CHICKENS FOR PROFIT

Variety Selection One Must Be Governed to Great Extent by Market Demand is Important.

In making the selection of breed, one must be governed somewhat by the market. Birds that sell best on the block should be medium in size, plump condition, with yellow skin and legs. Most all our American breeds have these requirements, and by careful selection at breeding time one can build up a profitable laying strain from this class of birds, such as the Plymouth Rocks or Wyandottes.

The common practice of breeding from the flock as a whole has done more harm than anything else in making the flock unprofitable as egg producers. Breeding from birds that produce but one or two clutches of eggs during the year will produce birds of like nature, and breeding a sire that has not the laying quality and characteristics bred in him cannot but help to make the situation worse.

The success with egg production must begin with breeding. When you have a hen that will lay a large number of eggs each month during the winter, breed from her. The trait of superior egg production is a habit that may be acquired and transmitted. A hen whose ancestors were poor layers cannot be expected to be a good layer. No amount of coaxing or cod-dling with mash or feed will induce her to produce an unusual number of eggs, because the trait of superior egg production was not developed by her ancestry and could not be passed on to be transmitted to her.

The selection of the male is the head the flock should not be neglected. He should have been bred from productive ancestry. The male is half

Plymouth Rock.

the flock, and if his dam and granddam were good producers, he should be worth much more as a sire than those whose dam produced only a limited number of eggs.

He should have a good constitution, showing short beak, broad head and bright eye, neck short and stout, breast of good width carried well forward and of fair depth. The mating of such a sire to a flock of hens bred from laying ancestors cannot but help to give good results with proper feeding and housing.

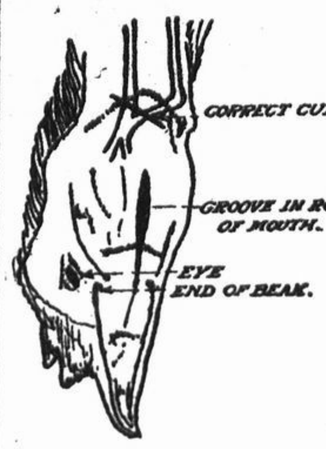
The breeding pen should be yarded separate from the whole flock, selecting for this pen only the very best egg producers, and this should be done each year. One male with 10 to 12 females will give best results ... eggs will be of stronger vitality ... incubating purposes. The breeding ... should be well cared for. ... roomy, well lighted ... The quarters ... clean and ... grain feed. ... is ab-

POULTRY

MANNER OF STICKING FOWLS

Common Pocket-Knife, With Medium-Sized Blade, Makes Excellent Instrument for Operation.

When the market calls for a bird to be bled, the best plan is to stick it in the mouth; and by so doing avoid the unsightliness so common where they are backed about the throat. Using this method, one should first of all have a stout cord



Where to Stick a Bird.

fastened to the ceiling, with a two-pound weight attached to the lower end. This should be just high enough to hang the bird to be picked at a convenient height. The weight is used to save tying a knot each time; as all that is necessary is to wind the string around the bird's legs, and the weight will hold it securely. Use a box or barrel to catch the feathers; and a small paint-can, with a hook fastened to the handle, is hooked into the bird's mouth to catch the blood and prevent its soiling the feathers. It requires very little practice to kill the birds in this manner. After the bird is hanged by the legs, cross the wings at the back and grasp the head in the left hand, the back of the head in the palm; and, with the end of the second finger, hold the mouth open; then, with the knife in the right hand, make a diagonal cut across the roof of the mouth, just where the arteries enter the head. Then, with the point of the blade, pierce the brain in about the middle of the roof of the mouth, which will loosen the feathers. The moment the operation is finished, the bird should be plucked, as the cooling of the body makes the feathers harder to pick. A common pocket-knife, with a medium-sized blade, makes a good instrument for sticking.

DUST BOX FOR WINTER USE

Combination of Hard Coal Ashes and Powdered Tobacco Stems Keeps Hens Free From Lice.

Thinking the hens did not use their dust bath as much as they ought, and believing the reason for this to be because the dust material was so cold, we changed conditions in this way. A dry goods box three feet long, twenty inches wide by eighteen inches deep was obtained, says a writer in the Homestead. The bottom boards were removed and a new bottom nailed on, which was one-fourth inch thick. Another box, just enough larger to allow the first to slip inside easily, was next found. This was placed in the sunniest spot in the hen house and filled to within four inches of the top with fresh horse manure. On top of this the smaller box was set and filled to

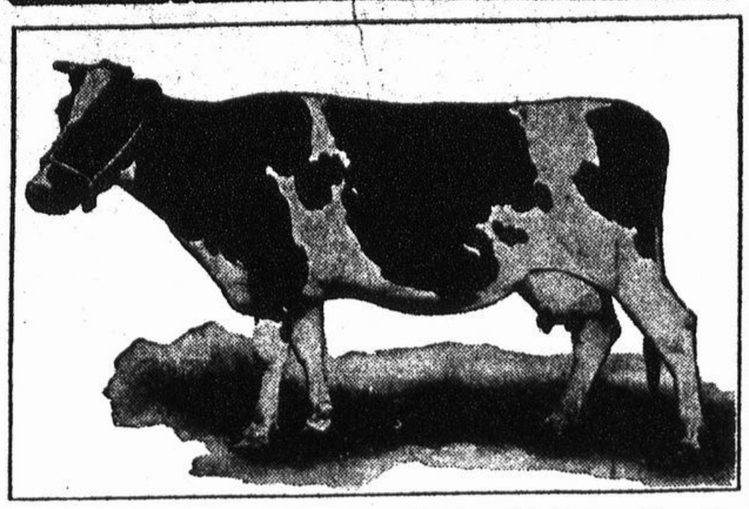
...t Box.

... top with ... some pow- ... a short ... and the ... have ... due, ... h

Greater Farm Efficiency

Cows That Make Most Money

By PROF. G. C. HUMPHREY, Wisconsin College of Agriculture



The Dairy Cow Must Have a Tendency to Produce Milk Rather Than to Lay on Fat.

A dairy cow is one of the specific dairy type and breed capable of making a large and economical production of milk and butter fat. A careful study and analysis of this definition and its application to cows whenever one has opportunity to apply it will greatly aid in getting in mind the correct ideal of the dairy cow and in judging and buying cows.

"Type" refers to the conformation of an animal and is indicative of utility. "Specific dairy type" refers to an animal having a large, deep barrel, a prominent, well developed udder, and sharp, clean cut features about the head, neck, shoulders, back, hips and rump, due to the absence of thick flesh. Such a type indicates dairy utility and that she is of little value except for milk production.

The dairy cow must be of distinct dairy breed as well as of dairy type; otherwise she may convert her feed into flesh rather than milk and thus result in a beef animal. The National and International dairy shows of this country recognize the Holstein, Guernsey, Jersey, Ayrshire, Brown Swiss, and Dutch Belted breeds of cattle as distinct dairy breeds. High grade and pure bred animals of these breeds are found in this state and rank in number in the order named. Pure bred animals possess 100 per cent. of the blood of their respective breeds while the grade animals have a predominance of the blood of a given breed but less than 100 per cent. Grade cows are generally by pure bred sires and out of native or grade dams.

A large production of milk and butter fat is a necessary requisite for a dairy cow. The production for at least a year should be taken into consideration because some cows make a large production during the early part of their lactation and then dry off soon. It is characteristic of beef cows and of many poor cows of the dairy breeds to dry off soon. A strictly dairy cow tends to make a large and economical production of butter fat throughout her life time which means that she converts a comparatively large amount of the feed that she eats into milk and butter fat, and only a small portion of it into building up the tissues of her body. A dairy cow shows marks of dairy breeding and constitution; and not only produces milk and butter fat in large and economical quantities but also at regular intervals progeny which tends to be satisfactory for dairy purposes.

Essential Features of the Dairy Cow.

The dairy cow is a living machine which, when in perfect health and form, has four prominent features. These are: a body indicating a large, strong digestive capacity, a dairy temperament which is nervous and results in milk production rather than flesh production, a large well developed udder of healthy gland tissue, and a strong circulatory system that distributes the blood actively to all parts of the body and gives vigor, health, and activity. A cow usually fails in the production of milk as she fails in one or more of these essential features. Each part of the body bears some relationship to one or more of these essential features and enables one to judge of their prominence. Where one is able to consider all the parts of the body and judge these essential features he is not likely to err seriously in his judgment.

Digestive Capacity.—A large body, more especially the barrel in proportion to the size of the animal, is indicative of capacity. The body of the dairy cow should be wedge shaped as viewed from front, side and top. That ... wider at the hip points and be-...een the fore legs than at the with- ... and deeper from the hip points ...he lower line of the rear flank ... at the fore quarters. This char- ...r of the body has led to the term, ...e-wedge-shaped conformation, and ...iving consideration to the di- ... capacity of the cow one should ...ber that it is the base ends of ...dges, rather than the sharp ...hich indicate her capacity. ...well sprung ribs, openness of ...width of back over loins, size ...rel, depth and width between ... and fullness of rear flanks ...s to indicate large digestive ... wide forehead and a com- ...ng face are indicative of ...d capacity of the body ... broad muzzle, good ... nostrils, silvery hair ...

The tail is often measured in judging the cow and should reach to or below the hocks and carry a good switch. This renders it most useful in brushing flies, which appears to be its chief purpose.

In judging the quality and condition of the muscular tissue of the body one should remember to take into consideration the size, age, and stage of lactation of the animal. The bone and muscular tissues in a large cow are naturally heavier than in a small one and there is not the apparent refinement and spareness of form in the large breeds that is noted in the smaller ones. Marked coarseness, however, in any animal is usually accompanied by a sluggish disposition which in a dairy cow prevents her from performing satisfactorily. Young heifers with first calf usually carry more flesh than cows of mature form. All properly fed cows usually show a higher condition of flesh development toward the close of their lactation and prior to freshening than they do when four or five months advanced in lactation.

The Udder.—The udder is the milk secreting organ and its proper development is, therefore, essential. In many instances cows of large digestive capacity and of dairy breeding have failed in production apparently on account of poorly developed udders. The udder consists of two large glands, each of which is more or less distinctly divided to correspond with each of the four teats and form the quarters. The duct of each teat enters a small cavity termed the milk cistern. The milk cistern of each quarter is more or less surrounded by lobes of gland tissue held in position and closely together by connecting tissue. These lobes may be likened to thick bunches of grapes since each lobe has several lobules corresponding to the grapes. The lobules are made of small divisions called alveoli which correspond to the seeds of grapes. These alveoli are constructed of small cells surrounded by a fine network of blood vessels and nerves and it is by these cells that the milk is secreted.

The best cows have comparatively large udders with equally developed quarters extending well forward underneath the body and a good distance up behind and between the thighs. Poor attachment giving a swinging or pendant type of udder and deficiency and irregularity in the development of the quarters are criticisms to be offered on many cows. The quality of the udder should be examined by handling should reveal gland tissue of fine, plastic texture rather than fatty tissue or a texture that is coarse and hard.

The Circulatory System.—This system determines the activity of the cow with respect to all parts of the body. Only when in perfect health and all parts of the body are actively performing their respective functions can the dairy cow be expected to yield a large flow of milk. When the cow is sick or by virtue of her poor individuality is dull and morbid there is an inactivity of all the glands of the body resulting in a dry, harsh condition of the skin, a staring coat, and a low production of milk. The circulatory system includes the heart, lungs, arteries and veins since these organs respectively force, purify and carry blood to and from all parts of the body. When food becomes digested and assimilated the blood must carry it to the parts of the body demanding it and in the dairy cow the glands of the udder demand a large share of the nourishment of the blood for the secretion of milk. The size and character of the milk veins, more properly termed "mammary veins," and the milk wells on the underside of the body are the best indications of how much blood passes through the udder. These veins do not carry milk as some people believe, but carry a large portion of the blood away from the udder. The blood passes into the udder through arteries located deep on the inner side of the thighs. If one were standing below a mill propelled by a water wheel and noted the race filled with water from the mill he would have reason to believe that the mill was in operation and performing its work. Likewise when one observes large, branching mammary veins entering the body through wells of sufficient size, to avoid a vein becoming gorged he has reason to believe that the udder is performing its work well.