

FARM AND GARDEN NEWS.

ITEMS OF INTEREST ON AGRICULTURAL TOPICS.

Chemical Elements of Plants—Storing Apples and Grapes—Curing a Horse—Taking Care of Corn Fodder—Profit from Keeping Cows—Etc., Etc.

CHEMICAL ELEMENTS OF PLANTS.

Ten chemical elements are found to be essential to the growth of agricultural plants. These are carbon, oxygen, hydrogen, nitrogen, phosphorus, potassium, calcium, sulphur, magnesium and iron. To this list chlorine and sodium, the constituents of common salt, are added by some authors. Manures and fertilizers are used for the purpose of conveying to the soil the three elements, nitrogen, phosphorus and potash, in available and convenient form, experience having demonstrated that practically all soils contain an abundant supply of the other minerals required for plant growth.

STORING APPLES AND GRAPES.

If apples are kept in the cellar they should be placed in the coolest and most airy part. It is best to keep them in a shed or garret until there is danger of freezing, and then put in the cellar. To keep well, apples should be kept in receptacles as air tight as possible. The barrel should never be left uncovered. Open the barrel and take out a sufficient quantity to last a few days and then nail the cover on again.

It is hard to keep grapes in a good condition until Christmas, yet it can be done. Use a keg, jar, or any receptacle that is clean, dry and tight. Put a clean layer of sawdust about three inches in the bottom and then a layer of grapes. Pick off all the imperfect ones and do not let the bunches touch each other. The grapes should be perfectly dry. Sprinkle sawdust all over and through them and a thick layer on top; then another layer of grapes, and so until the receptacle is full. When full nail on a tight cover and keep in a dry, cool place.—New England Homestead.

CURING A HORSE.

A writer in the Horse Review learned from a successful driver something about curing a horse of pulling on the bit. The driver did not think an aged horse could be cured of the habit, but with a young, good headed horse it was always possible to overcome it. He said: "It takes two to make a pulling match; the horse will not pull his driver if his driver does not pull him. When I get hold of a colt that has learned to pull I first have his mouth examined by a competent veterinary dentist; then I rig him out with a nicely fitting harness and bridle that does not pinch him or hurt him anywhere, and use a snaffle bit of the proper length. I give him his head to start away with, and if he reaches for the bit and doesn't feel it, and then starts off fast, as most of them will, I pull him up instantly, turn him around and start him over again with an easy rein. Every time I stop him and turn him around he will go a little further without asking for the bit than he did the time before, and after a few lessons he generally finds out what I want."

TAKING CARE OF CORN FODDER.

Another season of shredding has emphasized the value of shredded corn fodder as stock food, but it has also been demonstrated that the process is quite expensive, and the machines do not have sufficient capacity for rapid work. Manufacturers must rise to the occasion if they expect their machines to sell widely. Under present conditions the cost of husking the corn and shredding the fodder is greater than it ought to be, often amounting to more than the farmer can get out of it as stock feed. This will keep many from attempting to shred.

The matter of storing shredded fodder is better understood, and now there is not much loss from molding, as was the case when the method of keeping fodder was first attempted. The precaution is simply to let the fodder and the stalks become thoroughly dried in the field before running through the machine. If it can be run into the barn and placed in the mow with little or no tramping, so much the better, for where compacted by being stepped upon, moisture is apt to collect. It can be safely stacked under a shed or even on the open ground, if the work is well done, and the top of the stack covered with layers of straw. Observe the same precautions as in stacking hay, keeping the middle full and solid, and raking off the loose material from the outside of the stack. Stack as near the feeding place as possible, so that it can be fed out with the minimum amount of labor.

If it seems practicable to shred, by all means store the fodder in a barn, shed, or stack as soon as well cured in the field. It will not have to be as dry as for shredding, for close compacting is not possible with whole stalks. The loading and unloading is rather heavy work, but by the use of derricks in the field and at the stack this is greatly lightened and is not so formidable as it might appear. By putting the fodder into the barn or stack in sections it can be easily taken out when wanted for use.

The old practice of allowing the shocks to remain in the field until needed will still be followed by many

spite of the fact that much of the best material is washed out of the outer parts of the shock. This amounts to a considerable percentage, particularly if the shocks are small and the weather rainy. Better store the corn fodder in some way if at all possible.—American Agriculturist.

PROFIT FROM KEEPING COWS.

It has been hard work for farmers who have relied on the dairy to figure a profit on cows at the low prices they have been obliged to accept for milk and other dairy products. To many it seemed as if they were only getting market value for the feed given to their cows, and doing a good deal of extra work to get even as much as this. Yet even thus the dairy has probably paid as well as anything else. If the products of the farm had all or even the larger part of them been sold, there must have been such depreciation of soil fertility as to make the farm less valuable every year. On the other hand, by keeping cows, and using all the manure they make, adding some mineral fertilizers which will restore what the milk sold has taken from the soil, the farm may be kept growing richer all the time. Where cows are largely kept, much corn and clover will be grown, and this means a greater amount of barnyard manure, besides the fertilizing effects from clover roots in the soil, both while growing and in their decay. But the best opportunity for making money by keeping cows will be missed unless by purchase of improved animals, and by grading up with crosses from the best dairy stock the herd is constantly improved. This will very quickly begin to pay in the increased value of the herd. It will pay still better when the heifer calves become cows and increase the butter and milk yield. Year by year the farmer may not seem to be making any money. It will take all he earns to pay the running expenses of the farm. But if the productiveness is all the time increasing, and above all, if the farm stock is doubling or quadrupling in value, it will be found that the farmer's capital has increased in the best possible way to enable him to spend his later years in the comfort that a life of hard work ought always to earn.

By always grading up and breeding to the best stock in his line that he can find, it is possible to double the value of a herd of cows in eight or ten years. By this time, also, the increased product of these better bred cows will enable the farmer to make other needed improvements on the farm as well as to buy more or less grain to feed them. In this way a much greater variety of feed can be profitably given, and the value of the manure pile be correspondingly increased. No one who keeps a dairy should be satisfied until he has been able to grow cows on the farm that will give him a profit, even if all the feed for them were purchased at market rates. Then the farmer will still grow, probably, as much corn and clover as he ever did, for these are not exhaustive crops. What he will buy will be wheat bran and middlings, linseed and cotton seed meal, and when they are cheap enough, some oats also. All of these make the manure pile rich, and when the farmer has cows that will warrant buying these feeds for them, he will no longer need to purchase commercial fertilizers, that were necessary while he relied wholly on his own farm to supply feed for his cows, and yet was always selling milk or its products. The making of butter, however, takes nothing from the land if the skim milk is fed out to stock on the farm, and the manure from it is saved.—American Cultivator.

A Support for Staging.

So many accidents have occurred from the fall of staging that many devices looking to safety in its construction cannot fail to be of interest to many persons. A clamp, holding the cross section and the upright firmly together, is an invention of great value. The construction of the clamp is such that, the greater the weight of the cross section, the more firmly the teeth of the clamp presses into the upright. They are anchored by pressure from the opposite direction and a sharp blow from a small hammer releases the clamp when the crosspiece is removed. This device has its advantages from different points of view. Continual nailing breaks the grain of the wood, and the breaking apart almost invariably splits off some portion of the timber, so after a time it is worthless unless the broken ends are cut away and whole wood furnished. By this invention there is merely the pressure of teeth into the surface of the wood, which operation may be repeated indefinitely with very little damage to the fibre. There is not only a support for its end, but a holder for the cross pieces. A man may carry, strung on a stick on his shoulder, the necessary clamps to put up an ordinary staging, and neither hammer or nails are required in any portion of it.

Spain's Soldiers in Manila.

Spanish soldiers are small, sickly and devoid of pluck. They were glad to surrender. They had received no pay for months, were starved in the trenches, and were told that Americans would give them no quarter. Spanish business men are not adverse to a change. They have had innumerable troubles. Only the government officials are bitter, but they conceal their hatred under a mask of friendship.—Chicago Tribune.

A correspondent of the Keystone Philadelphian, suggests that retailers should adopt trade-marks and use them on stationery and stock and in advertisements.

ALPINE ACCIDENTS.

SENSATIONAL FATALITIES WHICH ATTENDED A FASCINATING PASTIME.

The Fate of Some Who Never Returned to Tell the Story of Their Perilous Sport With Glacier, Peak and Pass.

The Alps are once more the theatre of those sensational fatalities which have from time immemorial been associated with the dangerous but fascinating pastime, or exercise, or whatever you choose to call it, of Alpine climbing. Within a few weeks, announces the New York Sun, five persons have lost their lives as a sacrifice to this diversion, and England and the Continent are appropriately shocked. Within the last month Dr. John Hopkinson, one of the most distinguished of England's men of science, President of the Institution of Electrical Engineers, and a fellow of the Royal Society, together with his son and two daughters, was killed while ascending the Petite Dent de Veisivi, a peak of 10,463 feet in the Val d'Herens, one of the side valleys running up from the central valley of the Rhone, and a few weeks later Prof. Masse, a well known surgeon of Berlin, met his death while climbing Piz Palu, a peak of 12,000 feet.

The death of Dr. Hopkinson and his son and daughters were particularly distressing. He was considered a good Alpine climber and was a member of the old Alpine Club, and his son, a fourth of 23, had had some experience. The two daughters, of 19 and 18, it is manifest, had practically no experience in the Alps. The father had climbed this particular peak before, and no doubt the sense of supremacy impelled him to undertake this task with his family, but without the aid of a guide. Leaving behind this altogether indispensable assistant Dr. Hopkinson made himself directly responsible for the lives of his party of four. No one survived to tell how that dreadful accident happened which plunged these four to a death as cruel as ingenuity could devise. It might have been a fatal slip of the younger daughter that set in motion the awful machinery of the catastrophe. It might have been a misstep of the father, just as the clumsy accident of Mr. Hadow in 1865 was responsible for the death of himself, Lord Francis Douglas, Mr. Hudson and a guide on the Matterhorn. The exact cause of the Hopkinson tragedy will probably never be known, but it will remain as one of the most sensational of the fatalities associated with the Alps, even though the peak which they attempted to surmount is not regarded as a particularly dangerous one.

The accident by which Prof. Masse lost his life was different in its nature and consequences. He was known as a skilful climber, and in this ascent was accompanied by another physician, a celebrated guide and a Tyrolean. How the accident occurred is shown in this description: "In crossing a crevasse the ice by which it was bridged gave way, with the result that Prof. Masse fell down perpendicularly into it, dragging the guide after him, while Dr. Borchard was suspended on the brink, and the Tyrolean had to support the weight of the entire party. Eventually the guide, who was at the end of the rope, having discovered that the bottom of the crevasse was not far off, cut himself loose and scrambled out with the help of his ice axe. But when he came to the rescue of Prof. Masse, it was found that the latter's death had been caused by the rope, which he had himself insisted on being tied under his shoulders. The consequence was that when the rope was pulled taut the professor's circulation was suspended. But how an eminent surgeon could have made such a blunder almost passes one's comprehension." In this tragic incident the guide escaped practically uninjured, while the surgeon for whose relief he had performed so brave an act was the victim of the passion for Alpine climbing. It is not the first time that guides have cut the rope in order to save the party entrusted to their care and experience. That is one of the accompaniments of this perilous sport. It is one of the elements of danger and one of the exhibitions to be expected when such great risks are taken.

No one is rash enough to expect that these accidents, occurring within a single month, will have the slightest deterrent effect. The sport of Alpine climbing will go on, as it has gone on for so many years. The Alpine club will still continue to do business on the same old peaks, and in the same old crevasses. Some will return to tell the story of their adventures against the obstacles of glacier, peak and pass. Others will never return. They will remain in their Alpine homes, a human sacrifice, and the mystery of their deaths will forever be a mystery. Those who climb Alpine peaks speak in the language of enthusiasm of the joy, the exhilaration, the excitement and the risks of their journeys. Their language is the language of contempt for those who know nothing of the glory of scaling crags and crawling over crevasses and the language of envy toward those who have surmounted some peak as yet unclimbed by their feet and untouched by their alpenstock. These superior beings look with an unholly scorn upon the inferior person who finds some diversion in golf, or who meets with plenty of excitement in football, or who is even enthralled with the leisurely progression of a cricket game. It is well, perhaps, that all men and some women do not think alike on the subject of sports, else this would be a weary

world of monotony. Nevertheless, one cannot but wonder at the spirit of adventure which impels a man to engage in this most perilous of undertakings. Sport would mean nothing unless it involved an element of danger, and no doubt civilization of the hardy sort would languish if the innoxious occupation of propelling a croquet ball over an inoffensive lawn were to displace all other forms of athletic entertainment. Most men, however, will rejoice that the Alps are so far away that the temptation of risking life on them may well be regarded as remote.

MAN'S INTRINSIC VALUATION.

His Physical Personality Ranges from \$6,665 to Over \$333,333.

The more money a man can produce each year the more valuable, of course, is his body to him. The less money a man can produce the less valuable is his body. The railroad president's body is worth a vast fortune. On the other extreme, the body of a tramp, a criminal, a lunatic or a beggar is worth literally less than nothing.

The poor laborer who is prone to imagine himself of very little use in the world and his body of little benefit to anyone will be surprised to know that he is in the possession of a handsome legacy, from which, by the proper exercise of his hands, he draws a yearly interest.

For instance, take the case of the ordinary "farm hand." He is found all over the United States. He is a Swede in the Northwest, a native in the South and possibly an Irishman or a German in the East. He gets, say, an average wage amounting to \$200 a year. How much do you suppose that man's body is worth to him? Just about 6,665. For his \$200 a year is to him in the nature of an investment at an annual interest rate of 3 per cent. Tell him he's worth \$6,665 and he won't believe you. But he'll go on drawing his yearly interest just the same.

Then there is the carpenter. He's a valuable bit of dust, this workman. So is the painter. So is the mason. So is every other skilled mechanic. Some will earn more money than others, but a true average will be about \$500 a year. The body of that carpenter, mason or painter is worth \$15,555. Seems queer, doesn't it? A good many of them would doubtless like to realize their entire principal at once.

Look at the \$15-a-week young man, the clerk in the lawyer's office, the bean of the ribbon counter or the starting stenographer. He has to count his pennies to pay his board and keep himself looking neat, with an occasional flyer at the theatre or on an excursion. Do you suppose he would be so careful if he knew that he was worth \$26,000? Well, hardly. Yet that is just the sum his labor figures out as a 3 per cent. investment proposition.

Then, when he gets a raise and draws \$25 in his envelope every Saturday he may ascertain by mathematical reasoning that his body is worth \$43,333. Pretty good for a clerk, eh? Of course, the professional men are worth big money. The civil engineer who draws a salary of \$1,800 a year may reckon that he is worth \$60,000. The physician whose practice brings him a principal of \$85,333 to brag of. The pastor of one of our city churches, a minister whose income may be \$4,000 a year, is worth \$133,333. The lawyers, the gentlemen who get all the fame, position and money, when they command an income of \$10,000 a year are worth on the whole \$333,333. President McKinley is worth the comfortable sum of \$1,000,000.

Dog Commits Suicide.

A dog belonging to Marens Vanderpool of Lisle, N. Y., made a successful attempt at suicide recently. Assistant Chief of Police Ables of Binghamton with several residents were standing on the creek bridge when the dog, a large collie, ran down the bank and into the water. It was first thought he was playing, and as the water is not over four inches deep at this place, no attention was paid to him. He was seen to lie down on his side and thrust his nose under the water, where he held it. Finally his peculiar movements attracted the attention of the spectators, and they descended the bank to find that the animal had drowned himself. The dog lay with his head under the water that did not cover his body. Before the spectators reached the spot he was seen to raise his head and thrust it into the water again.

The reason for his act is not known. He was in his usual cheerful spirits when last seen about the farm, but all the spectators agree it was a deliberate suicide.—New York Sun.

General Wheeler's Remark.

One of the brightest things said about the pro-Cuban war, or any other war, was dropped by "Fighting Joe" Wheeler the other day at the Windsor Hotel reception to Mrs. Grant: "The strength of American arms in war comes solely from the soldiers' memory of the women they have left behind." The old soldier is as gallant as he is brave. He has a happy faculty of saying the right thing at the right time, and of doing it.—New York Press.

Prices During Siege of Manila.

The blockade and siege sent prices skyward in Manila. Hotel rates rose from \$3 to \$7 (Mexican) a day, beer from 10 to 30 cents a glass, flour from \$2 to \$20 for fifty pounds. Meat could not be obtained at any price.

NOTES AND COMMENTS.

New Zealand has a law which provides an annual pension of \$456 for every honest needy person who has reached the age of sixty-five and has lived twenty years in the colony.

This season's onion crop is put by the American Agriculturist at 3,100,000 bushels, an extraordinarily good showing for one of the most reviled of vegetables.

In Venezuela people are going in for the yucca plant. Coffee is too low to be largely remunerative. Three acres of yucca will produce 20,000 pounds of tapioca. Land which is yucca planted will return from six to seven times as much money as coffee.

Ambassador Hitchcock corrects a prevalent American idea that foreigners are not granted patents in Russia. He says they have the same rights as Russians, and more than seventy-five per cent. of the patents granted in Russia are granted to foreigners. Of these many are Americans.

Pittsburg, (Penn.) women have a "Society for the Promotion and Amelioration of Cats." They actually attempt education of the felines, and the president of the society says: "We feel assured that under our process of culture many hidden and unsuspected good qualities in the nature of the cat will be brought to the surface."

There has been a noticeable increase of the foot and mouth disease among the cattle herds in Switzerland. Horse breeding and sheep raising have declined. Bee culture has increased. There are 275,000 hives in Switzerland. The people are eating much less beef, mutton and goat's flesh, and are becoming a nation of swine devourers. In thirty years the importation of hogs into Switzerland has increased 385 per cent.

It is computed that about two hundred thousand pedestrians and twenty thousand vehicles cross London bridge every day. Each leaves behind a little shoe leather or a little iron—just a trifle. But when litter and dust are added to these minute losses the whole fills between three and four carts. The most surprising fact of all however, is that the incessant traffic across the bridge reduces to powder about twenty-five cubic yards of granite every year.

Thomas Foster, an authority on such matters, writes to the Philadelphia Public Ledger in protest against the Chickamauga Creek being referred to as "the river of death," as if that was the meaning of the Indian name. He says the Indian word Chickamaugee means a boiling pot, and was the name given the place because of a whirlpool that once existed where the Chickamauga Creek emptied into the Tennessee river. The rocks which caused the whirlpool were removed by the government some years ago.

A woman's club in one of the smaller New England cities brings itself quickly and practically in touch with the public schools by offering a prize to the pupils of the high school for the best essay upon a given subject. For the first prize competition for the past three years the topic was the colonial history of this particular state and the interest taken in the contest proved its popularity. The same club has on one afternoon of the season a teacher's day, to which all the teachers of the schools are invited, a special social entertainment being provided for them. The idea is to establish friendliness between the schools, both among the pupils and teachers.

Elections in Guatemala are decided, it appears, by majorities so large as to render unnecessary any subsequent electoral contest. In order to dispose of contests more expeditiously, there are now in Washington three committees on elections in the House of Representatives. But one committee, probably, would suffice in Guatemala, where, at the last election for President of the republic, the vote was cast in the proportion of 700 for one candidate to 1 for the other. The term of the President of Guatemala is nominally six years, and he is not eligible for a second term, but when Guatemala gets a good President it is the custom to prolong his term, and a term thus prolonged is thus indefinite, and ends usually when the President dies.

Dr. Thomas F. Rumbold, in a paper on this subject, attributes the nervous prostration commonly attributed to "overwork" to chronic nasal inflammation, the most potent and frequent factor in the production of which he asserts to be the result of excesses of alcohol, tobacco and "colds" induced thereby. These practices, he says, increase the congestion of the nasal mucous membrane, producing a tendency to "colds," causing vascular paresis, which, commencing at the periphery, gradually travels to the brain vascular system, and the author holds that this disturbance of the cerebral circulation is the real reason of the irritability of temper, inability to hold the mind continuously on a definite subject, sleeplessness, forgetfulness, desire for change and excitement, accompanied by physical exhaustion and loss of ambition, which are commonly attributed by the physician to be continuous application of the mind to business and professional duties.

There is probably no game which offers so many opportunities for cheating as golf. The opposing players are usually far apart and unable to watch each other, and there are many refinements in the rules, violations of which can only be detected by closely observing the player. A golfer separated by even no more than twenty-five yards from his opponent, could hardly, for instance, detect the latter if, in violation of the rules, he "healed" his club

in a "hazard." The opportunities for tricky playing being so great in this game it is all the more gratifying that so little is heard of golfers yielding to the temptation to take unfair advantage of each other. It is a game played "on honor," and honor is so generally observed in playing golf that it has come to be called "the gentleman's game." Indeed, golf players, as a body, follow the rules and etiquette of the game so strictly that had there been a golfer in the charge of San Juan he would doubtless have shouted "Fore!" before firing.

War gave an impetus to shipbuilding and the best of it is that the impetus has lasted though the war is over, says the New York Commercial Advertiser. During April, May and June shipbuilding was double what it was in the same months of 1897. During July, August and September it was triple. War withdrew vessels from merchant use to be auxiliary cruisers, and new ships were laid down to take their places, and as many of them will be needed permanently by the Government the new ships will not be at all an over-production. Receipts from the tonnage tax show that commerce did not fall off at all during the war, a very interesting fact. Probably there was never a naval war before during which the ocean commerce, both in our own and in foreign bottoms, actually increased during the war. Now the extension of our navigation laws to Hawaii, Porto Rico and other islands will create a new and increasing demand for American tonnage. When American ships have the monopoly of American trade with the islands they will pick up incidentally a volume of other trade, and double activity in our shippings will follow. It is a good thing to see this noble industry advance.

A measure has just been adopted by the Austrian and Hungarian Ministers of Education which is highly significant of the delicate relations between the two halves of the empire. Hitherto the medical diplomas acquired in one half of the monarchy entitled the holder to practice in the other. It has now been decided that from the first of next January Austrian diplomas in Hungary and Hungarian diplomas in Austria shall be placed on the same footing as those of foreign states. There are to be certain exceptions to this rule, in the case of practitioners in districts lying on the frontier. This measure is greeted by the Hungarian press as one of high importance in completing the emancipation of Hungary from a state of practical subservience to Austria in medical matters. The practical result of the original arrangement was that while thousands of Austrian doctors practiced in the other half of the monarchy, Hungary occupied the position of an Austrian province. It is also worthy of note that the Hungarian government recently decided to yield to the urgent representations made by the Opposition in the Chamber of Deputies in favor of the removal of the Austrian eagle from its place by the side of the national arms on the walls of the Hungarian Ministry in Vienna. The obnoxious bird was taken down during the recent negotiations between the two governments.

Is Laughter Dangerous.

If physicians keep on making medical discoveries life after awhile will not be worth the living. People will spend so much of their time in finding out what not to do if they desire to remain on this mundane sphere that they will prefer to get out and take the chances somewhere else.

The latest nonsense, or at least it seems nonsense to a non-medical mind, is perpetrated by a writer in the "British Medical Journal," who says that laughter in itself cannot very well kill, but it may do harm. Hysterical girls and boys with kindred nervous afflictions are often given to immoderate laughter, which tends to increase nervous exhaustion. Dr. Felchenfeld relates a case in which a little girl suffered from very definite cardiac symptoms after immoderate laughter. The patient was thirteen years old, and had previously been free from any sign of heart disease. After laughing on and off for nearly an hour with some companions she suddenly felt stabbing pains in the chest, and was seized with fits of coughing, followed by cardiac dyspnoea, very well marked. Felchenfeld believes that the cardiac disease directly resulted from immoderate laughing.

Looked at from an every-day standpoint most people will still believe that it is better to laugh and die than not to laugh and live. Heretofore the world has thought that laughter lengthened life, and most people, in spite of Dr. Felchenfeld, will continue to think so.

Cristobal Colon's Cat.

A prisoner of war, who positively refused to be interviewed, was seen at the office of the United States Express Company recently en route to the United States Supply Station, St. Joseph, Mich., where he will be put in custody of Lloyd Clark, a relative of Captain Clark, of the Oregon. The following notice was found pasted on the prisoner's personal effects:

"To Good Americans—Treat me kindly and give me food, for I am a prisoner of war from the Cristobal Colon, being forwarded to my captors, the crew of the Oregon, to the gallant commander, Capt. Clark, whose brave efforts forced the Colon to surrender July 3, 1898." The prisoner's name was Mr. Thomas Cat. He was a handsome specimen, having a silver gray coat, with tiger stripes, and showed no effects of having passed through the horrors of war, although very much uncommunicative.—New York Sun.