

REAL RURAL READING

WILL BE FOUND IN THIS DEPARTMENT.

Some Well Recognized Principles of Breeding—A Convenient Sawbuck—Feed the Hogs Turnips—Buy Good Cattle—Farm and Household Notes.

Breeding Matched Horses.

There are few men, even among those actively engaged in the horse-breeding industry, says a correspondent of the American Agriculturist, who fully realize the long and expensive searches that are made by horse dealers and by the agents of wealthy men to secure well-matched pairs of horses for carriage driving. It is not essential in a great number of these cases that the horses be fast trotters, but it is of the first importance that the pair match well, and after this that they move with a stylish, high-stepping and high-spirited gait. Such horses, matched, are worth very much more than double their price when sold alone, owing to the difficulty that is experienced in attempting to cater to this desire on the part of wealthy people to indulge their fancy in an attractive pair of carriage horses.

The following of the well recognized principles of breeding will go far toward securing well-matched pairs. If one could use breeding mares, of an established standard of form and color, such as has been secured in the breeding of the Hackney Coach, French Coach, and Cleveland Bay, and could make use also of stallions that had been thus bred, he could count quite confidently on producing what was desired. But the average breeder has no such facilities at hand. He must use such mares as he has, or can readily obtain, but even under such circumstances there is an intelligent way to proceed.

A well-shaped mare may be bred for two years in succession to a sire whose prepotency has been shown to be so strong that his offspring, as a rule, strongly resemble him in form and color; or, what would be still better, two mares of as great similarity as possible may be bred the same year to such a sire, and the chances will strongly favor the securing of a well-mated pair. If one is breeding horses as a part of his farm operations it is not difficult to secure mares that bear a close resemblance to each other, which, if a person is limited to the use of only one mare, he may, as suggested, breed for two years in succession to the same sire, or may arrange with a neighbor, having a mare somewhat similar to his own, to breed both the same season to such a sire with a view to the increased profit to both if a well-matched pair be thus obtained.

A French Coach, or a Cleveland Bay sire possessing fine style and spirit, is preferable, for there is a strength of breeding in the case of such sires that makes the handing down of their own characteristics to their offspring quite certain, even when the dams are not altogether similar to them in form and color. These two breeds are specially noted as possessing such form, spirit and good "action" as to make them particularly desirable as carriage horses. Good results in breeding for matched pairs may come when well-built trotting bred stallions are used, but the past breeding of such animals usually makes the chance of uniformity of form and color in the offspring decidedly remote. Attempting to secure such uniformity can certainly result in no loss, if the attempt be made as suggested, while it may result in a quick sale and a largely increased profit.

Agricultural Atoms.

PLANT deep in dry weather; shallow in wet.

KEEP the weeds out and the crust broken.

CUT your grass early; it is more appetizing.

GROW such crops as are adapted to your soil.

ONE can plant more than he can cultivate.

IT is better not to stir a porous soil too much.

RIGHT planning saves both time and labor.

DO a little thinking and contriving every day.

BROAD tires on the farm save the moist turf.

POOR feed and care are worse than hard work.

HAVE a field of clover growing every year.

GROW a little something else besides wheat.

DON'T plant corn until the soil is well warmed.

INSOLUBLE fertilizers are of no practical use.

ALL fertilizers should be well mixed with the soil.

PLow deep, according to the character of the soil.

THERE are no weed seeds in commercial fertilizers.

SMALL farms do best because they are best tilled.

A CLAY soils needs much care to keep it from baking.

IT is a great mistake to stint in amount of grass seed.

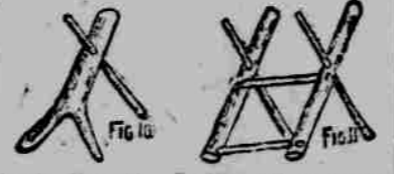
Turnips Instead of Slop.

A correspondent says: Last year I had an acre that was too wet to plant in corn. About the 15th of August I sowed two-thirds of it in turnip seed. I would have sowed all of it but I did not want to fool away so much time. Late in the fall I pulled 150 bushels of turnips. I tried to sell them in the home market. One merchant finally offered to take one or two bushels a week at fifteen cents a bushel, provided I would take

it all in trade. As I did not know what to do with so much merchandise I let the trade go by. I was feeding 100 head of hogs on corn and slop made of wheat middlings. I fed turnips instead of slop and found they did as well on corn and turnips as they had done on corn and slop. I cut with a corn knife a bushel basketful of them twice a day and fed to four milch cows. There was an increase in the milk. The flavor of the milk from three of the cows was unchanged, while that from the fourth one (a greedy eater) was considerably tainted by the turnips. With a favorable fall a good crop can be raised if sowed as late as September.

The Sawbuck.

This cut, Fig. 10, shows a sawbuck extension, useful where the timber is long. The same principle of construction is shown in the ordinary



buck, Fig. 11. In Fig. 12 we give an improvement to the ordinary buck that will be apparent to any one who would like to work his big two man



cross cut saw alone. The sawing arm into which the saw is inserted is slotted, as the saw will require freedom to slip up and down in the slot and is fastened by a pin through the cross slot.—Farm and Home.

Successful Planting.

A good experiment was made in timber planting by R. Hathaway of Michigan, which he reported in the Prairie Farmer. He set 150 trees, alternating with sugar maple and white pine, one rod apart, along the roadside. They were placed on the west or windward side of his cultivated farm. They have served as a windbreak for twenty years. He has also set a line entirely of maples, which he procured from a natural growth some miles away. The maple being an easy tree to transplant, very few were lost. From these maples he has made syrup and sugar for ten years without harm to the trees. This reminds us of a plan partly carried out by another person. The public road passes through his farm with a slight and uniform ascent. Planting a line of sugar maple trees ten feet apart along the border of the road he proposes to tap them for sap as soon as they are old enough and to connect them all by a small wooden or tin trough extending from tree to tree, and thus collect the sap from the whole in these successive troughs at the bottom of the descent into a suitable evaporating pan, where the pure sap can be evaporated into white and crystalline sugar.—Country Gentleman.

Notes From the Dairy.

A POOR cow is a dead weight which will drag a man to the bottom of the slough of despond.

BETTER buy your milk and butter of the neighbors than to keep a cow that will not pay her keeping.

EDUCATE the butter-maker and slaughter the poor cow, if you expect to make any money out of dairying.

SHORT pasture makes a short yield of milk unless supplemented with a grain ration and plenty of fodder corn.

DO ENJOY your cows as you would have them do unto you. If you are stingy with feed they will be stingy with milk.

THERE is no grain equal to oats for feeding to calves, and mixed with ground corn there is no better food for milch cows.

THERE is hope for poor butter-makers, as they can be educated; but for poor cows there is none, as they cannot be made over.

AS WELL expect to reach the top of a flight of stairs by climbing up two steps and falling down three as to expect to make any profit on a poor cow.

THE axiom "A penny saved is worth two earned" is practically illustrated by feeding unthreshed oats to cows and calves. Try it once, and you will never waste any time, money, and labor in threshing oats.

OF course, after milking your cows all summer you know what each can do, and whether you are milking her at a profit or a loss, so you will have no trouble in telling which ones to sell to the butcher.

IT is easier to keep a cow up to her regular flow of milk with a little feed than it is to bring her back to it after she has shrunk off it, with a good deal of feed. This is an instance where "an ounce of prevention is worth a pound of cure."—Correspondent Farm, Stock and Home.

Pruning Shrubs.

Late summer and fall blooming shrubs may be pruned this month and make a much better appearance through the winter. They may be pruned as sharply as desired, for the bloom coming on the young shoots will then have an opportunity to grow between spring and the blooming period. The novice will note that this fall pruning applies to late blooming plants. Spring blooming shrubs should receive their main cutting

soon after blooming, in order that the young wood on which will come the following season's flowers may have an opportunity to get the required growth. Serious mistakes are often made on the season for pruning, as the thousands of flowerless shrubs throughout the country bear mute witness. So-called landscape gardeners (self-styled) are at the bottom of the mischief, going over grounds in the early spring and ruthlessly cutting without regard to the season for blooming.

Buy Good Cattle.

We have advised dairymen who wish to improve their herds to attend public sales of pure-bred dairy stock and buy cows or bulls, if they can do so at reasonable prices. At a recent sale of Guernseys, in Philadelphia, the average made was about \$80, some cows selling much below that figure. A good pure-bred dairy cow is worth from \$75 to \$100 if she is fed and cared for as she ought to be. This is not mere say so, but can be proved by figures from actual practice. We don't advise anyone to buy a pure-bred cow with the expectation of having her prove her superiority over a scrub unless she be given a fair chance to do so, for disappointment will be the result. But if one is capable of giving a cow generous treatment (and this includes care as well as feed) he will find the most profit in keeping the best cow he can buy or breed. At the sale mentioned, we noticed that a bull calf sold for \$9, which was low enough to suit the purse of almost anyone. We don't understand why it is that so many dairymen will breed to common or grade bulls when pure-bred ones can be so cheaply bought. It is about time that the prejudice against "fancy" stock was done away with. Fancy stock, nowadays, means the most profitable stock that a farmer can keep. Think it over; ask your pure-bred stock-keeping neighbor for figures; read the papers and compare results from keeping the best stock with those you have been content with so long.—National Stockman.

A Fodder Drag.

Take two poles 14 feet long, 2 cross-pieces, 2 standards, 3 standard braces, 2 cross braces from standard to the runners; another cross stick; all secured with bolts. Take the hind



wheels of a wagon, make a tongue for it, mount the drag with pin through the end. Use a 1 1/2-inch augur for holes. With this contrivance one man can haul as much fodder as two men with a frame on a wagon.—Practical Farmer.

My Year's Profit.

My poultry account for 1921 was not large, but it shows that poultry will pay for itself if cared for in the right way. The feed cost \$27.04, and they were credited with eggs sold to the amount of \$7.79, chickens 26.25, eggs used 26.53 and 5 lbs manure at 75c, 3.75, making a total income of \$63.29, and leaving a profit of \$36.25. The account does not include the chickens eaten, and values the eggs eaten at 25c per doz. I have kept 15 hens most of the time. My hens are Barred Plymouth Rocks, which I think cannot be excelled for all purposes. It took me only about 20 minutes each day to take care of them, of three hours a week, which gave me 20c an hour. I set 82 eggs and hatched out 78 chicks. My hens laid 1605 eggs, or 133 1/2 doz., an average of 89.1-5 eggs per hen. The hens were kept shut up from April to September and let out a few minutes before dusk two nights a week. I change cockles every year and think this is the reason the eggs hatch so well.—W. H. Miller, Jr., Westchester Co., New York.

Hints to Housekeepers.

PUT salt on the hot clinkers in your stove or range after raking down the fire, and it will remove them.

ORANGE peel dried and grated makes a yellow powder that is delicious for favoring cakes and puddings.

FLINT glass ground to a powder and mixed with the white of an egg makes one of the strongest cements known.

GALVANIZED articles may be cleaned by a solution of one part of borax to eight parts of water. Rub on well with a brush.

TO REMOVE bits of paint from window glass, put some soda in very hot water and wash the glass with it, using soft flannel.

ONE of the easiest ways to catch up a superfluity of water on your color picture is to lay on a clean sheet of blotting paper.

DARK brown sugar slowly dissolved in a little water on the stove furnishes a syrup scarcely inferior to the product of the maple.

PEEL off the yellow skin of a lemon, rejecting the white, cover with alcohol and in a few days a pure lemon extract will be ready for use.

WET boots and shoes may be kept from shrinking out of shape when drying, if, as soon as taken off, they are tightly stuffed with newspapers.

If the stovepipes are found to be rusted when taken down, rub thoroughly with lard. The good pipes may also be preserved in the same way.

OILCLOTHS should never be washed in hot soapsuds; they should first be washed clean with lukewarm water, then rubbed dry with a cloth wet in milk.

WATER without shade loses half its value to the hogs; both are necessary in the pasture in the summer.

ONE HUNDRED MILES IN AN HOUR.

Or Master Mechanic Richards Will Give His New Locomotive Away.

A working model of the record-breaking locomotive, invented and patented by Master Mechanic Jackson Richards of the Reading railroad, was placed on exhibition yesterday in the hall of builders' exchange, says the Philadelphia Times. A large number of engineers, locomotive experts, and others interested in the increase of speed on railroads visited the hall during the day.

Speaking of his invention Mr. Richards said: "If the new engine I am about to construct for exhibition at the World's Fair in Chicago cannot make over 100 miles an hour I will give it away to the first person I meet. I do not claim that this will be the highest rate of speed it will be capable of making, for I believe the speed will be practically unlimited. By that I mean the engine will be capable of going much faster than anyone would care to travel. If the machine is successful, as I firmly believe it will be, it will revolutionize the entire construction of all the high-speed locomotives of the future. I have been working on this invention for over ten years, though the drawings were only completed about the first of September. After this the patent was applied for, and as soon as it was granted I had the working model, now in the builders' exchange, made for the purpose of exhibiting it to the public.

"The new inventions will enable a gigantic stride to be taken in the matter of high-speed locomotives, and it is more than likely that the time between Philadelphia and New York will be decreased to less than an hour. I intend to make the first trial trip between this city and Chicago with the engine I will have built for the World's Fair.

"In outward appearance the new locomotive will not differ materially from the speedy ones now used by our company between this city and New York. The driving-wheel will be a trifle larger, being 6 feet high in place of 5 feet 8 inches, as at present, and the engine will weigh fifty tons, a small increase over the present weight. The peculiarity of construction lies in the fact that instead of the two cylinders as now used there will be four.

"One cylinder will be located on each side of the locomotive frame, as at present, and the other two will be cast on what is known as the cylinder saddle. The inside cylinders are to be cast in one piece and will be horizontal to the outside ones. The four cylinders will entirely overcome what is known to engineers as the dead center and the engine will be perfectly balanced without any counter balance in the driving wheels. This latter improvement will be the means of saving from 30 to 50 per cent. of the present wear and tear on the roadbed, as it will do away with the vicious pounding which has proved so destructive to modern roadbeds.

"The engine will glide smoothly and easily along, and there will not be any of the sudden starts and jerks so noticeable in those of the present time. These are specially noticeable in the starting, when it is necessary to reverse the engine before a start can be made. In my invention, owing to the perfect balance, this will not be necessary, the engine starting forward as soon as the valve is opened.

"You can see how smoothly and easily the engine works by the model. This, though it has been running 100 miles an hour for over a day, and though it is placed on a movable support without any fastenings whatever, has not shifted during that time one-sixteenth of an inch from its first position.

"An easy way to describe my locomotive would be to say it is two engines consolidated into one, so adjusted that when the balance of one's driving-wheel is on top that of the other is beneath, and vice versa."

Too Much for Him.

A tall, solemn-looking young man entered the restaurant with a mild, apologetic air and seated himself at a vacant table near the middle of the room, says the Detroit Tribune. It was evident that he dreaded to intrude. He wanted to get as far away from other people as possible. He even blushed painfully when he gave his order, and the most casual observer could have told that he was bashful.

Just as his dinner was brought to him a buxom-looking woman with seven small children entered the place. The head waiter swept the field with his eye, pounced upon the table where the young man had sought solitude, motioned to the mother, who clucked to the chickens, and a moment later they were all around that one table. That young man's face was a serial story.

Other people entered the restaurant, glanced at the group, smiled significantly and seated themselves. "He doesn't look it, does he?" queried a pleasant-faced old lady in an audible whisper. "She looks at least ten years older than he?" murmured a girl at the next table.

He flew to the hatrack, threw a dollar to the cashier, and tried to get through the door without opening it.

Mr. LIVERNASH of Santa Rosa has acquired a habit of shooting at people. He claims that he only does this when lost in a state of auto-hypnotism. The allegation is made with some show of reason that to be shot by the hypnotic process is very like being shot with the ordinary accessories. It would certainly be reasonable to seek Livernash to also hypnotize his target, as he seems to have an unfair advantage under present arrangements.

TALKED OF BANKING.

Lyman J. Gage Addresses Eight Hundred Northwestern Students.

Lyman J. Gage, President of the First National Bank of Chicago, gave a lecture on "Banks and Banking" in the First Methodist Church, Evanston. The lecture was the first one in the series to be delivered before the political science class of the College of Liberal Arts of Northwestern University during the coming winter and spring. Mr. Gage is a trustee of the Northwestern University and formerly was a resident of Evanston. It was his interest in the University and its welfare that induced him to prepare and deliver this lecture.

The arrangements were first made to have it delivered in the chapel of Memorial Hall on the college campus, but many citizens expressing a wish to hear the lecture the First Methodist Church was thrown open for the purpose. It was an enthusiastic audience of 800 students and others that greeted Mr. Gage, and he held his hearers closely to the end of his lecture, which was most interesting throughout.

The speaker was introduced by Prof. John H. Gray, the new instructor in political science in the University.

Mr. Gage said, among other things: "The banker is generally regarded as a dealer in money. He is so only incidentally. He is primarily a dealer in credits and instruments of exchange. This is easily seen by observation. Let us, in an imaginary way, develop a course of events which are daily taking place in the actual business of banking. Mr. A. applies to his banker for a loan of \$20,000. He asks for a loan of money, but if the banker grants his request he really gets a credit upon the banker's books, against which he may draw his checks. To be sure, he may draw the cash, but as he borrows only to buy something or to pay an existing debt his check answers the purpose. He therefore gives his checks to B. and C. and D. and E., who are respectively dealers with Mr. A's banker. They bring A's checks to the bank and deposit them for their own respective credits, where they are subject to their future checks or orders. Multiply the transaction many fold and you will understand how it is that in the daily receipts over a banker's counter the great disparity exists as shown a moment before between the amount of checks and the amount of cash. Reflecting upon what has just been said, you will perceive also that the banker gains interest not only by lending money, but more largely by loaning his credit.

Now, there is one indispensable and ever-ruling condition which the banker must observe and obey if he long continues the exercise of his vocation. It is this: he must always be ready to respond to a call for cash from those who have credit balances on his books. Ordinarily such demands are extremely limited, but circumstances may arise which will make them extraordinary. It is the ever-present possibility of such exigencies that gives the thoughtful and conscientious banker anxiety and care. To guard against them he carries at all times an important portion of all his liabilities in cash. The National Banking law requires that national banks doing business in certain important cities shall maintain at all times a minimum of 25 per cent. of their total liabilities in legal money. The law is a wise one so far as it goes, but it is impossible to adequately direct by written statutes in a matter so delicate and flexible as this. Not less important than his reserve in cash are the quality and character of the notes and obligations of his debtors which he carries in his portfolios. They ought to represent some form of existing value, either held by himself as security or under the control of his debtor. In the credit system every honest financial obligation is given either to aid in the production of value or to transfer property of value in the course of its distribution from the producer to the consumer.

For the success of his affairs it is necessary that peace and order prevail; that industry thrive; that production advance; that the distribution of products be unfettered; that labor be fairly compensated; that capital, the total of useful things, should steadily increase.

Now, there is a strange result that often follows an enduring period when all these favoring conditions have existed. Prosperity begets confidence; confidence makes credit more effective and tends to stimulate prices; rising prices invite speculation; to support which credits come more largely into use. The steady gains of industry and trade seem slow and small compared with the quick and brilliant achievements of the speculator and promoter. Bank deposits increase (instruments of credit being multiplied). The nouveau riche build new houses and furnish them with all that is rare and beautiful. The papers quote society as usually gay; and in other columns descend upon the evidences of prosperity which on every side appear. But to him who sees through the apparent to the real these new conditions are but the symptoms of a gathering storm. Values cannot forever mount upward. The expanding volume of credit by which they are carried bears a vital relation to the money supply, and though the relations may for a time be ignored, it will finally be asserted. When this time comes the whole flimsy fabric is threatened, and we are exposed to the retributive effects of what is known as a financial panic. Then under the law that action and reaction are equal, credit loses the legitimate and honorable power it once enjoyed. Money, hard

cash, is demanded. It is the banker finds that his police-man, is not a happy he is not alone in his wretched. Property of all kinds now sale, not on the ordinary credit but for cash, falls below its natural average are closed, labor is idle, and is universal. It is unfortunate when these evil consequences reached a climax a process of destruction and restoration.

Few cities to-day present more serious and practical a means of prevention of contagious diseases. Among the reforms lately there are the ambulance of the city government. Ten of these are used for diseases, such as diphtheria, scarlatina, smallpox or typhoid while the other two are for patients attacked with contagious diseases.

These vehicles have four provided with rubber tires, drawn by one horse. The rounded in the interior, and iron sides are painted and varnished. They contain a flexible metal for the nurse and a litter for the patient. A rubber tube communicating with the driver they are heated with of hot water.

Each of these vehicles is of carrying one adult patient children afflicted with the contagious disease. The ambulance, closed by the driver, who has the key in his pocket; but the can be opened from the interior no outsider can open it by force.

The litter put in use is that the patient can be either or placed in a reclining posture out having to be disturbed. It is ranged as an armchair for descent stairways and as a bed in the lance. The invalid rests cushion of pure horsehair, which be passed through the stove for definite period.

The patient having been downstairs, the legs of the litter placed upon the rollers designed to facilitate its introduction or removal through rails arranged in the floor. This litter is made of iron painted and varnished. They are punched in the bottom of order to give a greater lightness children a litter in the form hand-barrow is used. It is said that these apparatuses can be easily disinfected.

The Ornaments of Home. It has been said that the ornament of every home are the friends visit it. Now, though called more intimate acquaintances, morally decorative, still the ornaments of the home are the who live in it. They are the prettiness that turn even plain roundings into something more attractive and delightful to the who wends his way thither at a fall or sets out from thence morning to assume the duties posed upon the breadwinner.

What is home without a mother is a very much parodied expression yet in it lies a concise and truth, though wife, sisters, daughter, each and all types of home femininity go as much toward the making of that one special nest for many have been deprived of the tender loving care of parents years ago.

A sunny-faced wife, who kisses husband goodby in the normal bright-eyed daughter who follows to the door with gay little salutations as to the cares of his during the day, or a sister who pinches his nose and hat in readiness him as an act of affectionate attention, these are the ornaments of home he leaves behind a man remembers, though he not be able, to save his soul, call the special name of any of his cabinet or on his dinner table.

Do not forget this, ye little circle of busy women. Make yourselves bright and attractive to men folks that belong to you; they will not invent so many engagements and lodge meetings order to get away from you.

The Oldest Town in the United States. The oldest town in Texas, as believed in the United States, is Ysleta, situated on the Rio Grande and near El Paso, the chief of the county of that name. The population of 2,500 souls. It is one of peculiar interest alike to its age, its people, its architecture, its agriculture, and its general products. It is a well-established fact that a Spanish explorer named Coronado visited the town in 1540, and found it populous and prosperous community. He was immediately followed by the Franciscan friars, who erected a church and schools. Ysleta is believed to be a considerable settlement centuries before the Coronado. It is not a little interesting considering the advance of civilization from Europe, that the town of people exist in the town existed 350 years ago, and that are engaged in the same mechanical and mechanical pursuits as the fathers at that period and the preceding.

One's Ancestors. A remarkable fact can be covered with the aid of a pedigree the twentieth generation now of the present each person now of 1,000,000 of ancestors. Every figure are 1,048,576. Every had two parents, four grandfathers, eight great-grandparents, etc., doubling until the twentieth generation and you will verify the aggregate given above.