of very large sums. To the croupiers money must seem a drug. They are constantly handling such quantities of silver, gold and bank notes, and seeing such wonderful instances of people winning—with at first the smallest stake—what elsewhere would be considered a fortune. Were it possible for a croupier to roll the ball at roulette into a given number, the bank would soon be broken, all its capital lost. The croupiers are not paid extravagantly by any means, and could they, as some persons are firmly convinced, roll where they like in the wheel, they would soon arrange with others, accomplices who would not betray them, and share with them the sums thus gained. That the bank has no fears of this is the best proof of the fact that the croupiers can not do it. There has been no very heavy play during the past week, save when a New York millionaire has been betting 1,000-franc notes upon chances which paid him enormously when he won, and he has won so frequently as to cause many to wonder at his good fortune. His good luck does not seem to excite him much, and he remains quite as impassive when his notes are raked in. Doubtless in his case it is the mere desire to "beat the bank" which causes him to wager—the bank's money he can care for but little. Be that as it may, he certainly has so far this season been very successful.

A RATHER STRANGE EPISODE

in his experience in the rooms is related here. On a certain day in February some two years since, he entered the place, and walking up to one of the tables, placed the maximum—9 louis—on No. 13. He won, and at once walked out with the 6,000 francs he had received. The next year he upon entering went to the same table, placed the maximum upon 13, and again he won.

The coincidence is certainly remarkable, but hundreds of such strange instances are known to have occurred since the bank was first established in Monte Carlo. Things people would scarcely believe happen almost daily in the way of good and bad fortune—instances of enormous sums won by persons having but a few 5-franc pieces as capital to start with, and, on the other hand, enormous sums being lost without a single gleam of good fortune during hours of play. It is doubtless because of the great wins from a small capital that so many people tempt fortune in this place. But a few days since I heard of a courier, who was here with an American family, having won over 100,000 francs and given up taking people about Europe. It is to be hoped that other couriers will not hear of this instance of good fortune, else they will be endeavoring to win the round sum, and where many try, but few succeed.

It is curious to observe how almost invariably people win when they begin to gamble. They wager timidly at first, and evidently under the belief they can not win. But they do and soon confidence takes the place of doubt, and then they play more heavily. Then, however, the luck changes, and losses in proportion take place. But the gambler will not stop then. At first he or she won, and why not again, and so it goes on The few make great gains,

THE MANY LOSE,

and all the while the bank piles up its many millions towards its yearly average—16,000,000 to 18,000,000 francs of profit, after all expenses paid.

Among the constant gamblers, as I have stated before, are women, and, in some cases, these women—many of them handsome—exquisitely dressed and very attractive, are the cause that men forget their wiser resolutions, and play more than they intended. The desire to appear indifferent, as to money, to make thus a favorable impression upon the women in question, will lead men on, and if success attends the gambler, he will find himself an object of interest indeed, but should the reverse occur the poor punter soon finds himself delaisse for the more fortunate, and when, too late, realizes that it was not himself but his money that was the attraction. One sees instances of this kind taking place all the while; there is a lot of going-up-rocket and coming down stick. Unless the private means of the gambler are great, as his luck deserts him he must retire. As a place to philosophize in Monte Carlo must rank high and people soon learn that money rules here—royalty—princes next to the throne—dukes with enormous revenues, millionares are all the same to the bank as the small punters. Their worldly status or expectations are nothing to the bank. Money is all in all to it and the 5-franc pieces are looked after with as much care as the large notes. The only aristocracy in the Salles de Jeux is that of money. The man who makes large wagers is king here.

Wonders of Life.

According to the naturalists, a scorpion will produce 65 of its species in a single season; a common fly, 144; a leech, 150, and a spider, 170. The hydrachna produces 600 eggs, and a common frog, 1,100. The female moth is credited with exactly the same number of eggs as the frog, and the tortoise 100 less, or an even 1,000. The gall insect lays 50,000 eggs; the shrimp, 6,000, and over 10,000 eggs have been found in the ovaries of a captured ascaris. One naturalist reports finding over 12,000 eggs in a female lobster, and another found 21,000. The mutilla, an insect very similar to the ant, has been known to lay 80,000 eggs in a single day, and Leuwenhoeck attributes 4,000,000 for the season as the female crab's share in reproducing her species! More than 36,000 eggs have been counted in a herring, 38,000 in a smelt, 1,000,000 in a sole, 1,130,000 in the roach, 3,000,000 in the sturgeon, 342,000 in a carp, 383,000 in a tench, 546,000 in a mackerel, 992,00 in a perch, 1,357,000 in a flounder. But of all the fish hitherto discovered the cod appears to be the most wonderfully prolific. One reliable naturalist reports 3,686,000 eggs from a single female in one season, and another as many as 9,444,000.

A NOVELTY IN SULKIES.

THE INVENTOR CLAIMS THAT A HORSE WILL MOVE FASTER

Harnessed to the New "Bike" Than to the Pneumatic-Tired Racing Vehicles Now in Use—The Driver's Seat is Placed Above the Horse's Hips, and the Axle is Close to the Middle of the Animal's Body.

The votaries of trotting are just now interested in a new and somewhat novel style of sulky for harness racing, which the inventor claims will prove to be almost as great an improvement over the present pneumatic vehicle as the latter has been shown to be in comparison with the high-wheel sulky that was in use prior to 1892. The new contrivance is the work of a well-known horseman, and its design is so well set forth in the accompanying illustration that scarcely any further description seems necessary in order to enable horsemen to form an opinion as to the merits of the invention.

One of the chief advantages claimed by this notion is that it relieves the horse of much of the usual draught incident to any sulky which he is forced to drag along behind him. Every trainer recognizes the fact that the closer he can hitch his "bike" to his horse the lighter the draught will be, and it is to this knowledge that the extremely high truss axle now in use is due. Some of the prints which depict the old-time trotters in action show them hitched to sulkies with perfectly straight axles, which were necessarily placed far enough away from the horse so that he could not touch his hocks when striking out behind at full speed.

All the veteran drivers agree that this primitive style of vehicle was a tremendous handicap in more ways than one. It made the draught very great, besides causing the sulky to slew out of its course in rounding the turns, and thereby throwing the trotter off his stride. Some years ago the sulky builders began to use slightly bent axles, admitting of a closer hitch without danger of striking, and by degrees this departure has been carried further and further until the modern truss axle machine, which fits so close that a driver can sit on the dock of a horse's tail, has been evolved. The invention is simply following this tendency out to the end by placing the axle slightly

THE NEW BIKE SULKY.

in front of the middle of the animal's body and having the driver's seat directly above the horse's hips. A central upright bar extends from the wheels to the seat on a slight incline backward, thus utilizing the driver's weight, according to the inventor's theory, to push the wheels forward and help propel the vehicle.

This is another principle which drivers quickly learned to take advantage of after the introduction of the small-wheeled pneumatic sulky. Instead of adjusting their sulkies so that the wheels are directly beneath the seat of the driver, they tilt the shafts upward in hitching the horse, thus throwing the wheels forward and seat backward, and giving the axle a slight incline out of the vertical plane—a scheme which, experienced reinsmen say, makes a great difference in the draught of the vehicle.

Another advantage claimed for the new sulky is that it will leave the horse free of all portions of the present style of track harness which have a tendency to impede his action. A comfortably fitting surcingle supports and steadies the shafts, the small strap running from it to the cap which encases the end of the shaft keeping the sulky in place—keeping it from going faster than the horse, as the inventor put it. Straps from the breastplate also assist in steadying the vehicle. The breastplate surcingle, and bridle are the only necessaries in the way of harness, leaving the utmost freedom to the shoulders and chest, as well as to the lungs by reason of less tightening of the girth. It is further claimed that a horse may be more readily, controlled from the proposed location of the seat close up to the horse's head. This advantage is expected to be gained by the leverage at the terrets, which was attached to the breastplate, instead of the saddle or girth as at present. An attachment there also secures the check, doing away with the water hook. The driver's feet rest in stirrups opposite the shoulders of the horse and just beneath the shafts.

Illustrating What He Meant.

Latter day speakers of English are getting to be very wordy and pompous in the use of our language, according to the distinguished linguist, Professor Whitney, and he thinks we ought to get back to the modesty and simplicity of our ancestors. This advice of Professor Whitney is no doubt timely. But in advising us not to use big words and to be clear, pure and simple in diction he employs the following words: "Avoid all polysyllabical profundity, pompous prolixity, and ventriloquial verpidity. Shun double endentre and prurient jocosity, whether obscure or apparent. In other words, speak truthfully, naturally, clearly, purely, but do not use large words."

The Way to Learn.

The beggar had a sign up, Deaf and Dumb, and the passing philanthropist stopped in front of him.

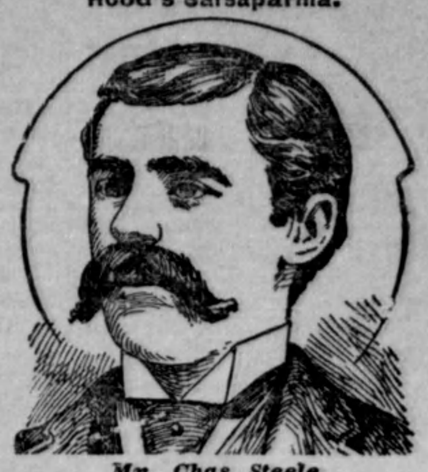
I'd like to give this man something, he said to his companion, but how am I to know he is deaf and dumb?

Read the sign, sir, whispered the beggar cautiously.

Broken in Health

That Tired Feeling, Constipation and Pain in the Back

Appetite and Health Restored by Hood's Sarsaparilla.



Mr. Chas. Steele
St. Catherine's, Ont.

C. I. Hood & Co., Lowell, Mass.:

"For a number of years I have been troubled with a general tired feeling, shortness of breath, pain in the back, and constipation. I could get only little rest at night on account of the pain and had no appetite whatever. I was that tired in my limbs that I gave out before half the day was gone. I tried a great number of medicines but did not get any permanent relief from any

Hood's Sarsaparilla Cures

source until, upon recommendation of a friend, I purchased a bottle of Hood's Sarsaparilla, which made me feel better at once. I have continued its use, having taken three bottles, and

I Feel Like a New Man.

I have a good appetite, feel as strong as ever I did, and enjoy perfect rest at night. I have much pleasure in recommending Hood's Sarsaparilla." CHARLES STEELE, with Erie Preserving Co., St. Catherine's, Ontario.

Hood's Pills are prompt and efficient, yet easy in action. Sold by all druggists. 25c.

For twenty-five years

DUNN'S BAKING POWDER

THE COOK'S BEST FRIEND

LARGEST SALE IN CANADA.

Going to Sleep.

"Order is Heaven's first law," and the truth is manifested even in the process of going to sleep. When a man drops off to sleep, his body does not do so all at once, so to speak. Some senses become dormant before others, and always in the same order. As he becomes drowsy the eyes close and the sense of seeing is at rest. It is quickly followed by the disappearance of the sense of taste. He next loses the sense of smell, and then, after a short interval, the tympanum becomes insensible to sound, or rather the nerves which run to the brain from it fail to arouse any sense of hearing. The last sense to leave is that of touch, and in some hypersensitive people it is hardly ever dormant. Even in their case, however, there is no discriminating power or sense of what touched them. This sense is also the first to return upon awakening. Then hearing follows suit, after that taste, and then the eye becomes able to flash impressions back to the brain The sense of smell, oddly enough, though it is by no means the first to go, is the last to come back. The same gradual loss of power is observed in the muscles and sinews, as well as in the senses. Slumber begins at the feet and slowly spreads up the limbs and trunk until it reaches the brain, when unconsciousness is complete and the whole body is at rest. This is why sleep if impossible when the feet are cold.

Remarkable Surgical Case.

A despatch from New York says:—The death of Thomas Nevin, the well-known dry goods merchant of Brooklyn, at Seney Hospital, late Wednesday night, brought to a termination one of the most remarkable cases in medical history. Last November Nevin, who was a fine-looking, splendidly proportioned man of 34 years, began to complain of severe pains in the thighs, and went to a hospital. The surgeons determined to expose the lower portion of the spine, and remove any foreign matter which they might possibly find. A diminutive human body was found at the back of the abdomen. The embryo was removed and preserved in alcohol. The discovery was one of intense interest to the hospital staff, and the explanation was that the patient was one of twins, and the form found in his body is what is known technically as an arrested development.

Prices of Meats Going Up.

A despatch from Chicago says:—Prices of all kinds of meats will be higher this summer than they have been for ten years past. It is not probable that much relief will come before next autumn. Prices have already advanced about 25 per cent., and an additional advance in about the same proportion is almost certain. While the prime cause of the advance is the scarcity of choice beef cattle, all kinds of meats have gone up, partly through speculative sentiment and partly on account of the increased demand.

Went to an Oculist.

Friend—Did you go to that fashionable oculist, as I suggested?

Nearsight—Yes. He examined my eyes, and gave me a piece of paper showing the sort of glasses I needed.

Why don't you get the glasses?

No money left.