

THE FARMERS' CORNER.

VALUABLE FACTS AND HINTS FOR THE AGRICULTURALIST.

Village Farming--Hedge Fences--Cross-Bred Fowls--Weaning Colts--Feeding Pumpkins to Hogs.

Village Farming.

Mr. John W. Bookwalter owns 60,000 acres of land in Nebraska, and he proposes to undertake the establishment of a modern Utopia upon it. The plan consists of a colonization of the farmers in a village that will build, and that will contain schools, churches, halls of entertainment, libraries, etc. He thinks the present farm life is one of privation, and he expects to furnish his farmer colonists with all the advantages of the towns. The practical farmer can see many obstacles in the way of a successful working of this plan. It is, of course, slightly modeled after the European farming village, but the conditions in America, especially in the West, are not favorable to it.

The American farmer, on relatively cheap land, and raising low-priced products, must work with machinery, and thus till large tracts. Under these circumstances very few could have farms close enough to a proposed village to permit of their making homes in it. Western farming is, and of necessity must be, on a rather extensive scale that will not permit of a concentration of the people. In a country where land is high because the demand for its products is great, small tracts given up to vegetable farming, and furnishing more opportunity for labor than 50 times its extent in our Western land, adapted to grain farming, will permit village farming, but we predict its failure for the present in our country.

Hedge Fences.

Osage orange hedge fences are undesirable. The weight of testimony is against them. Some farmers are still planting them, but for every such one there are five who are digging them out. For the first 10 years the prospect for a good fence is bright. It continues to thicken, and when well kept, is not too high to be easily trimmed. This is the case when the trimming has been done three or four times a year. But the stubs are left an inch or two longer at every trimming, and in time the old wood must be cut down a foot or two, and this is an exasperating piece of work. The trimming must be done each time just before the thorns harden, no matter how much other work presses. A little delay makes serious trouble. But all this could be endured if the hedge made a trustworthy fence. It gives fine promise, but soon after it reaches a condition of trustworthiness hog holes and breaks begin to appear in it. It requires constant mending, and is never safe. It robs the earth of plant food and becomes a nuisance. Notwithstanding the work of uprooting a hedge fence, a very few possessors of hedges over 10 or 15 years old are willing to let them stand unless they are farmers who have ceased to trim them and are careless of the appearance of their farms. Other kinds of fences are more satisfactory every way.

Cross-Bred Fowls.

The poultry-keeper says: "The fact that the cross-bred birds lay soft-shelled eggs is conclusive evidence that they are over-fat. It shows also that cross-bred birds are more liable to take on fat than the pure breeds. Instead of rendering them delicate, it is evidence that they require less food, and that they have partially been changed from being prolific layers to meat producers. This tendency to take on fat by cross-bred birds is the cause of persistent setters, and we are confirmed by every experiment in our claim that when hens become fat they are more apt to become broody." If this authority is correct, it would appear that our farmers who keep hens for eggs are making a mistake in crossing their flocks as much as is common. When new blood is introduced it should be from the same breed. All this may be usually true, but there are some cross-bred flocks that are great egg producers.

Authorities agree that the variation in the color of the yolk of eggs is due neither to the color of the hens nor their age, but to the coloring matter of the food consumed. The richness or the paleness of the color so often noted does not qualify any more than the annatto used to color butter indicates its quality. In times of drought or late in the season, when plants lose their bright color, eggs have pale yolks. Clover or corn-fed hens give plenty of color to their eggs.

Feeding Pumpkins to Hogs.

The National Stockman says: "The farmer who is so fortunate as to have a good supply of pumpkins has a valuable food in them as a part ration for his fattening hogs. It is claimed by some that hogs will fatten on them as their only food. We would not care to risk the statement so far as to undertake to fit a lot of hogs for market with them. We would feed as many each day as the hogs would eat up clean and then give them all the corn they could consume besides. Young hogs with a ration of pumpkins each day will stand a much longer feeding of corn than they would if fed corn alone. It is a wasteful way of feeding to throw out enough corn or pumpkins, or both at one time, to last the hogs two or three days. Their food should be given to them sweet and clean at least twice a day."

Another plan of feeding pumpkins to hogs that has been found to produce excellent results, is to begin early in the fall, when the fattening hogs are in the pasture lot; give them all they can eat as long as the supply lasts, then begin with the corn.

Pumpkins alone will fatten hogs quite rapidly, but the pork from such feeding is soft and undesirable, and needs a finishing with corn to make it first-class.

Pumpkins are cheaper than corn--besides being a specially health-giving food, hence the fat and flesh added in

the beginning is more economically produced and the profits proportionately increased.

Usefulness of a Trotting Horse.

A San Francisco paper informs its readers that a trotting horse is very useful outside the track, and asserts that "on the road he is great; on the farm he does the work of a mule, plowing, harrowing and hauling heavy loads;" while in the cities "he pulls butcher carts, milk wagons, buggies, carriages, omnibuses and express wagons." Possibly the trotting horse can do the "work of a mule." He may be able to draw the plow and to haul heavy loads, and draw omnibuses and express wagons, but it is certain if he does this kind of work he will soon be spoiled for trotting. A trotting horse may be a fine roadster, but some of the very points which give him excellence in this direction manifestly unfit him for use on a farm, or for any other heavy and long-continued work. We believe that, within certain limits, there is such a thing as a "general purpose" horse, but we do not believe that the lines can be spread far enough to include an animal that will also be adapted to perform general farm work or draw heavy loads over the city pavements.

French Way of Fattening Fowls.

The writer has often been asked about the French method of stuffing birds in the forced fattening process which is in vogue somewhat in the east and might be worked just as profitably in Denver. The modus operandi is simple enough. There is an instrument consisting of a rod, a piston and a treader, with a long slender tube attached. The fowl that is to be fed is held by the machine, the tube is inserted down its gullet and a man turns the treadle with his foot. By this pedal movement the feeder is set in motion, and gently as a nurse would force a tonic down a sick man's throat, the stuff is inserted into the bird. All the time this cramming operation is going on the fowls are kept in pens and no other kind of "vituals or drink" is given them. They wax fat on the treatment. By this process the flesh of the fowl can be flavored to any taste a customer desires, and it becomes as soft and sweet as a capon's. The result is more than anything else like the poularde of the French markets.--Field and Farm.

Weaning Colts.

For weaning colts provide a good box stall large enough for a number to be weaned. Feed them in it for a week or more, so they will get used to it. See that their manure and feed boxes are in order before commencing, and provide a good vessel to hold water for the night, as it will require two or three gallons per head each night. A large iron kettle has rendered good service in my barn. Cleanse the vessel once in every 24 hours, as colts prefer the water fresh and clean. Having lived mostly on liquid food for five months, then turning suddenly to solid, the youngsters need something to moisten it. By having water within their reach they will drink little and often, which will do them more good than larger quantities farther apart. Confining a weaning in his stall from four in the evening until seven the next morning, or 15 hours, is too long to have them do well.--Exchange.

Straw.

Farmers have been slow to learn that they cannot afford to burn straw. If it is not wanted for feed it should be rotted and returned to the soil. Its analysis does not show a high manurial value, as it contains much carbon that is not valued as a manure, but herein may be led astray by the tables and theory. Its mechanical effect on all soils that are inclined to be great. It lightens and warms up the soil, and lets the air in to feed the roots. It is a good absorbent, and should be used freely in the stalls, when not wanted for feed. Return all straw to the soil either in form of animal manure or in its usual form after rotting.

Cleanliness in the Dairy.

A creamery man writes: "The churn, butter worker and all utensils that come in contact with the butter should be washed first with hot water and soap--and good soap, too, not common three-cents-a-bar rosin soap; this will take off all butter or grease, but will not thoroughly cleanse the utensil on account of the oil or fatty substance in the soap itself, and to overcome this rinse with boiling water. Cold water alone will not do, as it will cause a very small portion of the soap which has been dissolved in the suds to harden and remain on the utensil."

Valuable Hints.

Fowls and eggs are always in demand.

In preparing poultry for market dress as nicely as possible.

Select the warmest place in the garden where the drainage is good--on the south side of a hill if you have such a thing, and plant your grapes there.

Did you ever think that a weed was something of a blessing to some people? It is. It compels them to do what they would not do but for weeds, cultivate the crop.

Raw meat in moderation, chopped fine and fed about twice a week will stimulate egg production. One pound of meat is sufficient for 15 hens. Some cook it, but raw meat is better by far.

For any one wanting a white fowl of excellent laying qualities the white Minorca will be sure to please. Like the white Leghorn they have their separate admirers and the qualities of each are more or less distinct.

The man who believes--and acts on his belief--that cows should have no shade in the pasture so that they won't loose anytime from eating by laying in shade should, be compelled to eat a day bareheaded in the hot sun.

For scalding poultry, the water should, be as near the boiling as possible, without actually boiling; the bird, being held by the head and legs, should be immersed and lifted up and down in water three times; this makes picking easy.

SCIENCE AND INDUSTRY.

CLEVER AND INGENUOUS INVENTIONS FOR MAN'S BRAIN.

Mr. Edison's New Motor--Opium as a Tuberculosis Curative--What a Modern Gun Can Do--Ammonia Engines.

Opium as a Tuberculosis Curative.

One of the latest of those experimental remedies in cases of tuberculosis has just been promulgated by Dr. John Gordon Dill, Assistant Physician to the Sussex County Hospital, England. He suggests modified opium smoking and mentions several cases which have come under his personal observation where the treatment has been used with considerable success. Dr. Dill wishes it to be understood that he does not claim opium smoking to be in any sense a cure for consumption, but simply that it is a valuable palliative which may be of service in the treatment of the disease. Dr. Dill uses, as he calls it, medicated tobacco. That is, the tobacco is soaked in a preparation containing all the component parts of opium in fluid form, about 50 per cent stronger than latex. The tobacco is dried thoroughly before using. In advocating this mixture of opium he is fully alive to the danger which may result in prescribing the drug for medicinal purposes and upon this point expresses himself as follows: "We certainly do not inject an unknown poison into the system to work its wicked will independent of our control, but, on the other hand, we may be means of introducing a moral poison, the terrible nature of which can only be realized by those who have had the painful task of trying to cure a victim of the opium habit, and for this reason I have never allowed my patients to know what they are smoking, merely calling it medicated tobacco."

The mixture was found to have its most efficient strength when one ounce of tobacco was saturated in three fluid drachms of the liquid. The patient was advised not to smoke just before eating. The most marked effects of opium smoking in this way are that it eases the cough and assists in expectoration. Dr. Dill is careful to say that he is not yet sufficiently prepared to drop any conclusions as to whether opium administered in this form has any specific effect upon the disease, although almost without exception the patients who have made use of this treatment have thought that they derived great benefit from it.

Dr. Dill got his idea of employing opium from the Chinese, having ascertained that in certain districts of that country where tuberculosis was extremely prevalent, the opium-smoking population were almost exempt from the malady, and this led him to try the effect of a mixture of opium and tobacco upon a number of his patients.

Mr. Edison's New Motor.

Much interest is shown among electrical experts regarding Thomas A. Edison's ideas and inventions in electric railroading, and especially in applying electricity as a motive power to street cars. When questioned on the subject T. C. Martin editor of the Electrical Engineer, said: "I note that Mr. Edison speaks of dispensing with overhead trolley wires and all direct connections between the electric motor and its source of current. It should not be forgotten that as far back as 1880, at Menlo Park, Mr. Edison ran an electric railway which had no overhead wires.

In other words, he carried the current to the two rails of the track, one of the rails being thus made positive and the other negative or "return." The motor on the car was in multiple, so to speak, between these rails. The car used to travel at a lively gait on a three or four mile track. There are difficulties, however, in applying this plan to a city street car track, for the reason that the two rails might be bridged electrically sometimes by other things than the setting car, and then there would be trouble. One way to obviate this is to throw the current into successive sections of the track by means of electro-magnetic devices operated by the car itself. Perhaps Mr. Edison is working in that direction.

There is, however, another way of doing this thing, and it is not unlikely that Mr. Edison is looking at that also. I mean the utilization of the alternating current. If this current were used, it could be "picked up" inductively, without any connection whatever with the track--not even by the wheels--and then could be "converted" for use in the motor on the car. This method is still in the future, but you will see it worked out as surely as the sun rises. On the whole, it is more likely that Mr. Edison, by way of relaxation from 50 other inventions, has been harking back to some of the schemes he tried on that historic old electric road at Menlo Park.

New Lakes on Mars.

There is one point of view from which the formation of a new lake in Southern California by the overflowing of a sandy desert with water from the Colorado River possesses a peculiar interest. It may throw light upon some of the mysterious changes that have occurred upon the Mars. Near the equator of Mars there is a region which has been believed to be part dry land of that planet, and which has been named Lybia by the Italian astronomer Schiaparelli.

But a few years ago a change occurred in the color of "Lybia," and some of the observers thought that it must have been suddenly overflowed with water, since it had assumed the color characteristic of the other regions of Mars that are supposed to be water-covered. Other similar changes have been seen by telescopic observers. Now that a new lake has actually been formed on the earth by the expected filling up with water of a depressed area of dry land those who believe that a similar occurrence, on a larger scale, has taken place on Mars will probably be strengthened in that interesting opinion.

Ammonia Engines. "Inventors" of ammonia engine

are pretty sure to find plenty to listen to their schemes, as witness the following from The Press:

J. H. Campbell, the inventor of the engine, said: "I believe that the most skeptical engineer would acknowledge an economy in ammonia if he were to pursue this course. Substitute water for ammonia in the generator, and in all other ways work the water steam just as we work the gas. The engine that is now making 100 revolutions and propelling this boat against the tide twelve miles per hour would then drop to fifty revolutions, and would be an economy in running an ammonia engine that is seldom thought of, that is, the readiness with which it accommodates itself to the different speeds of an engine or to the different loads. Other than the economy of 50 per cent. of fuel, the advantages of the ammonia engine are a saving of all the cylinder oil, 95 per cent. of the water required for the boiler, a boiler always clean, no care as to the supply of water for the boiler, and great comfort for the fireman, as rapid firing is not required."

A New French Cruiser.

The French cruiser "Coetlogon," which has just completed her official trials at Brest, is of the same type as the French cruisers "Surcouf" and "Forbin," and only a trifle smaller than the "Lalande," "Toude," and "Cosmos," which have a displacement of 1,877 tons. In the trials which took place during the past fortnight she failed to quite reach her contract speed of 19 1/2 knots; but as she attained a speed on the two hours' run of 19 3/10 knots with 124 revolutions she is to be accepted, subject to the penalty for not coming up to the stipulated speed. Both the "Surcouf," which was built at Cherbourg, and the "Forbin," built at Rochefort, on the trials obtained considerably higher speeds, that of the former being 20 1/2 knots with 133 revolutions, and that of the latter 20.63 with 136 revolutions. The "Coetlogon" has a length of 311 1/2 feet, a breadth of 30 1/2 feet, and a mean draught of 14 feet. Her displacement is 1,848 tons. It is wonderful, the amount of effort of the world that is given to building great war-ships whose purpose is to destroy something.

A Singular Optical Effect.

A curious optical effect has recently been the subject of a note to the Academie des Sciences, Paris, by M. Mascart, the well-known physicist. When we look fixedly at a white background uniformly lighted and a black object rapidly crosses the field of vision, the background will appear darker in the rear of the object, and the end of the "shadow," as we may call it, where the background recovers its true whiteness, is seen to be tinged with red. M. Mascart explains the effect by the established fact that the eye takes time to recover from the darkening due to the passage of the black object. There is a physiological retardation; and the red tinge is accounted for by the eye being more sensitive to the red or long waves of light than to the green. According to a rough estimate the retardations of the luminous impression is about 1/25th of a second, and the red rays are about 1/100th second in advance of the total radiation or white light.

What a Modern Gun Can Do.

Unless one is actually brought into business relations with the great science of modern warfare, it is difficult to conceive of the terrible power of the latest and largest guns. These engines of destruction, weighing 110 tons, hurl a projectile of solid steel 18 inches in diameter and nearly 4 feet long, at a velocity of 2,075 feet a second. When tested recently, one of these guns sent a shot through 20 inches of steel armor, 8 inches of iron, 20 feet of oak, 5 feet of granite, 11 feet of concrete, and 3 feet of buck. Comparatively, a locomotive weighing 200,000 pounds would have to spin along the tracks at a rate of 135 miles an hour to strike a blow equal to that projectile. Think of the damage wrought and nearly 4 feet long, at a velocity of 2,075 feet a second. When tested recently, one of these guns sent a shot through 20 inches of steel armor, 8 inches of iron, 20 feet of oak, 5 feet of granite, 11 feet of concrete, and 3 feet of buck. 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