

GRAIN GRADING AND MARKETING

Columbia University Added to Number of Colleges Giving Course of Instruction.

OTHER INSTITUTIONS AIDING

United States Department of Agriculture is Preparing Sets of Trays Illustrating Various Grading Factors.

Columbia university has recently been added to the number of colleges giving instruction in grain grading and marketing. The United States Department of Agriculture, charged with the administration of the grain standards act, is keenly interested in having such instruction made a part of college curricula, particularly of agricultural colleges, and today there are 20 colleges where students study grain handling.

Columbia University Helping. At New York city the local federal grain supervision office is giving active assistance to Columbia university in outlining and presenting the grain grading course to be given, and similar help is being accorded other colleges by federal grain supervision officials located in 33 districts throughout the United States. The department is also preparing sets of eight type trays illustrating the various grading factors of shelled corn, wheat, and oats, to be lent to colleges teaching grain grading under federal standards.

Last fall a conference of teachers of farm crops in a number of agricultural colleges with federal grain supervision officials was held at Chicago, where the entire grain situation was discussed with a view of equipping the instructors with information that would enable them to formulate courses of study in grain grading and marketing. Every phase of the grain trade was covered and a report of the conference prepared for distribution among the various colleges interested.

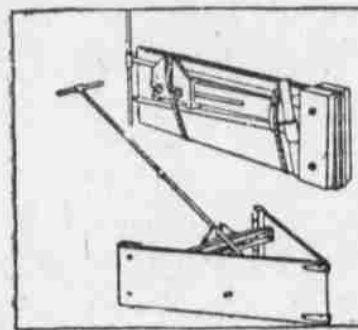
Grading Demonstrations. Grain grading demonstrations covering a period of from one to twelve days have been given by United States Department of Agriculture experts before students of agricultural colleges in 17 states. The department is prepared to assist colleges in every possible way in furnishing them with authoritative information regarding the objects of the grain standards act and the practical application of its provisions.

SNOWPLOW IS COLLAPSIBLE

Simple and Inexpensive Contraption May Be Folded Up and Carried From Place to Place.

The Scientific American, in illustrating and describing a snowplow, the invention of V. W. Mason of Bridgeport, Conn., says:

The object of the invention is to provide a simple, inexpensive and collapsible plow, which when folded may be easily carried from place to place.



The Device Folded, and Open for Use.

A further object is to provide a plow of the manual type, so constructed and counterbalanced that its pushing and pulling steering handle, relatively full-crusted, exerts a varying downward pressure according to the depth and resistance of the snow. The plow can be adjusted to clear a path from 28 to 30 inches in width.

AUSTRALIAN WHEAT IS GOOD

Larger Yield Obtained on Pacific Coast Than Some of Native Commercial Varieties.

Tests made by the United States Department of Agriculture with 130 lots of Australian wheats recently introduced into this country have brought out three varieties adapted for growing on the Pacific coast, where they have produced larger yields than some of the native commercial varieties. They are known as Federation, Hard Federation and White Federation. The Australian varieties in general are susceptible to most cereal diseases, but many of these are not destructive in the Pacific coast region.

ERADICATION OF COCKLEBUR

Plant is Double-Barreled Gun Affair, Carrying Two Seeds—Circular Tells How to Kill It.

In eradicating the cocklebur, remember that it carries a double-barreled gun. Every bur carries two seeds, only one of which sprouts the first year. Even when the product of that seed has been killed the other will be in shape to make trouble the next season. The United States Department of Agriculture has a circular on the cocklebur—how to get rid of it.

WOOD CUTTING GOOD JOB DURING WINTER

Work Does Not Interfere With Regular Field Crops.

Logs Cut in Cold Weather Season Are Not Subject to Rapid Drying—Farmers May Profitably Turn to Some Sawmilling.

Farmers, as a rule, have too much to do at certain times of the year and not enough at others. Many farms are unprofitable because their owners have little or nothing planned for winter. Wood-cutting can be done at any time, but cool weather favors the rate of production, and in the winter the work does not conflict with that on regular field crops. If cut in winter logs are not subject to rapid drying.



Cutting Wood for Fuel by Use of Gasoline Engine.

nor to checking at the ends of the logs, which often occurs in summer-cut logs and apparently reduces their sale value.

Because of injury resulting from the southern pine bark beetle in the hot season, it is practically necessary to cut pine in the fall and winter months. Damage and loss in summer often come from wood-rotting fungi, including the "bluing" and other staining of wood. For these reasons a good many farmers turn profitably to logging and sawmilling for a few fall or winter months each year. Nearly every kind of wood product can be satisfactorily handled in winter, according to the forest service of the United States Department of Agriculture.

MALE BIRD MARKINGS

1. He should possess the characteristics and markings of the breed and variety of which he is a member.
2. Strong vitality.
3. Active movement.
4. Good health as indicated by ruddy combs and wattles.
- (It is not advisable to use a bird for breeding which has ever had a disease even if there are no indications of it at present.)
5. No marks of effeminacy. Crow should be strong and clear.
6. Remember the foundation of success in the breeding of poultry is the correct markings of the breeding pens.—B. W. Fairbanks of the Colorado Agricultural College.

FERTILITY IN TON OF STRAW

It Has Ability to Increase Crop Just as Much as Manure, Although It is Slower to Act.

A ton of straw contains as much fertility as a ton of manure, and although the fertility does not become available quite so quickly, it nevertheless has the ability in the long run to increase crops just as much as manure. Of course the ideal way to use straw is to use it as bedding for animals and then spread it on the land mixed with manure. Where this is impractical the straw should by all means be spread on the land at the rate of around one and a half tons per acre and plowed under.

CHICKENS NEED GREEN FEED

Fowls Must Be Provided With Something to Take Place of Grass Obtained in Summer.

To take the place of green grass obtained by the fowls in summer the flock must be provided with green food in some form. Mangels and sprouted oats are very good. Alfalfa and clover meal are high in protein content and make good additions to an egg-producing ration. Cabbage and carrots are also good green foods.—E. J. Peterson, North Dakota Agricultural College.

WILD ANIMALS SEEK SAFETY

Find Protection in Game Sanctuaries at the Beginning of Every Open Hunting Season.

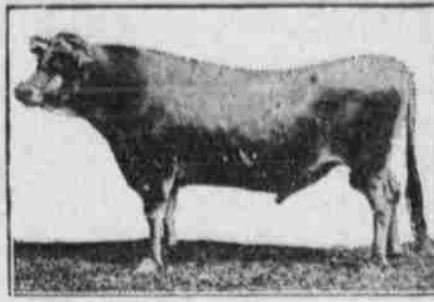
Wild animals know where they can find protection, says a United States Department of Agriculture circular on the fur industry. In places where there are game sanctuaries, wild creatures hasten to them at the beginning of every open hunting season.

DAIRY

GOOD OF BULL ASSOCIATIONS

Experience Shows That Organizations Are Adapted to Every Kind of Dairy Community.

Are you one of those who think a bull association cannot be formed in a community like yours? asks the United States Department of Agriculture. If so, probably you are mistaken, for experience shows that the bull associations are adaptable to



Purebred Sires Should Be Used in Grading Up Herds.

nearly every kind of dairy community that can be found. The annual report of the dairy division shows that there are now about 120 bull associations in 30 different states of the Union, and among all classes of communities.

The extension men of the dairy division find that in very many cases, when the idea of a bull association is discussed, people think that, while such an organization is clearly a good thing on general principles, the conditions in their particular community are not suitable. Many times, in such places, it has been tried, and to the surprise of some it has been found that the conditions did not stand in the way at all. There are many such communities. They have men engaged in dairying; they have scrub or other inferior bulls which should be replaced; and they have the need for better bulls.

Any community in which there are 200 or more cows can better afford to have a bull association than it can afford to be without one; and if the people of the community are neighborly and able to work together in everyday business affairs, they can just as well have a strong association with all its benefits.

CARE FOR BREEDING CATTLE

Have Both Cows and Herd Bull in Good Physical Condition to Insure Uniform Calf Crop.

If it is desired to have calves dropped in the fall or early winter months—November—the cows should be bred in February and March. One way to insure a uniform calf crop is to have both the breeding cows and herd bull in good physical condition at this time. A herd bull that has been left with the wintering herd to shift for himself is, as a rule, in poor condition when the breeding season arrives, and the chances are that he will not be a sure, vigorous sire.

The ration for the herd bull should consist of a liberal amount of roughages, such as corn silage, legume hay, stover, or straw, and in most instances, unless in good condition, a small allowance of grain. The breeding cows should be healthy and vigorous at time of calving, otherwise they should receive in addition to a liberal supply of silage, legume hay, or other roughage, and a small amount of grain, in order that they may give sufficient milk to nourish the calves properly and at the same time maintain their own condition.

COLOR PREFERRED IN BUTTER

That Which is Not Too Pale Is Generally Favored—Quality Not Always Affected.

The color of good butter should be clear and even throughout. Although the shade of the color does not always affect the quality of the butter, preference is generally given to that which is not too pale in color. When the cream is churned at too high a temperature, the butter comes quickly, but loses much of its natural color. Churning at too low a temperature, and consequently for too long a time, also destroys the color of the butter produced. Color in butter is often spoiled through overwashing or overworking it. Butter is of a paler color from sweet cream than from ripened, as in the former case there is more buttermilk in the finished product.

FOR CLEANING MILK BOTTLES

Cold or Lukewarm Water Prevents Hardening and Sticking of Albumen and Casein.

When milk bottles are allowed to stand, the curd hardens on them and it is almost as difficult to remove as when it is burned on by the use of hot water. If it is necessary to let your milk bottles stand for any length of time, it is best to pour cold, or lukewarm water into them, which will prevent the hardening and sticking of the albumen and casein. Then, when it becomes time to wash them, lukewarm water can be used followed by hot water, boiling water or live steam. If this method, the bottles will be clean, and all bacteria will be killed by the hot water.

Improved Roads

PERMANENT ROADS ARE BEST

Although Apparently Expensive at First, They Add Greatly to Value of Farm Lands.

When one is figuring the cost of improving the public roads consideration should be given to the increased value of the lands located in the section where the roads have been permanently improved.

In every case where roads have been put in a permanently good condition, the value of the farms has increased to a point that the increased value would more than pay the cost of the improvement. Permanent roads do seem high-priced in the beginning but



An Improved Road Near New York City.

one should figure that there will be small future outlay for upkeep.

The dirt road has a bad reputation every place it is found and even improving does not make it a permanent road, for it is continually needing work. It is a never-ending job to keep a dirt road in even passable condition. It is like doing the chores on the farm, they must be gone over again and again and still remain to be looked after. The properly graded road, of course, is better than one poorly made, but at its best it is a continual worry and expense. Where very steep hills are on the roadway, ditches should be run off along the side to carry the water into the side ditch and not allow it to run down to the bottom, carrying the soil with it and making a pool where it stops.

Much of the movement now for improved roads is for permanent roads. And, as stated above, these permanent roads although quite expensive at first, add much to the value of the lands and to the reputation of the farming districts. It has been much easier to populate a new farming section when it is known that permanent roads are coming soon or are already installed. A farm always sells better when the buyer can approach it on a substantial roadway. Those who are advocating good roads and permanent roads may not all live to see their ambitions satisfied, but they are starting a movement that will carry on to the coming generations and will be a blessing for those who live after the present improved road agitation.

SUPERIOR SYSTEM OF ROADS

In Every Section of Country Work is Progressing Favorably on Many Projects.

The time is rapidly passing when the bad roads of America can be pointed out as a reproach. In every section of the country work is in progress to give the United States a system of roads which will compare favorably with those of other countries. Roads are being built at 2,985 different points. Fully 30,000 miles of road have been approved by the secretary of agriculture. It is estimated that this construction will cost the country nearly \$400,000,000. At the end of June, 1920, the government reported that 2,116 different projects or a total of 16,000 miles of roads had been completed.—Boys' Life.

ACCESSIBILITY TO MARKETS

Farm on Paved Road is Nearer to the City Than One Located on Impassable Highway.

The type of road over which a farmer must haul his crops determines his accessibility to markets. A farm many miles from the city, but if located on a paved road, is nearer to market than a farm separated from it by only a mile of impassable road. That is why the various reports of the United States weather bureau issued daily by the local state offices of the bureau, devote frequently their entire report to the subject of roads—a strange place you'll say to find an editorial promoting permanent highways, but it is there from time to time, nevertheless.

Streets of Glass.

In Geneva glass blocks are used to pave the streets. They are made from the refuse from the glass factories. They are pleasant to the eye and very durable.

Watch Breeding Flock.

Watch the breeding flock carefully and see that the fowls keep in good breeding condition.

Phosphate Improves.

Phosphate is the salt of the soil—A little makes a great improvement.

POULTRY

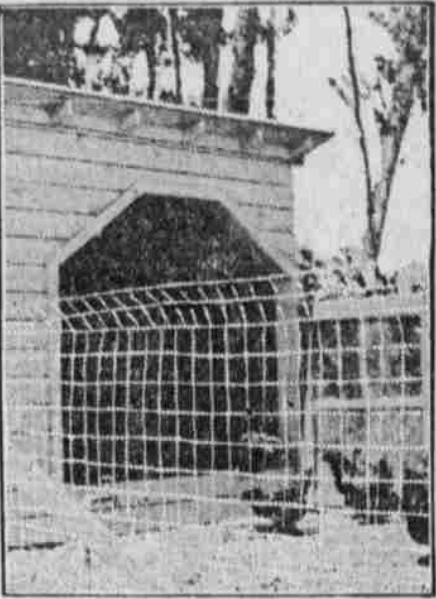
FENCES USED FOR CHICKENS

Cost of Equipment, Labor and Maintenance is Increased Where Yards Are Divided.

Fences dividing the land used for poultry into yards increase the cost of equipment, labor and maintenance. There should be as few fences as possible, as land can be cultivated and kept sweet more easily if not fenced. The value, too, of fresh, sweet land for poultry can hardly be overestimated. A grass sward can be maintained on good soil by allowing 200 to 250 square feet of land per bird (217 or 174 birds to the acre), while more space is necessary on poor or light land. A larger number of fowls are usually kept to the acre where double yards are used, and the land is frequently cultivated.

Plymouth Rocks and the heavy meat birds in small yards require fences five to six feet high, while a fence six to seven feet high is necessary for Leghorns, say poultry specialists of the United States Department of Agriculture. The upper two feet of the fence for the latter may be ligged inward at an angle of 30 degrees, or a strand or two of barbed wire may be used on top of the regular wire to help keep them confined, while it is sometimes necessary to clip the flight feathers of one wing of those birds that persist in getting out. It is not advisable to use a board or strip along the top of the fence, as hens will often fly over one so constructed.

Posts may be set or driven into the ground. They should be set eight to ten feet apart for common poultry netting, or 16 to 20 feet for woven wire. Corner posts should be about eight inches in diameter and be set four feet in the ground, while intervening posts may be four or five inches in diameter and set three feet in the ground.



Difficult to Keep Yards Clean Where Fences Are Used.

lighter posts driven into the ground may be used for temporary fences. That part of the post set in the ground may be charred or treated with some wood preservative to advantage, while corner posts should be firmly braced or set in cement.

NO CURE FOR FOWL CHOLERA

Afflicted Birds Should Be Killed by Dislocating Necks and Carcasses Burned.

Poultry experts at Iowa State college are warning poultry keepers against fowl cholera which is a very contagious disease of hens often proving fatal without any previous indications of trouble. Indications include a slow movement of the animal, a tendency to crouch and ruffle the feathers, and yellow or bright green stools. Examination of the dead bird shows a congestion of the blood vessels in the liver, kidneys and intestines.

It is useless to treat sick birds. All that show symptoms should be killed by dislocating their necks. Burn the body with oil and bury at least three feet deep all dead birds and all excreta. Place one 7.5 grain bichloride of mercury tablet in a gallon of drinking water in a nonmetal container or use a 30-gallon sodium sulphocarbonate tablet in every gallon of drinking water.

FROST COLLECTED ON WALLS

It Shows That There is Not Sufficient Ventilation to Carry Off Moisture.

If frost collects on the walls of the henhouse, it shows that the walls are too thin or that there is not sufficient ventilation to carry off the moisture from the birds' breath, or that there are so many birds in the house that reasonable ventilation will not take care of this moisture.

PREFER TO REMAIN OUTDOORS

There is Nothing to Worry About if Turkeys, Geese and Ducks Prefer Open Air.

Don't worry if turkeys, ducks and geese prefer to stay outdoors until snow comes, for they are often healthier if allowed to live in the open as nature intended they should. The greatest danger is from thieves and prowling animals.

50 Years Ago



A young man who practiced medicine in a rural district became famous and was called in consultation in many towns and cities because of his success in the treatment of disease. This was Dr. Pierce who afterward moved to Buffalo, N. Y. He made up his mind to place some of his medicines before the public, and he put up what he called his "Favorite Prescription," and placed it with the druggists in every state in the Union. For fifty years Dr. Pierce's Favorite Prescription has sold more largely throughout the United States than any other medicine of like character. It's the testimony of thousands of women that it has benefited or entirely eradicated such distressing ailments as women are prone to. It is now sold by druggists in tablet form as well as liquid.

ARIZONA, NEMB.—"My mother was always a great believer in Dr. Pierce's medicines and when I was a girl she gave me 'Favorite Prescription' when I was in a run-down, nervous condition and it soon built me up in health and strength. 'Favorite Prescription' is a splendid tonic for girls or women who suffer."—MRS. WALTER GUARD, 608 Tenth Street.

Mrs. Hicks Relieved By Four Eatonic

"I have taken four Eatonic tablets and they relieved me of sour stomach. I recommend it to everybody," says Mrs. G. P. Hicks. If stomach is not digesting your food; if you have sourness, bloating, food repeating, indigestion or acid stomach, Eatonic will remove the cause by taking up and carrying out the acidity and gases, bringing quick relief and healthy digestion. Why suffer stomach trouble? Why not keep your digestion normal and enjoy good health? An Eatonic taken after each meal will prevent discomfort and pain. Make the test today and see how quickly this wonderful remedy acts. It comes in handy tablet form. Carry it with you. A big box costs only a trifle with your druggist's guarantee.

PATENTS

Watson E. Coleman, Patent Lawyer, Washington, D. C. Advice and book free. States responsible. Highest references. How to service.

Irritating Coughs

Promptly treat coughs, colds, hoarseness, bronchitis and similar inflamed and irritated conditions of the throat with a tested remedy.

PISO'S

Effective Compromise.

Heck—You say never have any domestic squabbles; how do you avoid them?

Peck—Well you see, immediately after we were married my wife and I came to an understanding. She said: "Now, Henry, we must neither of us be selfish and always try to run things. We must make mutual concession. I propose that when we agree on any matter you are to have your way, and when we disagree I am to have my way. Then we shall get along nicely." And we have.—Boston Transcript.

Freshen a Heavy Skin

With the antiseptic, fascinating Cuticura Talcum Powder, an exquisitely scented convenient, economical face, skin, baby and dusting powder and perfume. Renders other perfumes superfluous. One of the Cuticura Toilet Trio (Soap, Ointment, Talcum).—Adv.

Odd Result.

"They say poetry don't go now."

"That's queer, considering it's made up of feet."

The fool man and the wise trout are slow in catching on.

This Is Shoe Insurance
\$5.00 CASH

and a New pair of Shoes will be given to the wearer who finds PAPER in the heels, counters, insoles or outsoles of any shoes made by us, bearing this trade-mark



"It Takes Leather to Stand Wealth"

See your neighborhood dealer and insist on the Friedman-Shelby "All-Leather" Trade-Mark. It means real shoe economy.