

FARM AND GARDEN NOTES.

ITEMS OF INTEREST ON AGRICULTURAL TOPICS.

Young Clover in Wheat—Frequent Application of Gypsum—Setting Out Cabbage Plants—Etc., Etc.

YOUNG CLOVER IN WHEAT.

Where winter wheat was seeded with red clover the last spring it is probably making a good growth, and will very likely set large enough to oblige the reapers to cut high so as not to cut too much of it when it comes to harvest. Clover seeds much better on winter rye or wheat than it does on spring grain, though we have seen it grow pretty tall among spring-grown barley. The reason why it does better on winter grain is probably because it can be sown earlier, and is also benefited by growing in the fine soil made by frequent freezing and thawing of the surface during the winter.

FREQUENT APPLICATIONS OF GYPSUM.

Wherever the white, soft rock from which gypsum or land plaster is produced, it is ground during the winter in large amounts and sold at very low prices, often as cheap as \$2 to \$3 per ton. We have known farmers drive 12 to 15 miles in winter for a load of land plaster, as it is usually called. When it is thus plentiful and cheap, advantage is found in making two or three applications of it during the growing season to clover, peas and other broad-leaved plants. It is not good to apply to the small grains, especially if the season is wet. By increasing the dewfall on the leaves it increases the liability of rust to attack them and thus injure the crop.—American Cultivator.

ARTESIAN WATER.

The water from artesian wells does not change, as no surface drainage can come into contact with it. If there are any impurities they are due to the minerals with which the water comes in contact as it passes through the earth's lower strata. These minerals may be beneficial to health, and are very rarely injurious. As the danger increases that surface wells will become contaminated, sinking these wells deeper or, better still, making artesian wells in their stead, will become more common. It will be better for the public health in many localities when this is done. Much of the ill-health in all new settlements comes from drinking surface water, or what is just as bad, getting it from wells so shallow that they depend mainly on surface drainage for their supply.

FEEDING OATMEAL TO CHICKENS.

Theoretically, and judging my analysis, oats and oatmeal ought to be the best feed for hens or their chickens. But whole oats have too much chaff to be profitably fed to chickens. Their crop is limited in size, and the chaff of the oat, besides being itself innutritious, is soft and interferes with crushing the grain. The same objections apply to feeding oatmeal, either dry or wet, to young chicks. Even if fed without the chaff the oatmeal is liable to compact in the chick's gizzard. Meal for chicks should always be cooked, and the harder the cakes made from it the better. Crush these cakes into small bits and fowl will eat them greedily.

FORAGE CROPS.

There was so great a supply of hay everywhere last year that many may think there is little need of growing forage crops, especially as the prospect is now good for another excellent hay crop. But well-cured corn fodder is better for cows in winter than is mow-hay, and such fodder crops as Hungarian grass and millet come in handy for feeding all kinds of stock. All these are hot weather plants, and will make a crop if drilled or sown any time in June after the ground is thoroughly warmed. Corn for fodder planted in June can be grown at a very small cost, as it will take the lead of weeds and can more easily be kept clean. Put in some of these to supplement any deficiencies in cattle feeding next winter.

SETTING OUT CABBAGE PLANTS.

Simple as the act seems of setting out cabbage plants, there is an art in this, as in nearly every farm operation, that needs to be understood to make it successful. More cabbage plants are killed by taking too much pains with them and not properly understanding the conditions. Deluging the newly planted cabbage with water simply packs the earth around the stem, which hardens as it dries and makes ingress of air impossible. The ground for cabbage or any other vegetable should be moist but never wet. Clip the top pretty freely. In fact, most of the old leaves may be removed, as the cabbage grows from its centre and will soon replace them. Then puddle roots by dipping them in warm water, and quickly placing them in soil dry enough to adhere to them. Then plant as quickly as possible in soil that has been freshly stirred, and very few will fail to grow.—American Cultivator.

STABLE CARE.

Whenever a cow is kept for milk there are few things that should never be lost sight of. To the man with a few cows and little money they are more important than to the rich man with many cows and more money. It should always be the aim of the owner to secure the largest possible amount of butter fat (because this is the only true measure of the value of milk) with the minimum amount of expense.

including food, time and capital invested. The cow should be comfortable, healthy and vigorous, able to consume, properly digest and assimilate food for her support and a large surplus for milk. The profit in dairying is always measured by this surplus. Moderate exercise, under favorable conditions, will contribute to the desired result; but every effort of the cow beyond that will detract from the profit. All the energy used in warming up ice-cold water, every moment she shivers in the cold wind, lessens the surplus of the milkpail. Cold, damp, dark or dirty stables are not comfortable; therefore, in such quarters a cow will not do her best.

In the exercise of my duties as a dairy inspector I have visited every class of stable, from the best to the worst; those that were dry, clean, light and well ventilated, down to those that were dark, damp, and filthy beyond description. Hundreds of times I have been met with the statement, "I would like to keep my cows clean, dry and comfortable, but I cannot afford it." In these inspections we note the kind and amount of feed used, etc., and also the amount of milk produced. This gives us a reliable basis from which to determine the kind of care and feed and the character of stables that bring to the owner the largest returns for the time, labor, capital and brains invested. Right here it might not be amiss to mention that it has often seemed to me that a great deal of time, much hard and disagreeable labor and the interest on considerable capital were wasted.—Hoard's Dairyman.

LIMBER NECK.

The newest and most fatal disease that we know of among chickens and turkeys is what is called "limber neck." This is very suggestive of the prevailing symptoms of the disease. The first trouble one sees with a fowl is that in trying to pick up food they seem to peck everywhere but the proper spot. Their necks are absolutely so limber that they have no control over their heads at all. In a short time—often but an hour or so—they squaw, stretch their necks out straight and when approached make a heart-rending squawk, but are unable to lift their heads at all. There are no symptoms of cholera or any other fowl trouble present. We know of one poultryer who lost over a thousand chickens last year, every affected one dying. The only recommendation that "limber neck" has is it does its work quickly; one is never in doubt about the matter from the very first.—Farmers' Guide.

SALVIAS.

In planning for the summer and fall garden if one has a bed in a conspicuous place and wishes something very showy that will bloom during the greater part of summer and until the late frosts, the salvia will prove a very satisfactory plant. When planted by itself and in large quantities there is nothing more showy or that will give a greater profusion of flowers than this. The salvia will stand considerable drought if the beds are no higher than the surrounding surface, but when planted in mounds or in any raised situations they dry out very rapidly, and during a drought soon become unsightly. There are usually half a dozen varieties of this plant catalogued, but the brilliant scarlet flower of the Salvia splendens is the showiest and best. This is a valuable sort for cutting, as the flowers are borne in long racemes and work in splendidly with mixed flowers. The prettiest way to arrange them is to place several spikes in a tall vase by themselves, with a few of their own leaves for green. There is one beautiful sort with intensely scarlet flowers which makes a brilliant bed for a part of the day, but the flowers drop off nearly always of so. The greatest success with the salvia will be obtained from the early sown seed. Under favorable circumstances the seed will germinate in about five days, but sometimes a much longer period is required. Two or three blue salvias are catalogued, but the scarlet kinds are the only ones worth cultivating. They must not be allowed to form seed, or if it is necessary to save one's seed, only allow one plant to go to seed, and keep the others blooming until after the late frosts. The most brilliant display of the salvia is during September and October. The cool nights of autumn seem to lend an additional glow to the brightly colored flowers. Stips of this plant root easily, and where there is plenty of space they can be kept over for another year.—Laura Jones in Agricultural Epitome.

POULTRY NOTES.

Hot weather breeds lice. Lice breed disease. It is the weakly chick that first shows signs of gapes. In-breeding is a very fruitful cause of gapes in young chicks. But don't neglect that housecleaning. Clean out thoroughly—dirt floor and all. Clean up the yards and outlying grounds. Fill up all low places where water is apt to stand. This cleaning-up will prevent many cases of sickness among the flock and will prevent such diseases as cholera. The griddles of worn out stoves make excellent feeding boards for young chicks and are easily cleaned. If you have a hen that eats eggs we advise killing her for roast fowl or chicken stew. She will teach her companions the bad trick. To rid the roost of the small red mites and gray spider lice there is nothing better than kerosene. Have

everything in the house movable, so it can be readily carried out of doors.

The roostpoles, dropping boards and nest boxes, together with any other loose boards, should be piled up out of doors; saturate well with kerosene and set on fire. After the oil has burned off throw sand over the pile to keep the wood from burning.

Cholera never attacks fowls that are properly housed and fed and where lice are kept down. By proper housing we mean clean, dry quarters, where the fowls are not packed in like sardines at night, and where the premises are kept clean.

If you have only ten or a dozen hens they may be confined in pretty small quarters and produce a good supply of eggs, if given the scraps from the kitchen, plenty of grass and a little grain in a good supply of straw or leaves so they will import eggs.

Grade up your flocks, get a good rooster of the herd you prefer; next year get another of the same breed not related to the one used this year; keep this up year after year for a little time, and you will have for all practical purposes a flock as good as a thoroughbred.

There are two or three things that should always be remembered by the person who is raising young chicks. One of them is, that nothing produces diseases among chicks so quickly as being exposed to cold and dampness. Another is that young chicks, as well as all other young things, must have exercise to thrive.

Chicks in the shell need the air which comes to them through their covering. If a broken egg is smeared over them the chicks quickly die. If the albumen remains over the shell; even for a short time after the germ has started into life the egg will be quickly addled. Whenever eggs are found smeared they should be at once taken from the nest and washed with water at about 105 to 110 degrees.

No Folding Beds at Cripple Creek.

Clerk A. N. Shaw, at the Metropole, in Denver, Colorado, has many experiences with people inclined to blow out the gas and perform other antics of a serious nature, but the latest incident occurred a few days ago, when a Cripple Creek man called to rent a room. The man from the land of gold was a good looking young fellow, but was apparently a stranger to many devices used to assist in making rooms roomy in the large hotels. He walked up to the desk, and with a modest blush remarked to the good natured clerk:

"Say, I'm going to get married next week, and I want to engage a room here in advance. I know the price'll be pretty steep, but don't care for that, for the girl I'm going to marry is the biggest nugget ever dug out of camp." "All right, sir," said the clerk, and up to the second floor they went, and talked of the price per week on one of the best rooms in the house.

"Yes, this is a shiner," said the man from Cripple Creek; "but the smoothest thing in the shape of a room I ever saw" but he hesitated and looked over it carefully again. "Something you would like more convenient?" asked the clerk. "No of course not, at the same price, but how much extra would you charge me to put up a bed in here?"

Clerk Shaw saw the point in a minute and stepped over to a corner of the room, and let down a folding-bed. The man from Cripple Creek blushed again, and as he reached the office, remarked: "I don't want you to think I'm a chump, but out in the mines we don't have any such hoisting machinery as that. Take a cigar, and if you ever tell the story keep my name out of it, and smoke whenever you feel like it—all the time charging to me—That's a great invention, and I thought it was a bureau."

Once More, the Unmanned Letter.

Here is a new story about the man who forgot to mail his wife's letter. The hero is a newspaper man who is connected with one of the New Orleans dailies: "Something over two years ago, on a cold winter's day, his wife gave him a letter to mail, and he slipped it into his overcoat pocket. It was addressed to a friend in Los Angeles. Two weeks ago, during a chilly snap, he put on the overcoat, and in the lining he felt the long lost missive. Conscience stricken, and without noticing the date or remembering when the letter had been given him, he rushed off and posted it. It was when the reply came from the friend in Los Angeles that the secret was out. The friend thought that the writer must have gone crazy. "I was glad to get your letter," the friend replied, "but what on earth is the matter with you? You wrote things that happened two years ago and about nothing else."

It took some time to get matters straightened out.—New Orleans Times Democrat.

Ice Wagon Figures.

There are in use in New York city, about 1,500 ice wagons, which cost about \$350 apiece, so that the money invested in ice wagons amounts to about half a million dollars. Though ice wagons are made of the best procurable materials, to withstand the hard wear to which they are necessarily subjected, yet it costs a good deal to keep them up. After the first two or three years \$50 or more a year must commonly be spent on an ice wagon for renewals and repairs, so that the money spent simply for ice wagon repairs amounts to from \$60,000 to \$75,000 annually.

Great Britain has a longer sea-coast line than any other nation in Europe. It measures 2,755 miles, with Italy second, 2,472 miles. Russia ranks third and France fourth.

DISAPPEARING GUNS.

THEIR GREAT ADVANTAGES OVER THE FIXED TYPE.

Impossible to Silence a Battery of Such Ordnance When Well Protected by Concrete and Sand—Method of Loading and Firing. A young woman visiting at West Point was describing to the commandant of the post a wonderful model she had seen in the ordnance museum. "It is beautiful, Colonel, beautiful! Let me see, they call it a—oh, yes, a retreating gun!" My dear young lady," exclaimed the shocked officer, "the guns in our army never retreat!"

What this enthusiastic young person tried to name was a disappearing gun, such as appears for a moment above a huge bank of sand until discharged, and then sinks with a roar from sight only to appear a few minutes later to repeat the operation. And it is on account of this temporary vanishing that disappearing guns are so valuable. As it costs thousands on thousands of dollars to build a modern, high-power gun of large size, its brief exposure to the fire of an enemy is very desirable from an economical standpoint alone. The carriage upon which it is mounted costs much more than the old type, which elevated the guns at all times above the parapet, thus making a fair target for the opponent's gunners. However, as a matter of property-insurance, the disappearing carriage is more than worth the difference in cost.

Then, too, it would be almost impossible to silence a battery of such guns when well protected by concrete and sand. In truth, it is asserted that no naval attack can do this. This is no part due to the fact that since the introduction of smokeless powder, the position of the battery will not be indicated by a dense pall of smoke. It can readily be appreciated how difficult it is to hit a gun which appears but for a moment at an unknown distance.

England made an interesting experiment some years ago to determine this very point. A dummy gun mounted on a disappearing carriage was put in a sand pit dug in an open field near the seashore. The appearance of the gun was accompanied by a puff of smoke, to imitate war conditions. H. M. S. Sultan then stood out at sea and turned all guns, heavy and machine, upon the target, but was unable to damage it. The weather was good and all the conditions were as favorable as possible. It was concluded from this that a battery of disappearing guns, well organized for defence, could not be silenced by a fleet. The only attack then to be feared is one from the land, and this must be provided against.

The gun in the position of load is hidden behind the parapet, and the gunners work there in comparative safety. The aiming is directed by officers stationed in observing towers at some distance on either side. By means of range finders they determine the position of the hostile ship, and then telephone the directions and elevation necessary to the officer in charge of the gun squad. The gun is quickly aimed at the unseen enemy, released from the catches which hold it in position, and as soon as it reaches the position for firing, is discharged. The shock of the discharge is taken up and distributed by hydraulic buffers, and is so great that the gun is thrown back behind the parapet, where automatic catches hold it in place until the firing is to be repeated.

The best type of disappearing gun-carriage is that made on plans designed by two of our own ordnance officers, in whose honor it is called the Crozier-Buffington carriage. This has proven a practical success, not only for the smaller calibres, but also for the larger ones, which seems remarkable when the strain upon ice carriage is considered. The gun kicks back upon discharge, with a force that makes the earth quake for hundreds of feet around. Yet this carriage takes up the shock and, by means of its hydraulic buffers, transmits it gradually until the gun comes quietly to rest in the position of load. Large guns of this type have recently been placed at Fort Schuyler, Hamilton and Wadsworth. The largest mounted is a ten-inch rifle, and will use a projectile weighing 1,000 pounds. In four seconds from the moment of discharge this mass of steel will pass over a mile and be capable of piercing ten inches of the best armor-plate. The largest gun in the world of this class has just been completed by our government and will soon be shipped to Sandy Hook. The calibre is twelve inches, and it is fifty-seven feet long. The gun and carriage weigh 175 tons. When fired the force of its recoil is equal to that necessary to stop a large train of Pullman cars within a distance of five feet when going fifty miles an hour. It takes 475 pounds of powder to produce this great result.

In an ordinary drill with the large guns of the seacoast defence, the firing must be simulated, as it costs something between \$500 and \$1,000 every time one of these mammoth guns is fired. Then, too, it would prove dangerous to shipping in this busy harbor. But the best kind of drill goes on in spite of this drawback at our forts. For instance, at Fort Hamilton, the men being in position, the officer in the observation tower sights some vessel in the offing and telephones directions for the aiming of the gun. This is done as carefully as in time of war. The gun is then released and, as it rises to the firing position, an observer seated astride of the breech sights on the vessel to verify the aim. The accuracy of range finding and aiming is remarkable. During a drill last week the smoke stacks of five different vessels were separately the objects of fire. Three times when the gun rose to the

firing position the aim of sight was on the smoke stacks. The other two times it was on a vital part of the boat.

When our system of coast defences is completed, every port of importance will be protected by these disappearing guns, hidden between parapets of concrete and sand. These, in connection with high power mortars, well manned, will make our coasts secure.—New York Post.

Preparing Searchlights.

The importance of the mirror in search lights is shown by the fact that there is not at the present time a sufficient number of these articles to supply the demand of the United States. These mirrors must be made with the utmost nicety, and the work is such that it is not easy to hurry it. It requires at least a week with present facilities to complete a mirror in the best style of the art. The glass, which must be of extreme fineness and purity, is molded into the proper form. It is in reality a concave lens with a backing of silver and protection of the finest hardened vulcanite. The operations of grinding and polishing must be conducted on the most scientific principles to produce perfect results. There is neither guesswork or question about it. The preparing of the arc lights is relatively easy when once the mirror is ready. The first search light mirrors were made in 1881 in England. France and Germany took up the business later, and a majority of the best work is done in these two countries. It is possible, however, to turn out perfectly satisfactory mirrors from our own shops. Our fortifications are at present most imperfectly equipped, very few of them having any facilities for producing search lights. In almost all of them a dynamo must be set up. This, however, is not difficult, the business having been reduced to such a fine art that within three or four months every fortification in the country could be furnished with these very necessary adjuncts.—New York Ledger.

The Sure-Footed Goat.

Of all the American game the big-horn are undoubtedly the warriest and hardest to approach. They live altogether on the high, barren mountains, and during the daytime choose the most open and exposed places on which to rest. A lone sheep will then lie down for only a few minutes at a time. He always has his eyes open and is continually getting up to obtain a better view of his surroundings. When there is a band of them, a few are always standing on watch while the others rest. They are expert climbers and good jumpers, very quick and agile in their movements. The goat, however, will go in places where the sheep cannot. Slow and uncouth appearing as he is, he is much more surefooted and can often be seen clinging to the wall of some dizzy height where one would think nothing but a bird could venture. At such times the hunter will often look closely at the surroundings and think he has surely driven the game to a place where it can not possibly escape him. But there is always a way, and no goat has yet been corralled on a mountain wall. Another peculiarity of the goat is that when wounded he will not hesitate to jump off a cliff in order to escape his pursuers. The writer has seen them deliberately cast themselves off precipices something more than a thousand feet in height and strike the bottom a mangled and shapeless mass.—New York Sun.

Warred Gould of the Coast.

Paul Gore, now clerk at the Auditorium annex, was room clerk at the Grand Pacific for several years. He tells a story in connection with Jay Gould's first visit to Chicago. Mr. Gould had registered at the Grand Pacific, and was standing in the lobby with his hands in his coat pockets, looking like a countryman in town. The little millionaire approached J. P. Vidal, who was clerk at the house, and modestly asked him what would be the best way for him to go to Lincoln Park. Vidal not knowing who Gould was, gave him the necessary instructions as to street cars, etc. Gould heard him through and then said, "But could I not go in a carriage?" "Yes, you can, but it is a little expensive," said Vidal. "Well, as this is my first visit, I think I will try to stand the expense." "All right, but to whom shall I charge the carriage?" asked the clerk. "To Jay Gould," came the quiet answer. Vidal almost fell to the floor, but Gould got the carriage.—Chicago Times-Herald.

Why a Colorado School Was Closed.

Mary Matthews, a nice little girl, lived so far from the schoolhouse that she rode a little blue-eyed confiding mule to the hall of learning. The teacher thought it unwise to allow the animal to graze about unharmed, so he attempted to club it away. The rest of the story is told in these expressive little lines: Mary had a little mule, It followed her to school; That was against the rule. The teacher, like a fool Got behind that mule And hit him with a rule, After that there was no school.—Rifle (Col.) Reveille.

Production of Coal.

Coal is not only a production of heat and light, but a storehouse of colors, medicines, perfumes and explosives. From 140 pounds of gas tar in a ton of coal, over 2000 distinct shades of aniline dyes are made.

There are said to be fewer suicides among miners than among any other class of workers.

SURVIVORS OF 1812 WAR.

Father Smith Was Mustered In, but Did Not Get into the Fighting.

Eleazor Smith, of Danbury, N. H., New Hampshire's only survivor of the war of 1812, was 100 years old on Monday, May 16. Public exercises in honor of the event were held in the opera house.

"Father" Smith was perfect health and says that he expects to live several years more. He has never been sick in his life, a fact which he says is due to total abstinence from the use of tobacco and alcohol. He has never used glasses. His hearing is impaired only a little, and he moves about with freedom with the use of a cane. On warm days he goes to the house of neighbors to visit.

Mr. Smith is of English stock. His father served in the Revolutionary war and was at the battle of Bunker Hill, when Gen. Warren fell. Eleazor says he has heard his father relate that incident many times. A brother of Eleazor was killed in the Civil War. Eleazor enlisted in the second war with England on October 5, 1814, in the company recruited by Nathan Johnson of Grafton, N. H., Capt. Joshua Merrill, Lieut.-Col. Edward Size. He was eager to enlist as soon as the war occurred, but extreme youth barred him. Soon after enlistment he developed aspirations to become a drummer boy, and before long he was considered the most proficient in his regiment. The drum used by him in those days is still in his possession. To a visitor one of the first propositions made is to bring out the drum, and the old man then beats the "double quick," drummer's call, and "double drag" correctly.

The company in which Father Smith enlisted never saw active service, being stationed at Portsmouth, N. H., several months awaiting a call to the front. This fact the old gentleman regrets to this day. He says he spent many hours watching the sea in quest of sails which he hoped would bring news that would lead him into service. "It was with regret," he says, "yet extreme rejoicing, that while at Portsmouth word came of the close of the war. I shall never forget, however, the joy that pervaded the camp at Portsmouth. I was thrilled with emotion which I shall remember till my dying day."

Father Smith has a large stock of anecdotes on hand. He especially delights in telling how, on one occasion while at Portsmouth, women visitors came to the camp. He, being the youngest, felt it his duty to entertain them, and he was soon waltzing with one, much to the surprise of his fellows, who deemed it a breach of military dignity.

"On another occasion," he says, "a fellow drove into the camp with a large barrel of cider which he started to sell by the glass. While he was drawing from a tap in one end the soldiers, who had clustered around so thickly that nobody could see what they were doing, stealthily bored a hole in the other end of the barrel, and in a very short time our friend found his cider gone."

Father Smith is still interested in national issues. He has voted for every President since and including Monroe, and says he hopes to vote for another in 1900.

Father Smith now resides with his daughter, Mary, the only one of five children living. He spends his time reading, drumming, and carving canes, having a collection of several hundred of the latter.—New York Sun.

"Nickels" for France.

The French Government have decided to introduce nickel into their coinage. It is not intended that the nickel shall entirely supersede bronze, as in the case in Belgium and Switzerland. The idea is to secure a piece of intermediate value between the half-franc and the 10 centime piece, which correspond more or less roughly with our sixpence and penny. The French Mint is busy just now issuing the new pennies and halfpennies with the designs of M. Daniel Dupuis. The same artist is engaged upon the new nickel piece, which will be of the value of twopence. At first it was suggested to him that it might have a hole in the centre, like certain Chinese coins of small denomination, which are strung together on string. M. Dupuis, however, objected that this would interfere with his artistic handiwork, and the idea was abandoned. The proposed new two-penny pieces are not approved of in all quarters. Some people declare that they will tend to oust the penny for tips to waiters and others.

Bug's Long Imprisonment.

The wife of Dr. C. H. Emory, of Bedford, Mass., a few days ago noticed a small white speck on the top of a hard oak centre table, of which she has been the owner for six years. Yesterday the speck suddenly developed into an opening about three-eighths of an inch in diameter, out of which crawled a strange looking bug, gray in color, about one inch in length, and having several arms and legs. There is much speculation concerning the strange insect. Undoubtedly it was embodied in the top of that polished centre table ever since the table was made from the rough lumber by the manufacturer. Since the possession of the table by Dr. Emory there has been no break in its surface, for Mrs. Emory has had it under her daily care. Dr. Emory still has the captive, and is trying to identify it.—New York Telegram.

"By Request."

An amateur singer takes particular pride in announcing that a certain song is "by request." When she does dishes at home it is "by request." We wonder she doesn't take more pride in it.—Acheson Globe.