

BLUE GRASS BEST FOR FATTENING HOGS



ON BLUE-GRASS PASTURE AT MISSOURI COLLEGE.

(By F. B. MUMFORD, Dean of Missouri College of Agriculture, Columbia, Mo.)
Probably no state in the United States has so large an area of blue grass pasture as Missouri. Certain advantages in this state have led many men who farm, and particularly those controlling large bodies of land, to follow grazing on permanent pastures. When the price of land was low and the value of grain less than at present, blue-grass farming was more profitable than rotative farming. A change of conditions makes more skillful handling of grass lands necessary.

Investigations carried on at the Missouri experiment station for five years, comparing blue grass with ten other rotations, including the best forage

crops known for Missouri, show that the average return per acre which can be accredited to blue-grass forage for fattening hogs is \$22.50 per acre, estimating pork at 6 cents a pound, and corn fed at 90 cents a bushel. A rotation of rape, clover, and corn yielded an annual income of \$22.42 per acre. A succession of corn in which cowpeas were planted at the last cultivation gave an annual income per acre of \$19.48.

The figures indicate that it is not necessary for men who farm to plow up all the land devoted to blue-grass pastures in order to make it pay a good income even on the basis of high land values at the present prevailing in this state.

SHELTER ESSENTIAL FOR A SHEEP FLOCK

Dry Floor, Good Roof, Abundance of Fresh Air and Feed Space Are Important.

It is impossible to suggest any very definite sheep barn plans without knowing under just what conditions the barn is to be built, but Prof. H. Hackedorn of the Missouri College of Agriculture makes some general suggestions. He says: "In planning barns or sheds for a breeding flock of sheep, a space of 10 or 12 square feet per ewe will give sufficient room. The essentials of shelter for sheep are (1) dry floor, (2) good roof, (3) an abundance of fresh air, (4) avoid drafts (5) avoid narrow doors and passages so ewe heavy with lamb will not be injured, and (6) provide sufficient feeding-trough space so all the sheep can eat at the same time.

"We find that a shed 25 or 30 feet wide and as long as necessary to house the flock gives very good results at the Missouri agricultural experiment station. It should open on the south and may be built with a feed trough and feed alley along the north side. Economy of rack space may be secured by the use of movable racks so arranged as to make as many lots as are needed in the shed. These partition racks can be moved out of the way whenever a wagon is driven in to be loaded with manure. The shed should be high enough to afford plenty of loft room. As we feed baled hay, a loft five feet high at the eaves gives us room enough to store a winter's supply for the flock, but if loose hay is put in and fed correspondingly, more loft room must be provided."

BLACKLEG IS MOST INFECTIOUS DISEASE

Trouble Is Caused by Seed-Forming Organism Gaining Entrance Through Wounds.

(By A. HAINNER, Idaho Experiment Station.)
Blackleg is a specific infectious disease of young cattle, caused by a spore or seed-forming organism that gains entrance to the tissues through small wounds in the skin. Cattle between the ages of six months and two and one-half years are most susceptible.

The main noticeable symptom is the occurrence of a large gaseous swelling beneath the skin of the hind quarters, the shoulder or the lower portion of the neck. The swelling crackles when the hand is passed over it, and if cut into the muscle is dark and a yellowish bloody fluid escapes. Associated with this symptom are others common to bacterial infections, viz.: Elevation of body temperature, loss of appetite and rumination, dullness, and difficult breathing.

The best method of handling is to burn or bury deeply the carcasses of dead animals, disinfect the spots where they died, remove healthy stock from infected pastures and vaccinate the susceptible cattle.

CARING FOR DAIRY VESSELS

Wash With Hot Water Into Which Some Good Alkaline Powder Has Been Added—Avoid Soap.

Wash all dairy vessels in warm water first, then in water as hot as the hands will stand. Into this hot water put some good alkaline wash powder. Do not use soap, it may leave a taste.

CARE OF WIRE CUTS AND OTHER INJURIES

Practical and Timely Hints Given by an Expert of Missouri College of Agriculture.

(By L. S. BACKUS, Missouri College of Agriculture.)
First aid is most important. Quick healing leaves smaller scars. Don't use dust or lime to stop bleeding.

Bleeding that can be stopped with powders will soon stop itself anyhow. Frequent washing irritates wounds, prevents prompt healing and may cause proud flesh.

Small concealed stab wounds such as those from nails are the most likely to cause death. Find them and keep them clean and well disinfected.

Swab out deep cuts with pure tincture of iodine as soon as it can be secured and they will take care of themselves then if the normal pus discharge is removed.

A long continued discharge from a wound indicates an abscess pocket, a bone injury, or the presence of a snag or something else that should not be in the wound. Call a veterinarian.

As soon as bleeding has been stopped, wash the wound with a pint of warm water to which two teaspoonfuls of creolin, lysol, carbolic acid, or some similar disinfectant has been added.

A wound should be healed in about three weeks. If it is doing well, the swelling will gradually go down, and the discharge will be odorless, thin, and bloody at first, and thicker and whiter later.

Antitoxin will prevent lockjaw after nail or other puncture wounds. If not so prevented, very few of the lockjaw cases ever recover. The hard crust lime forms over the surface of a wound favors lockjaw by shutting out the air.

Bleeding from a leg can always be stopped by tying a small rope loosely about the wound, then twisting it with a stick or small rod. Tighten till bleeding stops. Apply bandages and remove the cord if possible. If bandages cannot be applied, prevent serious bleeding by pressing the fingers against the cut blood vessels until a veterinarian can be called.

STUDY THE MARKET DEMANDS CAREFULLY

Farmer Must Strive to Produce Only Best Animals and Meet Needs of Consumer.

(By S. T. SIMPSON, Missouri College of Agriculture.)
We must study the market demands and select good sires of the types that will enable us to meet them. If we find that the butcher or packer likes an animal of extreme beef type because that animal yields a high percentage of the high-priced cuts, the sires must be selected accordingly. If we find that the horse buyer takes the big, drafty, sound horse in preference to the chunk when his order calls for horses for heavy work, we must secure sires that will get colts of that type. If we ship or sell to a market which demands bacon hogs, then the boar should be the best obtainable individual of a bacon breed which is in good demand in that market.

In any case, we must strive to produce only the best animals and to be sure that they are uniformly good and that there are among them no misfits or inferior specimens which do not meet the consumers' needs.

OUT-OF-ORDINARY PEOPLE

BASIL MILES' NEW WORK



Basil Miles, who for the last three years has been one of the chiefs of division of the chamber of commerce of the United States, has been appointed by the secretary of state to take charge, in behalf of the United States, of military and civilian relief of Germans and Austrians in the Russian empire.

Since coming to Washington in 1908 to reside, Mr. Miles, who was born in Philadelphia June 20, 1877, has become widely known there and has been a familiar figure in all sorts of private as well as public charity affairs, where his work as an organizer has proved of value to many institutions and persons. He is the son of Frederick B. Miles, engineer and philanthropist of Philadelphia, his mother having been a daughter of Judge Woodworth of New York.

Mr. Miles was educated in Philadelphia and in England. He is a graduate of St. Mark's school, Southborough, Mass., and after teaching there for a time he went to Oxford university and took a post-graduate course at Balliol.

In 1905 and 1906 he was secretary to George von L. Meyer, the ambassador to Russia, and after that was attached to the American embassy at Berlin. He then was made superintendent of foreign mails at Washington, which position he resigned in 1913 to join the staff of the national chamber of commerce.

ate of the University of Pennsylvania.

CHIEF OF CONDUCTORS

Austin Garretson, president of the Order of Railroad Conductors, is credited by many with being the "brains" of the recent coup by which the railroad brotherhoods forced congress to pass an eight-hour basic day bill in order to avoid a paralyzing strike.

Garretson is also a big man physically, being six feet and two inches in stature. Men who know him intimately say that he is an accurate thinker, a skilled analyst, a philosopher, a materialist and a sentimentalist. He likes to give a poetic touch to his speeches and his writings and, although he is not a religious man, reads the Bible at his home, in his office and often on his travels.

The Bible, he says, covers the whole range of human experiences and is the safest of all guides, regardless of circumstances or centuries. He was a conductor for many years on the Missouri, Kansas and Texas railroad, and for some time ran passenger trains in Mexico. The conductors, respecting his earnestness and ability, jumped him over the heads of other officers in their brotherhood and elected him first vice president, that he might become the chief of their order if Edgar E. Clark should die, resign or engage in some other business. When Mr. Clark became a member of the interstate commerce commission Mr. Garretson, by the letter of the program, was chosen to be his successor.



SHOUSE LOYAL TO THE HORSE



Representative Shouse of Kansas represents a district where there is an automobile to every six persons, yet he is loyal to the horse, for he used to live in Kentucky, where he was editor of the Farmer and Breeder.

"In Kansas we have the heavy draft horse at his best," said Mr. Shouse. "He belongs to the farm and does his work well. When we want to go anywhere we use an automobile, but I know what the thoroughbred means to the country at large, and particularly to communities in which horse breeding is an economic asset.

"In a recent tour through my district I was forcibly reminded of a movement which had its inception in Kentucky in 1898, when a breeders' organization was formed to purchase all undesirable or barren thoroughbred mares and resell them without name or pedigree. When I saw the sorry nondescripts which were being picked up I couldn't help thinking how much superior these thoroughbred outcasts were to the riffraff which had neither breeding nor individuality to commend them. The European war has been a great benefit to the United States, as it has taken a lot of worthless breeding material.

"What we need now is a little intelligence and initiative to remedy the mistakes of former generations. Kentucky is essentially a horse-breeding state, and we naturally look for progress there, but in the same class may be placed Tennessee, Missouri, Montana, New York, Maryland, Pennsylvania and Virginia, and it is from them we must look for the greatest development."

LANGLEY DIDN'T SPEAK

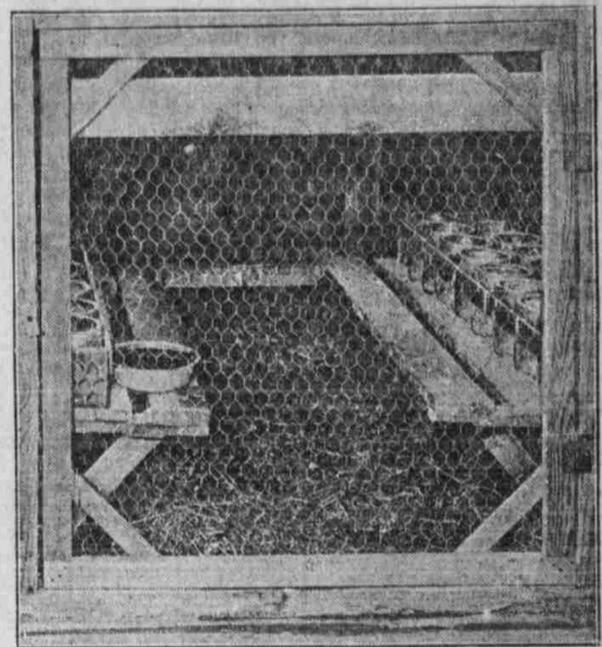
Representative Langley of Kentucky is a Republican, and when he first ran for congress he went to make a speech in a county that was mostly Democratic. Langley had never been in the county before until he entered the race for congress and knew little about conditions there. One of the things he did not know was that the county was noted for its almost complete absence of colored people. The people there for years had made a specialty of keeping out the negroes, simply because they had a prejudice in favor of an exclusively white community. That being the case, a Democratic politician named Van Zant, after state chairman in Kentucky, arranged with the liveryman where Langley would have to go for a rig, to give him a colored driver.

When Langley arrived innocently on the scene, alongside of his colored driver, Van Zant walked up to him and inquired in a loud voice:

"Which one of you gentlemen is going to speak first?" The crowd then laughed so hard at Langley that he was unable to speak at all.



FINDING OUT WHAT CHICKENS LIKE BEST



HEN PERMITTED TO SELECT HER OWN FOOD.

(By H. L. KEMPSTER, Missouri Agricultural Experiment Station.)
Perhaps the best way to find out what hens like is to ask the hens. At least that was the plan followed by the Missouri agricultural experiment station in recent tests in which weighed amounts of various feeds were placed before the hens and what they left of each kind of feed was weighed back so it was possible to tell what kinds of feed they had eaten and what they had passed by. At the same time a careful record was kept of the number of eggs laid by each hen and her changes in weight.

The test seems to show that the hen knows better than many people how to select the food that will help her most in laying eggs and keep her in the best condition. Some old ideas with regard to poultry feeding were proved sound and some others were discredited by the hens. They almost all showed a decided preference for wheat which is very generally used as a poultry feed. Kafir stood next in popularity, followed by corn and cornmeal, but oats and sunflowers were not eaten as much as many people would have expected, probably be-

cause the hen is not able to digest much food containing a high percentage of crude fiber. The hens that did eat sunflower seed were seen cracking them and eating only the softer portions inside, possibly because they wanted to get rid of the crude fiber in the shell.

Bran is often used in poultry feeding, but the hens in this test which could get other feed almost always chose it instead of bran. Alfalfa leaves were tried but not eaten to any great extent.

Animal food of some kind, such as the beef scrap or sour milk, is generally regarded as very necessary for laying hens, but most of the hens in this test did not eat much more beef scrap while laying than while not laying. Two actually ate more of it when they were not laying.

Other tests at the Missouri station have shown that the use of either beef scrap or sour milk makes the hen's egg record at least twice as good as though she were fed no animal food whatever, and that sour milk is slightly better than beef scrap for this purpose in addition to being cheaper and easier to get on most farms.

PRESERVING EGGS IS SIMPLE

Water Glass Method Is Not at All Difficult—Cleanliness Is Very Important Factor.

(By E. P. LADD, North Dakota Experiment Station.)
In preserving eggs the water-glass method is very simple. Eggs put up according to it will retain their original flavor.

Directions: The eggs must be fresh and clean. Washing an egg spoils its qualities. Galvanized iron vessels, crocks, jars or wooden kegs may be used. The vessel must be clean. If of wood it must be thoroughly scalded. Use a good grade of water glass. One like a heavy white jelly that flows like cold molasses. Use one quart of the water glass to ten quarts of pure water that has been boiled. Pour into the vessel when cool. Fresh eggs can be put into it from time to time until the jar is filled. There should be two inches of the solution above the eggs.

Keep the preserved eggs in a cool place, as in a cellar. The eggs will contain some gas and so crack when boiled. This can be prevented by making a pin hole in the blunt end of the eggs before boiling them.

CLEAN WALL NEST FOR HENS

One Shown in Illustration Herewith Is Recommended by Kansas Agricultural College.

Roomy, clean nests mean clean eggs. The Kansas State Agricultural college advocates the use of the nest shown. Dirty nests are generally caused by the fowls roosting on the edge of the nests and allowing droppings to fall in, or by the hens waiting at the edge of their favorite nest for another hen to get through laying, and fouling the side of the nest with



droppings as they wait. In the nest illustrated, the sliding door at one end may be shut at night. This will keep the birds from roosting on the nests. The narrow board by which the hens enter the nests allows their droppings to fall on the floor instead of accumulating to soil their feet and then the eggs. The removable board on the front of the nests makes them convenient to clean.

MORE EGGS WITHOUT MALES

Unmated Hens Not Worried and Retain More Energy to Be Devoted to Egg Production.

It has been quite well established by tests that hens kept separated from male birds will produce more eggs than those that run with the males. In one experiment five hens, five pullets and a cock were put in one pen and five hens and five pullets in another. All were of the same breed and were given the same care.

The experiment continued from January until September. The mated females produced 959 eggs and the unmated ones 972, a difference of 23 in favor of the unmated ones. In another experiment practically the same results were secured.

The theory is that unmated hens are not worried by the male and being more quiet retain more energy to be devoted to the production of eggs.

LOCATION OF CHICKEN COOP

Place it on High, Well-Drained Spot—Avoid Cool, Damp Air That Keeps Things Moist.

In locating a chicken coop, place it on a high, well drained spot. Soil that is well drained is less likely to become contaminated with disease germs.

Air drainage is as necessary as soil drainage, so the coop should not stand in a low place or pocket where cool, damp air settles and keeps things moist.

POULTRY AS INSECT HUNTERS

Fowls Will Pick Up Much Food When Turned Loose in Fields—Turkeys Like Grasshoppers.

The poultry that is turned loose in the fields these days will pick up a lot of valuable feed that will not cost you a cent. This feed, consisting largely of insects, makes valuable poultry feed in two ways, as it not only nourishes the poultry, but is thereby prevented from eating and otherwise destroying your crops.

Turkeys are especially fine insect hunters and are among the best hunters of the grasshopper.

CANDLE AND GRADE ALL EGGS

Farmer Cannot Afford to Produce Best and Take Flat "Case-Count" Price for Product.

Insist that your buyer candle and grade your eggs and that he pay a premium for "firsts" over "seconds." You cannot afford to produce the best and take a flat "case-count" price along with the producers of small, dirty, stale, inferior eggs.