FARM FURROWS

BREEDING HORSES.

A famous breeder of hunting horses tells of the rules by which he was governed in the conduct of this business. Such rules are likely to be largely applicable to the raising of the best live stock generally, and should be known by all those engaged in such work. Every farmer is likely to be helped by making them his own. Seven rules are thus given:

(1) Determine what it is you really desire to produce, and having done so, stick to it closely.

(2) Procure a young mother that has arrived at maturity, and is healthy, roomy, well-shaped, round, large-sized, with good temper and good action; and remember that the better bred the mare is that possesses the qualities, the more valuable she will prove.

(3) The dam, as a general rule, has more direct influence on her offspring, as regards health and size, than the sire has.

(4) The offspring bred from greatly dissimilar parents in either size or character should never be used for breeding purposes; their offspring will certainly prove to be mongrels of nondescript character. That the parents should be as similar as possible is a rule the neglect of which has led to more disappointments than any other with which I am acquainted.

(5) A pure thoroughbred sire that has produced good descendants should be selected, and I do not believe a really good weight-carrying hunter will ever be bred from anything but a thoroughbred horse.

(6) The sire has more direct influence on the bones, heart, tendons and nerves of the foal than the mare.

(7) Breeding too early is quite incompatible with hardiness of constitution and lasting qualities. Hence, I believe the mare should be at least four years old before she is put to the horse.—Home and Farm.

CURING MEATS ON THE FARM.

I want to warn farmers against trying to keep fresh meat in hot weather except in an ice house, writes J. E. Robey, in American Farm World. Even then it is dangerous, because when exposed to the air, it spoils in a very few moments, sometimes.

Meats cannot be kept even in moderate weather, but beef may be corned, or pork cured in the following way, and it will be sweet and wholesome:

For 150 pounds of meat, take one pound of granulated sugar, one quart of table syrup, three ounces of saltpeter, four ounces of sal soda and rock salt to make brine that will float an egg. Use water enough to cover the meat well. Boil and skim until it is white, then cool until milk is warm and pour over the meat. Change the position of the meat in the barrel each week.

In three weeks, take out the meat and boil the brine and skim, and one-half of the above ingredients and when it is cool, pour back on the meat. If pork or dried beef, take out in two or three weeks and smoke with cobs or hard wood.

If you follow the directions exactly, you will never lose any meat and will have as fine meat as you can find on the market anywhere. You must not use barrel salt for it has lime in it; and you must be sure to take your meat out every week and change it around so that the brine gets to every part of it.

After it is smoked, wrap it in heavy wrapping paper, sew up in a cloth and paint it thick with whitewash; cover it with chrome yellow, if you want to. The dry beef is made from the round divided in chunks, as the seam between the muscles will show you.

SHEEP ON THE FARM.

"Sheep return more fertility to the soil than any other animal. The cattlemen on the big western farms are just beginning to find that out, and many of them, particularly in Texas, have sold their cattle and gone into the sheep business.

"Sheep are the demand of the small farmer who has none too much money and cannot afford to go into cattle. Our people are learning to like mutton, because our farmers are learning how to grow and fatten it, and the demand will increase rapidly. There is no doubt that sheep can be raised with profit on any farm where cattle and hogs can be made to pay."

We do not believe that any regularly conducted live stock farm is too rich for a flock of sheep. It is certainly true that the land with much poor soil cannot afford to get along without the flock. On the land whose owner is addicted to the grain-growing habit, caring very little for live stock and their uses, the flock might be profitably maintained where other stock might be out of the question. Their advantage lies principally in the fact that they are easily confined and fed to advantage upon the vegetation that would otherwise go to waste. In the case of the noxious weeds the proportion that were destroyed would depend largely upon the number of sheep and the scarcity of better feeding.—Iowa Year Book.

HEN HOUSE PLAN.

Will you please send me a plan for a hen house? I want one which will accommodate about a hundred hens. I want it to include a place for setting hens and raising young chicks. The site selected is an orchard containing several acres. Please give dimensions. P. D.—A pretty large flock for the hens ought to be at least 12x40 feet; larger would be better. It should front the south, and be 8 feet high in front, sloping down to four feet on the north side. The windows should be on the south, so as to take advantage of all the sunshine in winter. Sometimes muslin is used instead of glass; it is much cheaper. Be sure and provide a scratching shed or apartment; the hens need to exercise and roll in the dust in winter as well as in summer. The perches should be adjustable, so as to be taken down and cleaned, put them on the back side and the laying boxes in front—Indiana Farmer.

COMPOST.

Being in want of well-rotted manure, I took a quantity of fresh horse dung and putting it in a close vessel, pressed it down and covered it with a layer of moist earth. Can you inform me in about what time it will be fit for use? Shall I mix with carbonate of lime when using it? F. A. Petgrave. Everything would depend upon the temperature, if kept wet enough. If warm and moist, the decomposition will be very rapid and accompanied by a surprisingly large evolution of gas. This gas will contain a good deal of ammonia, hence it is well to put some acid phosphate or simply wet plaster over the top to catch and fix it. An examination will determine when the manure is sufficiently rotten. No one can tell otherwise.—Country Gentleman.

TENDER TEATS.

Scab and warts on cows' teats are troublesome in milking and should not be neglected. For scab, give one pound of salts, one-fourth pound of ginger in one quart of warm water three days apart for three times and rub teats with carbolic salve. For warts, treat them when sore with vaseline or carbolic salve. Such warts seem to come and go without any apparent cause. Often cows' teats are covered with white spots, smooth and round after warts have entirely disappeared without the application of any remedy. These spots seldom develop into warts again.—Epitomist.

SHELTER FOR POULTRY.

Poultry keeping in bleak, unsheltered runs in certainly poultry keeping under very serious difficulties, and in choosing a farm one of the desirable attributes to be looked for is good shelter. Many farms are naturally sheltered and others have certain fields well sheltered and so far as possible these should be chosen as fowl runs.—Farmers' Home Journal.

FARM NOTES.

The early chicks miss most of the troubles caused by red bugs and too hot sunshine during their critical period.

Did you ever use ducks to clean potatoes of bugs? Try it at the first opportunity, and you'll feel more kindly towards them.

If culling the flock has been delayed, do more than make a resolution now to do it—do the culling. Breed up this year more, not down.

Young chicks can stand considerable cold if they do not get damp, and if they can run back to a hen or to a brooder to warm up after they run out and air off.

Those expecting to be bothered with the boll weevil sooner or later should do a little toward getting ready for it, by raising turkeys. They are good weevil-catchers.

It is far better to feed and water ducks and chickens separately. Geese fall in the same class as ducks, as far as being undesirable where chickens are fed or watered.

No kind of poultry excels the duck in rapid growth and the small amount of care it needs. The objection often raised against them, that they are nuisances on the farm is true only when they are not fenced out of where they are not wanted.

If Pekin ducks are raised, a fence eighteen or twenty-four inches high will confine them. To a large extent the Pekin has lost its power of flight. Even its need for water to bathe in does not have much force in its present state of development.—From "Spurs for Poultrymen" in the Progressive Farmer.

Genesis of Jamaica.

The word Jamaica is a variant of the aboriginal name of the island—"Xaymaca," which is a combination of two words signifying water and wood. As Jamaica is known as the "Island of Springs," and produces an abundance of trees and vegetation, the name is highly appropriate. Old English localities are reproduced in Jamaica, says a London writer. Thus the island is divided into three counties—Middlesex, Surrey, and Cornwall. The parishes hardly correspond with the counties. Why there should be a parish of Manchester in Middlesex and a parish of Portland in Surrey is not apparent at first sight, but the parish of Trelawny, in Cornwall, is in perfect accord with the fitness of things. The parish derives its name from Sir William Trelawny, a former governor of Jamaica.

Tourists complain that Japan is getting to be the most expensive of all countries to travel in. Everybody considers foreigners legitimate prey.

Electric Farming.

Although agricultural machinery originated in the United States and the American farmer used patent mowers, reapers and threshing machines long before their European contemporaries in the same field of labor had put aside scythe, rake and flail, the possibility of introducing electric power in farm work was first recognized in the Old World.

This has probably been due to the fact that the farmers of America, thrifty and far-seeing, recognizing the economy and reliability of the small oil engine, failed to perceive how any saving could be effected by generating electric current and distributing to its motors in outlying positions.

When, however, the mains from some large electric power company pass within reach of a farm or estate the conditions are much more favorable, and this state of things must already exist in a measure which will be largely extended in the future. Current German newspapers contain an interesting account of the application of electricity to a group of farms in Saxony. The electric current is brought from an adjacent town by overhead wires carried on wooden poles. Two receiving stations are arranged, from which the electricity is distributed to the farm buildings and to convenient positions in the fields for the purpose of driving threshing and other machinery.

Sixteen fixed electric motors are installed for chaff and root cutting, oat crushing, pumping and for operating machinery used in the manufacture of potato spirit. In addition to this power equipment, six portable motors are provided, which may be used for driving pumps, circular saws, threshing machinery, and so forth, at any point where their services are required. The houses and buildings on the farms are all lit by electricity, 9 arc lamps and about 1,000 glow lamps being used for the purpose.

It must be pointed out, however, that this example could only be followed in the United States on a very large estate or a group of adjacent farms, and it is doubtful whether such a scheme could be made a commercial success for the operation of farming machinery pure and simple. It would appear that wood sawing, pumping and other operations requiring power must be included if the results are to compare favorably with those at present obtained by the use of oil or steam engines. But the Saxon experiment is full of interest, and displays a curiously progressive spirit in a country where farm forces are almost unknown, and shepherds and cowherds are still living amid picturesque realities.

Quality of Grass Seed.

The Maine law regulating the sale of agricultural seeds requires that grass seed shall be sold under a guarantee as to purity. Bulletin 138 of the Maine agricultural experiment station, which, doubtless, many of your readers have received, gives analysis of the seeds which were collected by the inspector and those sent to the experiment station by correspondence in 1906. The dealers are very generally conforming to the law and the purity of most seeds is now guaranteed. The question naturally arises in the mind of a farmer, should a seed be strictly pure, and, if not, how nearly pure should it be?

The purity of seeds varies greatly with their kind. It is possible to grow timothy seed so clean that it shall carry practically no foreign weed seeds. It is not as easy to grow any of the other grasses or clovers so clean. There is no need for the sower to ever buy timothy seed that is much less than 99.5 per cent pure. Samples have been examined by the station the present year which contained not a single foreign harmful seed.

The best red clover seed will frequently carry as much as 1 per cent of foreign matter, although these impurities are usually comparatively harmless. It is, however, poor policy for the sower to buy a red-clover seed that is less than 98 per cent pure. The best grades of alsike clover will run about 98.5 per cent pure on the average. It is doubtful if the purchaser should buy an alsike whose purity is less than 97.5 per cent.

Redtop is the most difficult seed of all. It will, of course, contain more or less chaff. It is difficult to grow redtop free from timothy, and the seed cleaners find it difficult to separate timothy seed from redtop after it has once been introduced. Samples of redtop carrying as high as 12 or even 15 per cent of timothy are not unusual. If one could be sure that the impurities were harmless like chaff and timothy it might be safe to buy a redtop even as low as 85 per cent pure. Unless one is assured of the character of the impurities, it is unwise to buy a redtop less than 95 per cent pure.

Learned by Hard Knocks.

A peculiarity of clover is that we may take off a crop and leave the land richer than it was before.

A proper rotation and wise tillage will do much to keep the soil supplied with available fertility.

Without stock there can be no complete utilization of the farm products. With stock there can be no waste products.

Clover and grasses retain moisture in the soil, render it porous and favor nitrification while filling with vegetable matter.

More hay and less grain makes the farm easier to handle and in the end gives it quite as much profit.

So long as the home market is not fully supplied there is no gain in shipping away.

Better methods, better stock and better tools have doubled the productions of more than one farm.

As a rule the offspring of immature and pampered animals are predisposed to disease.

There is often more profit in growing little things and in fine products, in proportion, than in the great staples.

Oats contain largely the mineral properties requisite to form and grow bone and the protein that makes muscle and other tissues.

Comparative Food Values.

An English journal, The Lancet, in discussing the comparative food value of roast beef and turkey, says that it may be said that, weight for weight, the flesh of the turkey is more nourishing than that of beef; but the latter is, generally speaking, cheaper than the former. The moisture in beef, however, exceeds the amount present in the flesh of the turkey, and the latter contains a better percentage of proteid or flesh-forming substance. In either case the percentage of moisture is seldom less than 70 per cent.

In lean beef the amount of fat is much the same as in a not too well-fed turkey, but it must be pointed out that the flesh of poultry differs from that of beef and mutton in not having its muscular fibers permeated by fat, and, moreover, the fibers in the flesh of the fowl are short and rarely yield to the disintegrating action of the digestive processes. A large amount of fat in either case is apt to interfere with the digestibility of the meat. The fat of beef is more digestible than the fat of the turkey. The fat of birds, in fact, is harder, and owing to its tendency to become rancid, is unsuitable for the dyspeptic patient.

The Lancet believes that the most important difference from a dietetic point of view between beef and turkey is that, whereas beef contains a high percentage of extractive matters, turkey contains hardly any at all. The extractive matters in beef account largely for its peculiar and marked flavor, and owing to their absence in poultry generally, and in the pheasant and partridge, the flavor of these meats is delicate. But there is no doubt that the extractives of beef, as well as mutton, are valuable, for not only are they flavoring agents, but they also act as perhaps the most powerful stimulant to gastric digestion.

Double-Edged Saw.

To make one saw take the place of two, and at the same time preserve its durability, is the recent invention of an Indiana man. Every carpenter includes two saws in his kit—one for cross-cut and one for cutting with the grain. He can now dispense with one saw, as it is possible to put the two blades having different teeth on the one saw, as shown in the illustration.

HAS TWO EDGES.

The smooth top edge always seen on saws is changed to a cutting edge, similar to the regular cutting edge, the saw thus having teeth on the two longitudinal opposite edges. The handle is hinged to the blade instead of being rigid and can be reversed as it becomes necessary to use either blade. This saw is also an economical saw, as it saves the expense of purchasing two saws.

Lard to Preserve Eggs.

Cover a fresh egg with a thin coating of lard and it will remain perfectly good for an indefinite period, according to a report of a new method for preserving eggs made to the State Department by Consul Murphy at Bordeaux. The discovery is of Italian origin, and is regarded as important, as it claimed that 100 eggs can be preserved with 4 cents' worth of lard.

News and Farm Notes.

The profitable line of production is to maintain good health with early maturity.

In some parts of Canada butter is being imported from abroad for the first time in the country's history.

More than half a million emigrants from Russia have passed into Siberia the past year to engage in wheat raising.

A farmer near McEwan, Tenn., is displaying an ear of corn twelve inches long, weighing three pounds and containing 1,396 grains.

A grain farm at Murray, Iowa, shipped twenty-seven carloads of timothy seed last fall, for which the farmers received from $1.50 to $1.75 a bushel.

A Kansas man claims to have invented a fence-weaving machine, run by a two-horse power gasoline engine, which will weave and set a mile of fence a day.

The United States produced 14,000,000 bushels of rice last year on a half million acres. The culture of rice is gradually creeping north and some very good grain is reported in Arkansas.

Holland has set engineers to work to pump the water out of the famous Zuyder Zee and turn it into dry land. When this work is accomplished there will rise where 4,000 fishermen now sink their nets farms and homes for 50,000 Hollanders.

Charles W Trock of Ridgeway, Ohio, a 7-year-old lad, while wandering in the fields sat down on a little hummock which contained a bumblebee's nest. Within a moment he was so badly stung that his body swelled to twice its size and death soon followed.

A Washington dispatch says a genius has invented a dope which when used as paint for farm machinery will prevent rust and decay. This might be good news for those farmers who use the fence corners as storehouses for their farm machinery, but the probability is they are too lazy to apply the dope.

R. W. Crouse, a graduate of Iowa agricultural college, has been appointed State lecturer on animal husbandry for Virginia. Another Iowa boy has gone to the Massachusetts agricultural college as assistant in animal husbandry. The demand for college graduates in the high class agricultural lines at salaries ranging from $1,000 to $2,000 a year is larger than the supply.

GREAT ENGLISH HOMES.

Estates That It Takes Huge Fortunes to Maintain.

It is a pathetic fact that there are several men in the United Kingdom who would consider themselves on the brink of bankruptcy if they were reduced by an evil stroke of fate to a mere pittance of £1,000 pounds a week—who would find it simply impossible to rub along anyhow on the income of a simple millionaire, which would be barely sufficient in some cases to pay the expenses of the lordly pleasure houses which they have inherited from their ancestors.

The Duke of Devonshire, for example, has no fewer than seven of these stately homes—six in England and one in Ireland—each of them fit for the reception of a king, and in not one of which, as he confessed the other day, has he lived long enough to explore thoroughly. Probably he himself does not know within £1,000 how much these palatial homes cost yearly to maintain, but the annual cost has been said to make a big hole in £100,000.

In Westworth, Woodhouse, which is only one of his four palaces, Lord Fitzwilliam owns the largest private house in England. It has a frontage of 600 feet, its hall is so enormous that four suburban villas could be built inside it, and its owner could live in a different room every day for six weeks and still leave several rooms unseen. The Duke of Portland owns five regal houses in England and Scotland, the value of which runs into millions, and which, with the attached gardens and estate, keeps hundreds of servants employed. At Welbeck he has more than thirty acres of kitchen gardens alone; in the glass houses and garden proper he employs about seventy men and boys, and his horticultural bill for this one house is said to exceed £6,000 a year.

Blenheim Palace, the Duke of Marlborough's Oxford seat, is so colossal that the late duke used to declare he spent £800 a year on putty alone for his window panes. It actually cost £300,000 to build in days when money was more valuable than it is to-day. It is 348 feet long, has fifteen staircases, and when it was repaired some time ago his grace found it necessary to sell his pictures and books to pay the cost, which amounted to more than £30,000.

The Duke of Northumberland owns five stately seats, at one of which—Syon House, Bentford — a staff of thirty or forty men is kept busy, largely in the magnificent kitchen garden and fruithouses. And yet the duke spends only a small portion of the year in this princely home, the rental value of which probably exceeds the lord chancellor's official income.

The Marquis of Bute has five seats in England, Scotland and Wales, and one of them, Mountstuart, Rothesay, covers an acre of ground, has 150 rooms and has actually cost over £2,000,000, representing even at a moderate 4 per cent a value of £80,000 a year. One can easily understand that his lordship's income of £250,000 a year is not a penny too much for the demand of it.

VEGETABLE WATER PROOFING.

Seattle Man's Discovery Will Add to Exports of the Northwest.

The great famine of waterproof goods which has been threatening the world for the last ten years by the large annual decreases in the output of rubber and the growing scarcity of the tree is to be offset and prevented by a scientific discovery on the Pacific coast which has recently been perfected by G. H. Cunningham after several years of toil and study, says the Seattle Times. This discovery comes in the form of a composition of vegetable oils and a solution made from marine algea, a fungus growth of the sea, and abounding especially along the coast of Washington.

It was seven years ago that Mr. Cunningham, a well-known Californian, now a resident of Seattle, seeing that something must be done to prevent a famine of waterproof goods, first became interested in the conditions affecting the rubber market and decided to put his scientific training into the finding of some composition that would take the place of rubber. How well Mr. Cunningham succeeded in his work is best known in San Francisco, where a factory was erected. Then came the devastation of the city by earthquake and fire, and with it went the plant where Mr. Cunningham's famous discovery was being applied with remarkable effect on every kind of cloth and leather material manufactured. The inventor's all was invested in the great enterprise and in the financial disturbances that followed the disaster he sought Seattle, where he has since interested local men in his discovery.

When Mr. Cunningham commenced upon his study of a compound which would replace rubber he did so under the most encouraging circumstances. His inventive genius was hereditary, his father having been the discoverer of the English method of treating sealskin furs, a secret that has been in one British family 150 years.

The composition perfected by Mr. Cunningham can be applied to fabrics of the finest fiber, silk, linen or cotton, without discoloring or obscuring the design of the weave, adding strength as well, yet leaving the material in its natural state as far as appearance or feeling is concerned. The merest cloth can be turned into an imitation leather of any color by a special treatment of the process and the cloth so treated becomes stronger than the best imitation leather now on the market. The cloth will not only shed water upon being treated by Mr. Cunningham's vegetable discovery, but will resist an abnormally strong pressure.

In White River Valley, in the town of O'Brien, twenty acres of land have been secured and already work begun on preparing it for the erection of a plant for the treating of materials with the waterproof compound. Also large laboratories will be erected on this land, where the compound will be manufactured. The people of Washington are now expending $3,000,000 annually on waterproof goods in markets of the East, and the erection of this large factory at O'Brien will mean a great item in the total yearly exports of the Northwest.

Crude petroleum has been found at Boonah, Queensland, at a depth of 100 feet. It is believed that "payable oil" will be found there at a depth of over 800 feet.

Preparing for Heaven.

The good are preparing for heaven. No one goes home on earth who cares nothing for home, takes no thought for it, does not plan with ardent longing for the home-coming. The very life good people live on earth is a preparation for heaven and an outfitting of them for any other future. Each soul will go "to his own place." There is a legend of an Indian chieftain who, migrating with his tribe, journeyed over the high mountains and through dismal swamps, and at last, having reached a valley fair to behold and good to dwell in, threw down his burdens, exclaiming, "Alabama!" meaning, "Here we rest." The true Christian is journeying toward the real "Alabama" the valley home of the redeemed, where they lay down their burdens and rest. "They rest from their labors, and their works do follow them." There is such a "home of the soul"—Rev. G. B. F. Hallock, D. D.