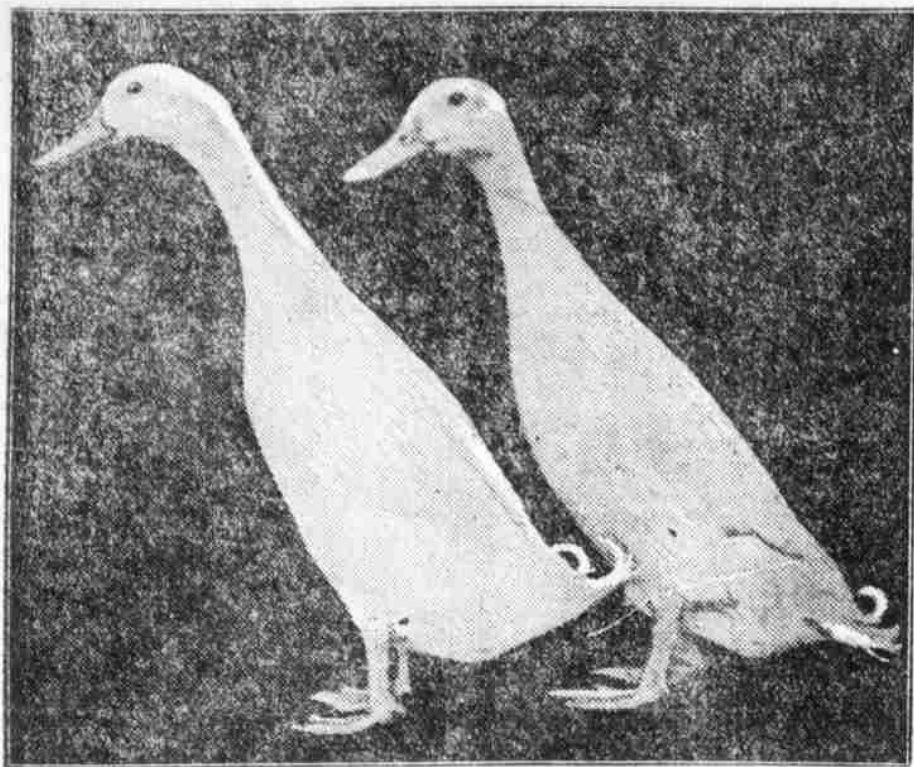


RUNNER ACKNOWLEDGED CHAMPION FOR EGGS



SPLENDID RANGERS AND FOES TO ALL INSECTS.

The runner duck has been aptly styled the Leghorn of the duck family, says a writer. If flesh is desired, there are other more satisfactory breeds, but this is acknowledged as champion for eggs.

The eggs are a third larger than those of the hen, and of fine flavor. The most noticeable difference is that the albumen is thinner.

The runner will thrive without running water, if it is supplied with drinking water in abundance, and this of sufficient depth to allow it to immerse the entire bill.

It is a splendid ranger, and a foe to all insect life. Especially does it enjoy getting into marshy ground, where it has a chance to fill up on the mosquito larvae or other insect life found in the mud and water.

On the other hand, it is the most easily penned in of all fowls, 18-inch poultry netting proving ample to keep it either in an inclosure or out of the garden.

If the breeding fowls are in healthy condition a 100 per cent hatch is not uncommon. We have always used hens for hatching, placing sod in the bottom of the nest before putting in the eggs, and sprinkling a day or two before due to hatch. Four weeks are required for incubation.

The nests must be ratproof, for this rodent has a special fondness for young duck, even a few days before it emerges from the shell. In fact, any of the poultry enemies appreciate that it is even better than chicken, and will devour the young birds unless they are guarded.

BROODY HEN PROBLEM

Considerably Lessens Productiveness of Farm Flock.

As Summer Advances They Become More Persistent and Seem Determined to Sit Anyway—Avoid Violent Measures.

The broody hen is a summer problem that, unless given constant attention, considerably lessens the productiveness of the flock. In the spring when the laying powers of the hens are at their height, it is a comparatively easy matter to break up the sitters, while as the summer advances they become more persistent. They may have been "broken up" two or three times, but late in the summer they seem bound to sit anyway. These remarks apply to such breeders as Reds, Rocks, Wyandottes, the kinds most universally kept on the farm. Mongrel flocks show this characteristic even more strongly. Lighter breeds like Leghorns seldom become broody.

It should be remembered that the broody hen is somewhat low in the scale of vigor, therefore no violent measures should be attempted, else the future production may be hindered. Such measures as throwing forcibly from the nest, "sousing" with water or even shutting up with a young cockerel are not the best methods. The object sought is to get the sitting idea out of the hen's head. This can best be accomplished by giving her an airy, comfortable coop where the opportunity to recline in a sitting position is lacking. To this end one man constructed a "jail" which is suspended from the limb of an apple tree, open at the sides but tightly covered at the top to keep out the summer showers. The bottom is also so constructed that perching is always necessary. Food and water are supplied by cups attached to the outside. In this airy, swinging "jail" the hen speedily forgets her vision of downy chicks to scratch for, and quickly regains her lost condition.

While the broodies are in jail they should be fed a ration calculated to give an abundant egg yield. Green food, fresh and appetizing, should be provided. A contrivance of this sort may be used at all times of the year, hanging it from the rafters of the house when the weather is too cold outside. Should a cold rain develop, even in the summer months, hens should not be allowed to remain exposed to it. The broody hen is in a condition to take cold more readily than her sister that is laying.

CAUSE OF WHITE DIARRHEA

One Infected Chick May Infect Entire Brood—Prevention Is Best Method of Combating.

White diarrhea is caused by the bacillus *Bacterium pullorum* with which chicks are often infected when hatched. The germs multiply very rapidly and one infected chick may infect the entire brood. Prevention is the best method of combating the disease. It should begin as soon as chicks are hatched. Intestinal antiseptics should be given to kill the germ. "Side" is one of the most potent and safe. It is recommended by the market that

CARING FOR LITTLE CHICKS

Weak Ones Should Be Separated From Strong and Kept by Themselves—Avoid Crowding.

When but a few days old, the weak chicks should be separated from the strong and kept in separate quarters. This should be done for two reasons: If kept together, the weak chicks will not get their share of food and will be knocked around by the strong ones. The weak chicks are more likely to contract disease which may be transmitted to the strong chicks.

A brood coop large enough for 50 chicks when just hatched will in a week or so become too small for them. Crowding chicks and running a large number in a flock is a losing game every time. When the chicks are two weeks old, no more than 25 should be kept in a flock. When many more than this number are kept in a flock, there is danger of the chicks piling on one another in feeding and hovering.

The floor of the brood coop should be sprinkled with dry sand or finely sifted soil or coal ashes. Wood ashes should not be used, since the moisture in the droppings will liberate the lye in the ashes which will burn the tender feet of the chicks.

When the chicks are two weeks old the brood coops should be cleaned out at least twice a week. Many practice daily cleaning, but if an additional bucket or two of sand is thrown on the floor of the coop each day, the coop can be kept in a good sanitary condition without daily cleaning.

GRASS CLIPPINGS FOR HENS

Poultry Flock Often Lacks Sufficient Green Feed With Consequent Loss of Eggs.

(From the United States Department of Agriculture.)

Grass clippings are an excellent green feed for chickens. The backyard poultry flock of a family often lacks sufficient green feed with a consequent reduction of egg and meat production. With the easy availability of lawn clippings the city poultryman can always have green feed through the summer for his chickens. The flock can be fed daily as much of the green clippings as they will eat. If any continued bowel trouble shows, the amount should be reduced. The remainder of the clippings can be allowed to dry and fed moistened during the time between lawn cuttings.

Amounts in excess can be dried for winter use. Dried grass clippings are a good green feed for winter. They can be dried and stored in sacks. These dried clippings, moistened and fed to the flock, are a very fair substitute for the succulent green feeds of summer.

SEPARATE PENS FOR FOWLS

Pullets and Hens Should Not Be Fed Together—Different Kind of Feed Needed for Each.

Pullets and hens should not be fed together; they should have separate pens. Have them as near the same age as possible. This makes it much easier to get uniform results, for pullets require different feeding than the hens. However, the separation of hens and pullets is not so essential with the lighter and more active breeds as with the heavier ones, as there is less tendency with the former to put on fat.

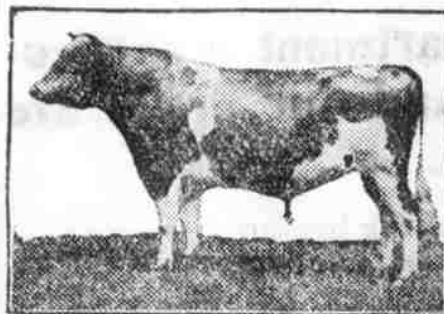
DAIRY FACTS

RECORDS WILL AID BREEDER

Dairyman Must Answer Various Questions Asked by Prospective Buyer of Herd Sire.

(By L. W. WING, JR., Missouri Agricultural College.)

The present sharp competition in the dairy business and the increased price of feed force the successful dairyman to secure the greatest return possible from his outlay. If he has registered cows he expects more for his progeny than if he had only grades. But to obtain more and enough more to pay to keep purebred stock, the dairyman must be able to answer the following



Superior Purebred Bull.

questions from the prospective buyer of a herd sire. Is the sire registered? What is the record of his dam? How many advance registry daughters and proved sons has his sire? And what are the records of his granddams and grandfathers? If the breeder is selling a registered cow he must answer: What is her record; the record of her dams and granddams and the ability of her sire and grandfathers to produce advance registry daughters and proved sons?

VALUABLE HINTS FOR DAIRY

Overfeeding Causes More Trouble Than Underfeeding—Make Change to Skim Milk Gradual.

(By H. H. KILDEE, University Farm, St. Paul.)

In rearing and developing dairy heifers:

- Don't overfeed. Twice as many calves are stunted by overfeeding as by underfeeding.
- Don't change suddenly from whole to skim milk.
- Don't keep calves in damp, dark, crowded, poorly ventilated barns.
- Don't feed milk in dirty pails.
- Don't be irregular as to time of feeding, temperature or amount of milk.
- Don't feed too much alfalfa hay before the calf is three months old.
- Don't let calves suck each other after drinking milk. They should be placed in stanchions and fed grain.
- Don't make calf go without water because it has had milk.
- Don't let calf drink foaming milk just from the separator.

MILKROOM IS A NECESSITY

Particularly Desirable in Warm Weather and Should Be Screened and Kept Clean.

A milkroom is a necessity in dairying, according to W. E. Tomson, instructor in dairy husbandry in the Kansas State Agricultural college.

A milkroom is needed at all times, but is particularly important in warm weather, pointed out Mr. Tomson. Milk must be kept away from flies. The room should be tightly screened and kept in a sanitary condition.

The milkroom affords good facilities for keeping the milk cool. This is essential because when the temperature of the milk is higher than 5 degrees undesirable bacteria that cause the milk to spoil in a short time are likely to develop.

GOOD TREATMENT FOR COLIC

Disorder Is Result of Feeding Materials Not Adapted to Stomach of Young Animals.

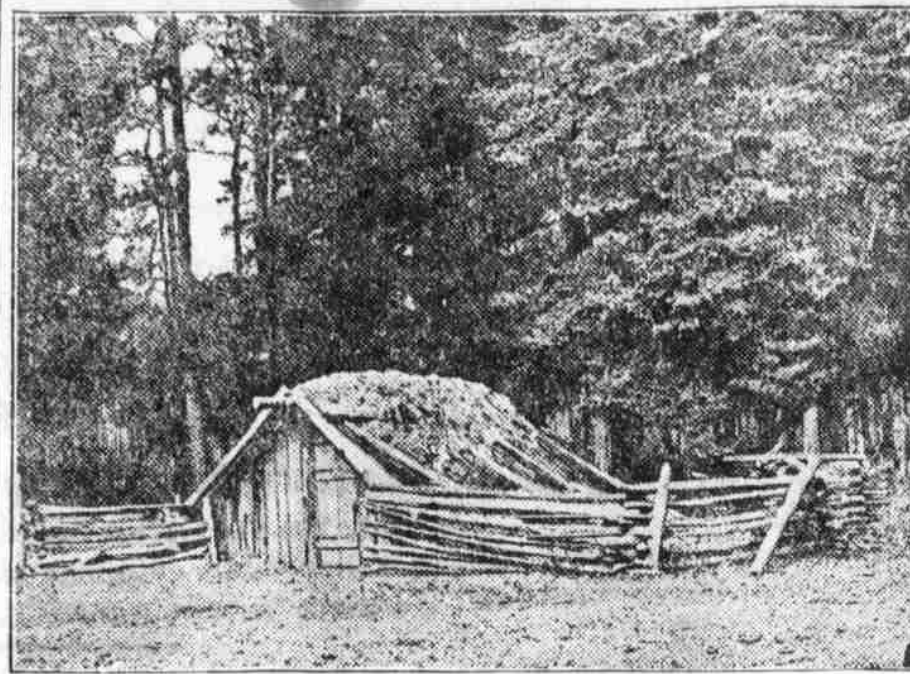
Colic in calves is the result of feeding materials not adapted to the undeveloped stomach of the young animal, or the feeding of the regular ration at unusual hours or in unusual amounts. The calf usually suffers violent abdominal pains, indicated by an unusual activity of the animal, frequent and continuous kicking, and, finally, complete prostration. Unless relieved within a short time, death usually follows. A standard treatment is to drench the calf at intervals of two hours with a mixture containing a teaspoonful of turpentine and a tablespoonful of raw linseed oil.

GIVE RIGHT AMOUNT OF FEED

Careful Feeders Study Individual Animals and Keep Them at Their Maximum Production.

Many careful feeders have their cows giving the most milk four or five weeks after the freshening time. They study the individual animals and endeavor to keep them at their maximum production by giving just the right amount of feed and no more.

STORAGE HOUSE BEST FOR SWEET POTATO



TYPE OF HOUSE USED IN ARKANSAS AND LOUISIANA.

(Prepared by the United States Department of Agriculture.)

Storage in regular storage houses is the only practicable method of keeping sweet potatoes on a commercial scale. A few crates of potatoes required for home use may be stored in the attic over the house kitchen.

Storage in banks and outdoor cellars has been the custom throughout the South for a great many years, but this type of storage is being rapidly replaced by house storage. Very few of the potatoes stored in banks or cellars are suitable for market, for those that do not decay make such a poor appearance and are of such poor quality that they are not desirable. The banks are not economical for storage because too much labor and expense are necessary every year to make them, the temperature and moisture in them cannot be controlled, potatoes cannot be taken from the banks when the weather is cold or the earth is wet, and potatoes from banks will decay very quickly upon removal.

A sweet potato storage house may be constructed of stone, brick, cement, hollow tile, logs, or lumber, but to secure the best results lumber should be used. The walls of cement, stone, etc., are always cold, and it is difficult to prevent them from becoming wet. It is also hard to prevent the collection of moisture in dugouts and cellars.

The cost of building a storage house will depend upon the kind of lumber used and its price and also upon the labor available. A 20 by 40 foot house will cost anywhere from \$150 to \$350. Many houses have been constructed of second-grade lumber, farm labor being used to do the work, and the cost has been very low. In many instances it has been possible to remodel an old tenant house, granary, or shed at little expense to make a very serviceable storage house.

House Construction.

The supports (pillars) for a house may be made of brick, cement, or blocks of wood, and should be at least 18 inches high and 12 inches in diameter. There should be three rows of these supports for a house over 15 feet wide, one row under each side of the house and one row under the middle. On these supports are placed the sills (8 by 8 inches) and across the sills are placed the sleepers (2 by 10 inches).

The walls of the house are constructed by setting 2 by 4 or 2 by 6 studding on the sills every 2 feet, and at the top of these are spiked the plates (4 by 4 inches). On the outside of the studding is nailed a layer of rough boards, laid diagonally to help brace the wall, and over these boards a layer of building paper, then the drop siding. On the inside of the studding are laid rough boards, then a layer of building paper, and over this a layer of matched lumber. The wall constructed in this manner consists of two air-tight walls enclosing a dead-air space. This type of wall is more satisfactory than a wall filled with sawdust or shavings, for these materials soon collect moisture and the walls decay.

The roof of the building is constructed in the same manner as any house roof, with rafters, rough boards over the rafters, then building paper, and last the roofing. This roofing may be sheet iron, roofing paper, or shingles.

The floor of the house is constructed by laying rough boards across the sleepers, then a layer of building paper is laid over the rough boards, and matched flooring is laid on the building paper. The matched flooring is usually laid crosswise of the house.

The ceiling is sometimes made by running 2 by 4 girders across on top of the eave plates and on the underside of these building paper and matched ceiling lumber are nailed. A much better ceiling may be made by nailing building paper and matched ceiling lumber on the underside of the rafters to about two-thirds of the way to the ridge of the house and then across on 2 by 4's, as mentioned above.

The windows for a storage house should be located about 2 feet from the floor, and they should open outward. Some of the windows should be of glass, so as to allow the entrance of light when needed without opening the house. All window openings, even those containing glass sash, should be fitted with well-battened shutters to protect the potatoes from cold and moisture.

Necessary Ventilation.

It is essential that a house be thoroughly ventilated when necessary, and for this purpose ventilators are constructed in the roof and openings made in the floor. The outlets through the roof may be constructed by nailing two 8-inch and two 10-inch boards to-

gether to form an 8-inch box. This box should extend from the inside ceiling of the house to about 18 inches, or 2 feet above the roof. The tops of the ventilator should be provided with a hood to keep out rain and the bottom with a cover so that the ventilator may be closed in cold weather. Every house over 20 feet in length should be provided with at least two ventilators. The openings through the floor should be 10 to 12 inches square and provided with a tight-fitting cover, so that they may be closed when necessary.

The bins for holding the potatoes should be constructed to allow as much circulation of air as possible. They should be set at least 6 inches away from the wall, and a space of 4 inches should be left between the bins and under the floor of the bins. The sides of the bins are formed by setting 2 by 4's upright and nailing across these 3 or 4 inch boards laid with an inch space between. The 2 by 4's between the bins are slatted on both sides so as to provide a 4-inch air space between bins. The floors of the bins are formed by laying two 2 by 4 scantlings edge-wise running lengthwise of the bins and nailing boards across these in the same manner as for the sides of the bins. The floor of the bin may be made in one or two sections, and if cut 2 inches narrower than the width of the bin and not fastened down it can be readily removed when it is desired to clean out the bins. The size and shape of the bins depend on the size of the house, but to get good air circulation the bins should not be over 4 feet in width.

The heating apparatus for a storage house usually consists of a cheap sheet-iron stove. Vitrified tile may be run through the roof of the house and the stovepipe run through the tile, thus lessening the danger from fire. Kerosene oil heaters are also being used with satisfactory results. In the more northern sweet-potato regions, where heat is required throughout the storage period, hard-coal stoves and hot-water heating systems are in common use, and the storage houses are usually provided with basements.

Management of the House.

After a house is a year old, it should be thoroughly cleaned and disinfected each year before being used. All dirt and decayed potatoes should be taken out, and the interior of the house, together with all harvesting baskets, crates, bin materials, etc., should be sprayed with a solution of copper sulphate, made by dissolving 1 pound in 25 gallons of water, or a solution made by dissolving 1 pint of formalin in 30 gallons of water. Repeat this spraying after about 24 hours.

A day or so before the storage house is to be used a fire should be started to dry it out thoroughly, and if the house is new the fire should be started several days in advance of the storage in order to drive the moisture out of the lumber used in the building. During the period when the potatoes are being stored and for 10 days or 2 weeks afterwards, a temperature around 85 degrees Fahrenheit, with plenty of ventilation, should be maintained. Even if it is not possible to secure 80 degrees Fahrenheit or above, the ventilators should still be left open, so as to allow the moist air to escape. During the curing period the windows and doors may be closed at night and on rainy days, but at other times they should be left open.

When the potatoes are thoroughly dried or cured the temperature should be gradually reduced to 55 degrees Fahrenheit, at which point it should be kept during the entire storage period. During the winter, if the temperature in the house should drop below 48 degrees Fahrenheit, a fire should be started or the house opened when the air outside is warm and dry. If the temperature should go above 60 degrees Fahrenheit, the house can be opened when the air outside is cool. Should drops of moisture appear on the walls or ceiling the fire should be started and the ventilators opened to allow the moisture to escape. The essentials in the proper management of a storage house are to keep it dry and to maintain a uniform temperature around 50 to 55 degrees Fahrenheit.

Success in storing sweet potatoes does not depend entirely upon successful storage methods. There are a number of sweet-potato diseases, notably black rot, stem rot, and foot rot, which may cause serious damage in the storage house. The elimination of disease should be closely coupled with good storage methods to give best results.

Girls! Use Lemons!
Make a Bleaching, Beautifying Cream

The juice of two fresh lemons strained into a bottle containing three ounces of orchard white makes a whole quart pint of the most remarkable lemon skin beautifier at about the cost one must pay for a small jar of the ordinary cold creams. Care should be taken to strain the lemon juice through a fine cloth so no lemon pulp gets in, then this lotion will keep fresh for months. Every woman knows that lemon juice is used to bleach and remove such blemishes as freckles, sallowness and tan and is the ideal skin softener, smoothener and beautifier. Just try it! Get three ounces of orchard white at any pharmacy and two lemons from the grocer and make up a quart pint of this sweetly fragrant lemon lotion and massage it daily into the face, neck, arms and hands. It naturally should help to soften, freshen, bleach and bring out the roses and beauty of any skin. It is simply marvelous to smoothen rough, red hands. Adv.

Bathe in Moonlight.

The pale moonlight that bathes each night the several hundred frame buildings at Fort Benjamin Harrison which house the student officers and the regular army men, shines also over the tents of two Indiana National Guard companies, the First Indiana field hospital and ambulance company No. 1. Late in the afternoon is bath time with the student officers, and with the regulars, and the bathhouses, one for each company, are about the busiest places at the fort, especially after a round of trench-digging. But the men of the field hospital don't care for bathing in the afternoon. Night time is the time for them. Their bathhouses are as open as the air, the bathing facilities provided consisting only of showers set up in the open back of their camp. So, late in the evening, guards are set out, and forms, pallid in the moonlight, emerge from the tents, run to the showers, shiver in the cold water, and bent a hasty retreat to the tents.—Indianapolis News.

ELIXIR BABEK WORTH ITS WEIGHT IN GOLD IN THE PHILIPPINES

"I contracted malaria in 1896, and after a year's fruitless treatment by a prominent Washington physician, your Elixir Babek entirely cured me. On arriving here I came down with tropical malaria—the worst form—and sent home for Babek. Again it proved its value—it is worth its weight in gold here."—Erasie O'Hagan, Troop E, 8th U. S. Cavalry, Balayan, Philippines.

Elixir Babek, 50 cents, all druggists or by Parcel Post, prepaid, from Kioezewski & Co., Washington, D. C.

Disproving a Theory.

The man who had a theory was expounding it. "Everybody is more or less of a poet," he said. "There's not a person on earth, and there never has been a person who hadn't a spark of divine affluence. It's only a matter of degree of inspiration of power to express, that makes the difference." "I disagree with you," put in an auditor, positively. "There was one man who couldn't have been a poet." "Who was that, may I ask?" "Adam." "How do you make out that Adam couldn't have been a poet?" "Why, that's simple. Poets are born and not made."—Cleveland Plain Dealer.

Little Bodily Energy in Potatoes.

A pound of potatoes yields hardly one-fifth as much body energy as a pound of rice, cornmeal, or wheat. This is partly because they are much more watery and partly because a large portion is discarded with the skins. Part of this loss is inevitable because the skin itself is not usually considered good to eat; but the more carelessly potatoes are pared, the more of the valuable edible substance goes with the skin.

Force of Habit.

"I want three eggs and boil them three minutes. I am hungry—how soon can I have them?" "In a minute, sir."

Always fresh and crisp!
Post Toasties
 are real corn flakes!
 SAYS Bobby