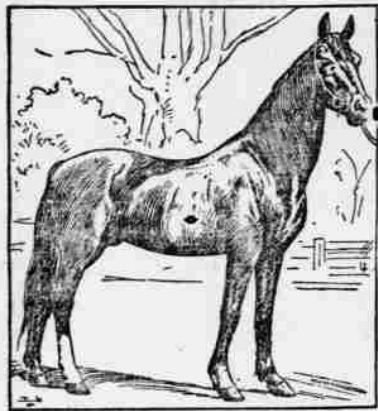


### Breeding Clay And Morgan Types.

Writing in Country Gentleman on Clay and Morgan types, a well known New Jersey breeder says:

"I send you a photo of my stallion Americus with six close crosses of Henry Clay. His get are satisfactory as roadsters and saddle horses of great endurance, spirit, cheerfulness and tractability, which I consider of greater worth than the sprinting ability for which high figures are often paid. In a very few years these are among the 'have-beens.' Then what have you for the years to come?"

"The most inbred family in this country is the Morgan. Because of this close breeding they have a dis-



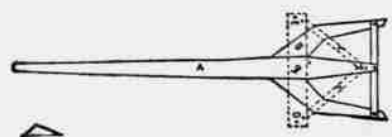
CLAY STALLION AMERICUS.

inct, fixed type, as have also the Clays, but not so marked, as they have not been so much inbred. To fix a type inbreeding must be resorted to. A union of Clay and Morgan blood, with an infusion of Arab, would, I think, produce such horses as the government needs more surely than any other combination. By careful selection of sires and dams the requisite size of the product, according to the uses assigned them, could be had. The Percheron was a large, ill formed horse until a little Arab blood was introduced. He is now an attractive animal, of better disposition, more spirit, more endurance and not reduced in size. This has been brought about by inbreeding from careful selections, exercising judgment in the use of sires and dams in the breeding stock.

"The types above mentioned are undeniably good. Why not use them, rather than throw them away and lose with it what the country has been nearly a century in securing?"

#### Devises For a Three Horse Hitch.

The three horse hitch here described has proved very satisfactory for hauling heavy loads on an ordinary wagon, says a writer in Breeder's Gazette, Chicago. A is an ordinary wagon tongue. B is a piece of wagon tongue four or five inches wide and about twenty inches long, with a hole at F to correspond in size with a hole in the tongue. C C are strong iron straps fastened to the back end of the tongue with a bolt and also to B with strong rivets. Drill holes through B and the straps C at E and D, making them eight inches from the hole F. Countersink the hole F and have an iron pin to go through B and A, with the head made to fit and not project



A THREE HORSE HITCH.

any about B. Put a hammer strap on one of the straps C. Now cut the evener as long as will work between the wheels of the wagon and divide it in the ordinary way. Place it on the plate B and fasten at either E or D, as you may desire, using a bolt and hammer strap. Use singletrees about thirty inches long and a doubletree to correspond.

By working the evener at E or D the middle horse is placed far enough on one side so the tongue does not interfere with it in any way. There is no side draft to speak of, and the plate B keeps the evener balanced nicely and up to its place at all times. Use an ordinary neck yoke on the two horses next the tongue and arrange lines on the third horse any convenient way. The scheme is all right. You have to get to one side to hitch or then use an evener so long that it will not work between the wheels. I have used this to haul hay with loader and on manure spreader, and it is all right. Take off the three horse evener and take out the pin in the plate, and it is ready for an ordinary two horse doubletree.

#### Keep Lambs From Their Dams.

"In feeding I have had best results from beginning to feed a grain ration when the young lambs were about a week or ten days old," writes a breeder in American Agriculturist. "Adjoining or in the sheep barn there should be an apartment where the lambs may be fed by themselves. It should be separated from the apartment where the breeding flocks are kept by a lamb creep, made by nailing narrow strips or bars with rounded edges perpendicularly and having them just far enough apart so that the young lambs can pass readily through, but through which the old sheep cannot pass. If the sheep has no milk for the lamb, three times out of four she will care nothing for the lamb, and if a lamb is not hungry it will care no more for its own mother than for any sheep in the flock, and the lambs will always do better if this feeding room, separated from the main flock, is large enough so that they can spend a large part of their time by themselves."

### A HEALTHY HERD.

The Successful Dairymen Weeds Out the Unprofitable Cows.

Many dairymen are losing their rightful profits because they have some cows that are costing more than they produce, and these eat up the profits of others. Too much cannot be said about the importance of weeding out unprofitable cows, but too often we overlook the fact that they are unprofitable because they are not well fed and cared for. With high priced feeds and labor a short sighted man is liable to cut down these expenses beyond economy.

It is no exaggeration to say that there are thousands of cows now maintained at a loss that would be giving a profit if allowed a fair chance. Professor Wing and Mr. Ford of the Cornell experiment station have clearly illustrated this point. Ten cows owned by a dairymen living near the station were included in an experiment which lasted for a period of four years. The first year the herd was visited regularly on its home farm, and careful records were made of food consumed and milk fat produced. The cows were then taken to the university farm and given good care and abundant and good feed.

#### Increase Shown.

This treatment continued two years, when the cows were returned to their old home and again received the care and feed that they had had before coming to the university farm. The first year at the university showed an average increase of 46 per cent in milk yield, or 55 per cent in fat yield. The large production was continued throughout the second year at the university, but it fell back to about the original amount when the cows were returned to their former home, care and feed. After the cows had become accustomed to fair treatment at the university they gave milk and fat at lower feed cost than they had done before, when the total cost of feed was less. In other words, the average food cost of a pound of fat fell from 12 cents at the home farm to 10 cents at the university. In the case of one cow it fell from 14 cents to 9 cents.

These ten cows were not selected, but were taken at random, and a study of their individual records shows a surprising uniformity of gain due to good treatment. The experiment points the way by which many dairymen could change losses to gains. Similar experiments have been performed by Professor Smith of Michigan and others, and similar results have been obtained. It is not intended to claim that any and every cow would be profitable even if given the best chance. There is a great difference, and this is shown only by keeping individual records.—R. A. Pearson, M. S., Professor of Dairy Industry, Cornell University, in Kimball's Dairy Farmer.

### DAIRY WISDOM.

It takes a little more to rig up a dairy with scales to weigh individual messes and a Babcock tester to find out if each cow is doing her share, but the returns more than overbalance the extra outlay. No man is willing to keep a cow after he knows she is not making a profit, but he never can find out until he goes at it in a practical manner.

Get thoroughbred cows, then give them thoroughbred care, says the Farm Press. The one is just as important as the other. Thoroughbred cows require more individual attention, but they are willing to pay for it.

Never churn in a cold room. The butter will be cheesy if you do. The churning room should be about the temperature of the cream.

Because the cow falls off in milk it does not always follow that she is sick. There may be something wrong with her feed. Look into that. Often it is the man and not the cow at all.

The best cows, as a rule, have the most sensitive udders, and harsh treatment is the very last thing to practice. Any harshness will cause an increase of nervousness and a decrease in the milk flow.

Eight good cows warrant a silo and a separator. Eight poor cows warrant a sale at a sacrifice.

Following is the lesson of the gilt edge milk farm: Get the best cows, feed them well and keep them healthy. Have the milk pure and clean. Put it up attractively and take it to the choicest retail trade you can find. The reward is sure.

Have a fixed time to begin feeding and milking both morning and evening. This is important. When a cow expects her feed and doesn't get it, she is restless and worried, and anything which annoys her lessens her milk production.

### CORN ROOT APHIS.

Treatment of Seed Corn That Protects the Young Plants.

In view of the importance of practical measures for controlling the corn root aphis, Dr. S. A. Forbes, Illinois state entomologist, prefaced his address at the Quincy meeting of the state farmers' institute by a brief synopsis of the experimental work of his office on this insect last year, and described a treatment of seed corn which he had found surprisingly effective as a protection of the young corn plant against this insect. His experiments showed an increased yield of 27 per cent in number of ears borne by plots of corn grown from seed treated in the manner described, as compared with adjacent plots planted with untreated seed. As both stalks and ears were visibly much larger and better in the experimental plots than in the check, the actual difference in yield must have approximated 50 per cent, but conditions for which the office was not responsible prevented a final comparison of the total product of these plots.

#### The Remedy.

The substance found most effective for the treatment of seed corn was a mixture of oil of lemon and wood alcohol. To one gallon of wood alcohol add a pint of oil of lemon and sprinkle and thoroughly stir three fluid ounces—that is to say, six tablespoonfuls—of his mixture into each gallon of corn shortly before planting, making sure that the fluid is equally distributed and that each kernel of corn has its proper share. A thorough stirring after the application of the mixture is all that is necessary.

#### The Cornfield Ant.

The odor of this compound, which will last for weeks in the ground, is extremely offensive to the cornfield ants, and these insects will not enter corn hills as long as it continues. As the root lice cannot get access to the corn or maintain themselves there except by the aid of the ants, the hills remain virtually free from both insects for at least six weeks.

The wood alcohol should not cost above \$1 a gallon or the oil of lemon more than \$2 a pint. The above amount of the mixture will be sufficient to treat the seed for forty-five acres, making a cost for materials of less than 10 cents per acre. Care should be taken to buy these substances from thoroughly reliable druggists, the oil of lemon especially being subject to adulteration. If the mixture is not entirely clear when shaken up, the materials are impure.

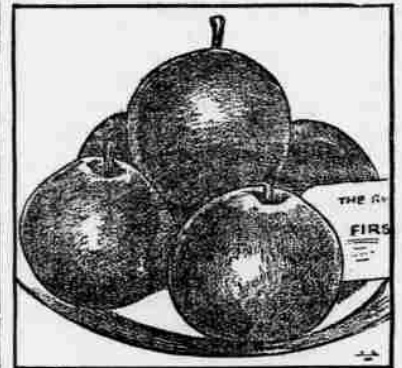
#### An Experimental Strip.

Every farmer was earnestly advised by Dr. Forbes to plant at least an experiment strip fifteen or twenty rows wide through his cornfield and to compare the growth and yield, particularly of the central part of this strip, with those of the rows beside it, states Orange Judd Farmer. This will be especially desirable if corn is grown on ground in that crop last year, and more so if the field was heavily infested with ants. Even corn planted after some other crop may be profitably treated in this way, since it is liable to become infested by winged root lice early in the season and may be badly damaged before the summer is over.

### FINE PEARS.

Where More of the Fruit Might Be Grown With Profit.

The fact that New England might grow more pears was emphasized at the annual meetings of the different



PRIZE SHELDON PEARS.

state horticultural societies. Eastern and central Massachusetts particularly were mentioned as giving ideal conditions for pear culture. Vermont is producing only a fraction of what pears might be produced profitably, says Professor William Stuart, horticulturist at the State Agricultural college. That New England can grow pears is attested by the accompanying illustration from New England Homestead, which shows the Sheldon variety as grown in Stratford county, N. H. They were displayed at the Rochester fair last fall and won first money.

#### Land Partly Idle.

The average wood lot is understocked. This means that the land is partly idle. If an old pasture is coming up slowly to forest growth very likely trees can be profitably planted. The farmer will gain by this, although he may not himself live to cut the timber, for land fully stocked with young timber will be salable at a much higher price because of its prospective value. This is already true in many regions. It will be far more generally true as timber increases in value.

#### Furrow Irrigation.

There are few irrigated farms in the western states where furrow irrigation in one form or another is not practiced. In regions devoted chiefly to the production of fruit it is usually the most common mode of irrigation. In other colder regions, where the staple crops are grain and hay, it is mostly confined to root crops, vegetables and small orchards.

### THE VANILLA PLANT.

Beans From Which We Get the Popular Flavoring Extract.

The best variety of vanilla comes from vanilla planifolia, which requires a mucky, porous soil. The plant thrives up to a height of about 1,600 feet above sea level, and as its fleshy roots do not penetrate deep into the soil it requires only a proportionately thin layer of soil. The plant bears merchantable fruit in the third year, sometimes even in the second year, which requires from seven to eight months to mature, and the harvest takes place from April to June. Five to seven harvests are made from the same plant before it is exhausted. New plants must not be planted in the same place as the old.

Protection against wind, also shade, is of great importance for the growth of the plant, and therefore the fields must be surrounded by trees and hedges. Grubs and snails are enemies of the vanilla plant. The former eat the roots and the latter the young sprouts and beans. While in the third year only about one-tenth part of the plants blossom, the percentage increases from year to year up to the seventh. The cultivation of vanilla in German East Africa is impeded by the absence of insects which are instrumental in fructifying the vanilla blossoms. Each separate flower has therefore to be fructified by human hands, the cover of the stigma being raised by means of a thin little rod, and the pollen, which is just above the cover, is pressed against the stigma.

When the young beans have grown to the length of a finger they must be closely inspected, and all defective ones must be cut off. The beans mature from seven to eight months after the fructification process. The ripe beans have a yellowish green color.

The way of preparing the beans varies, but an ever increasing temperature is required to dry them and obtain the well known brown black color. In this way the thin skinned bean, with its fine aroma, is produced. If hot water is used for heating the beans they are placed in baskets and immersed in it. The water has a temperature of 80 to 84 degrees Reaumur. Afterward the beans are packed into wooden boxes, which are lined with woolen cloth, and closed. Next day they must have a glassy appearance. They are then again wrapped in dark woolen covers and laid in the sun to dry. If the weather is rainy they must be dried in a dry room at a temperature of 50 degrees Reaumur, but an after drying in an airy room of from two to four weeks is necessary. After that the dry beans are packed in boxes.—New York Herald.

#### Eldiest Sons.

According to some curious investigations conducted by English scientists, eldest sons tend to be criminals and youngest sons paupers. A great many thousand school children and many family histories have been examined to yield these results. Firstborn children were found to be, as a rule, taller and heavier, with greater ability and endurance than the others. This is in accordance with the popular feeling in many countries that the oldest child is superior to the others and deserving of special privileges. It is a well established fact that among men of genius an undue proportion are eldest sons.

#### Warding Off a Catastrophe.

A fat woman entered a crowded street car and, seizing a strap, stood directly in front of a man seated in a corner. As the car started she lunged against his newspaper and at the same time trod heavily on his toes.

As soon as he could extricate himself he rose and offered her his seat. "You are very kind, sir," she said, panting for breath.

"Not at all, madam," he replied. "It's not kindness. It's simply self defense."

#### Force of Habit.

A physician started a model insane asylum, says the New York Sun, and set apart one ward especially for crazy motorists and chauffeurs. Taking a friend through the building, he pointed out with particular pride the automobile ward and called attention to its elegant furnishings and equipment.

"But," said the friend, "the place is empty. I don't see any patients."

"Oh, they are all under the cots fixing the slats," explained the physician.

#### Rather Mixed.

In the course of her first call upon one of her husband's parishioners young Mrs. Gray spoke feelingly of his noble, generous spirit.

"He is as nearly an altruist as man may be," she said proudly and affectionately.

"Is he an altruist?" said her hostess, with mild surprise. "I thought from the tone of his voice that he probably was a bass."

### A LITTLE NONSENSE.

What Attracted the Attention of the Solemn Faced Man.

One of our southern salesmen brought home the following from his last trip:

The proprietor of a tanyard built a stand on one of the main streets of a Virginia town for the purpose of selling leather and buying new hides.

When he had completed the building, he considered for a long time what sort of a sign to put up to attract attention to the new establishment. Finally a happy thought struck him.

He bored an auger hole through the doorpost and stuck a calf's tail into it with the tufted end outside.

After awhile he saw a solemn faced man standing near the door looking at the sign. The tanner watched him a minute and then stepped out and addressed him.

"Good morning, sir!" he said.

"Morning!" said the other, without taking his eyes off the sign.

"Want to buy leather?" asked the tanner.

"No."

"Got any hides to sell?"

"No."

"Are you a farmer?"

"No."

"Merchant?"

"No."

"Lawyer?"

"No."

"Doctor?"

"No."

"What are you, then?"

"I am a philosopher. I've been standing here for an hour trying to figure out how that calf got through that auger hole."—Boot Strap.

#### Necessary Then.

"It ain't true," said the milkman, "that we always put chalk in our milk."

"Do you mean to say," demanded Mrs. Houskeep, "that you never do it?"

"Well—er—never except after a heavy rain when the water gets brown and muddy."—Ohio State Journal.

#### Fine Time.



"I hear you attended the Tough Mug ball the other night. Did you have a fine time?"

"No; I had it next morning. Ten dollars and costs."—Philadelphia Press.

#### Why He Was Happy.

"I'm afraid there will be a serious falling off in the attendance to-night," said the happy manager.

"Then why are you so jovial?" inquired the popular star.

"Because we have sold so many seats that I'm afraid the people will be falling off the gallery into the balcony."—Cleveland Plain Dealer.

#### Proof Positive.

Crowells—That man at the bar is a perfect gentleman.

Howells—How do you know?

Crowells—When we were introduced the other day and I began to tell him my troubles, he didn't butt in and try to tell me his.—Chicago News.

#### The Measure of His Success.

Hicks—Your friend Marrayt tells me he's got his wife pretty thoroughly trained now.

Wicks—Yes; he's got her trained so that he can make her do pretty nearly anything she wants to do.—Catholic Standard and Times.

#### Heard in the Greenroom.

First Actor—Congratulate me, old man. I have been married just ten years today to one woman.

Second Actor—That's nothing. I've been married twice to my present wife in five years.—St. Louis Post-Dispatch.

#### Admiration.

"Bliggins is always repeating what his children say."

"Yes; I admire those children. They are the only people I know of who can make Bliggins keep quiet and let some one else talk."—Washington Star.

#### A Kiss.

"What is a kiss?" Heaven knows! Not I! And yet, with humble wit, Now that you've asked me I will try To give my view of it.

A friendly grimace, pleasing quite; A drooping of the eyes, The thrilling of a moonlit night, Or, better, starry skies.

A rare Havana sacrificed, A breath upon the lips, The spirit of red wine enticed To sparkle in long sips.

A contact either short or long, A dozen thoughts or less, The question, is it right or wrong? And then—just foolishness!

—Lurana W. Sheldon in New York Times.

### THE ANCIENT BO TREE.

Oldest Living Thing of Which Man Has Kept Record.

This bo tree (the Ficus religiosa) is probably the oldest living thing in the world of which record has been kept by man and, with the possible exception of the sequoia, the oldest of living trees. It was brought from India by the Princess Sanghamitta and was planted by King Dewanapiya Tissa in 288 B. C. It is therefore 2,195 years old. The preservation of this tree has been an object of reverent solicitude to successive dynasties, and either through superstitious reverence or because of its worthlessness to a plunderer it has been spared amid all the havoc of repeated invasions. As recently as 1739 A. D. it was endowed with lands by Raja Sinah, a Kandian chief.

The bo tree's age and identity are matters of absolutely faithful record, and when one recalls that in the rigorous climate of northern Germany, in Hildesheim, there grows a rosebush which is a thousand years old it does not seem so remarkable that in the balmy climate of Ceylon this tree should have lived twice as long. It is gnarled and unsymmetrical, because many of its branches have been cut off and sent to distant temples. This bo tree is a branch of the tree under which Guatama Buddha sat when he attained Nirvana, and Buddhists say the passion through which he passed communicated itself to the tree and caused all the leaves to tremble.

Each of the millions of pilgrims who have toiled along the sacred way which leads to this shrine has hoped to bear away with him a leaf from the sacred tree, and happy is he at whose feet one falls.

The leaves hang on a slender stem and are easily stirred by the slightest breeze, so each petitioner is rewarded for his pilgrimage by feeling that the tree responds to the fervor of his soul, but few take home a leaf. Many bring offerings to the tree, and on a number of the lower leaves are sheets of gold placed there by jewelers and other wealthy worshippers.—Rosalie S. Morton in Century.

#### Wood as Strong as Iron.

Recent official tests of the many valuable hard woods native to Western Australia have made known the extraordinary properties of yate, believed to be the strongest of all known woods. Its average tensile strength is 24,000 pounds to the square inch, equaling that of good cast iron. But many specimens are much stronger, and one was tested up to seventeen and one-half tons to the square inch, which is equal to the tensile strength of wrought iron. The sawed timber of yate is probably the strongest in the world. The tree grows to a maximum height of 100 feet and has sometimes a diameter of two and one-half or even three feet.

#### A New State—Lincoln?

There is at the present time in the northwest a movement that promises to assume respectable proportions, looking toward the remodeling of the three states of Washington, Idaho and Oregon in such a manner as to create a new fourth state out of what is now ordinarily termed in that section of the country "the inland empire." So far there seems to have been three possible names suggested—Lincoln, Jefferson and Whitman, with a preponderance in favor of the first.—St. Louis Post-Dispatch.

#### Dehorning Calves.

It is more humane to dehorn calves by the use of caustic potash when the horns are just starting than it is to use the saw on the horns after they have developed; also the task is easier at the earlier period. The operation with the caustic potash should be made before the calf is nine days old. The better time is when the calf is from two to five days old. The hair should be clipped away from around the horns. A stick of caustic potash should be rolled in paper, with one end of the caustic bare. This should be slightly moistened and the tips of the horns rubbed for about fifteen seconds or until the potash has made a slight impression on the center of the horn. The treatment should be given two, three or four times; according to the age of the animal and the size of the horns, about five minutes being allowed to elapse between applications. If a little blood appears in the center of the horn it will then be necessary only to give a slight rubbing with the potash. It is believed that the caustic potash method is nearly or quite painless.—Western Life.

#### An Improvement.

"My dear," said Mrs. Newlywed, her face flushed with the excitement of her afternoon in the kitchen, "I want you to be perfectly frank with me now. What would you suggest to improve these doughnuts I made today?"

"Well," replied Mr. Newlywed, lifting one with a slight effort, "I think it might be better if you made the hole bigger."—Cincinnati Times-Star.