Lot 3—Kafir alone, $4.00.

Lot 4—Kafir and alfalfa pasture, $4.05.

Armour Packing Company made a careful slaughter test and report as follows :

SLAUGHTER TEST.

Lot 1—20 hogs fed on Kafir corn, skim-milk, and alfalfa pasture, live weight 3,770 lbs., yielded 80.53%. When cut out the flesh showed a good firm condition ; nice white fat and better proportion of fat to weight of hogs than in any of the other three lots. The distribution of lean and fat in bellies not so good as in lots 2 and 4.

Lot 2—20 hogs fed on Kafir corn and skim-milk, live weight 3,700 lbs., yielded 81.17 per cent. When cut out showed conditions of flesh same as in lot 1. One hog in this lot showed fat very yellow, others good white color. Proportion of fat to weight of hogs not so good as either lot 1 or 4 ; distribution of lean and fat in bellies better than in lots 1 and 3.

Lot 3—20 hogs fed on Kafir corn alone, live weight 3260 lbs., yielded 80.30 per cent. When cut out showed flesh very irregular and rather soft ; color of fat about the same as in the other lots but softer. Neither the proportion of fat to weight of hogs or distribution of lean and fat in bellies as good as any of the other lots.

Lot 4—20 hogs fed Kafir corn and alfalfa pasture, live weight 3.340 lbs., yielded 81.05 per cent. When cut out showed condition of flesh firm, not quite up to lots 1 and 2, color of fat good, proportion of fat to weight of hogs not so good as lot 1, better than lots 2 and 3 ; distribution of lean and fat in bellies better than lots 1 and 3, about the same as lot 2.

They are also following the lots through various other tests, including the curing, and will test the cured production in their restaurant, a report of which will be made later. It is very gratifying to know that the large packing companies take such an interest in this work, and with their aid the experiment station can hope to accomplish a great deal in the line of experimental feeding.

A bulletin containing a full account of this experiment and five others—in all 250 head of hogs, will soon be published, and any one who does not receive the Kansas Experimental Station Bulletins should send his name to the Agricultural Experimental Station, and have it placed on the mailing list.

PRESS BULLETIN, KANSAS EXPERIMENT STATION.

The Egg Type Hen

The egg-shaped hen is the one most desired by all practical poultrymen, and to be able to determine just what that shape is, when running through the various breeds, requires no little judgment. It is much easier for me to pick out the hen of the desirable shape than to describe her, but when one has the form well in mind he can select with accuracy the prolific hen of any breed. A hen with a long, deep body, carrying the tail well up, presenting a wedge-shaped appearance when viewed from the back or front, will usually be found a good layer, although she may not be a winter layer. This last trait, I believe, must be bred into them. They must have that inherent instinct, produced by generations of careful breeding, that induces them to lay in cold weather. Then, too, the food must be such as will supply the warmth and waste of the body and leave ample material to produce the eggs.

In the Leghorn we find more hens of the perfect egg-shape than, perhaps, in any other breed, although as a general thing they are not a winter laying fowl. Some strains are, when given the care and conditions necessary to make them so. But in nearly every flock of Leghorns there are enough of the laying type to give the breed the reputation of being the greatest layers.

The Plymouth Rocks, as they should be bred, have the desired egg-shape, but of late some fanciers have overlooked form, giving their attention solely to color. Others have aimed at securing fowls of great weight, and have bred short, compact bodies of the Cochin shape. Among such fowls it will be hard to find very great productiveness, and to such an extent are birds of this class bred that the breed has been given a third or fourth place as layers. The shape given in the Hewes chart gives the correct type of an egg-producing hen of this variety, and when bred to this shape they will have no peers as layers, if not too heavy in weight. Rocks should never be above standard weight to be prolific. In fact, I believe the standard gives them a greater weight than they will stand for general utility purposes.

In the Brahmas, Langshans, and Javas, and in fact in all breeds, we find this same egg-shape, though somewhat modified or varied, and in the same breeds we find fowls that are utterly useless as layers. To breed a heavy laying strain it will be necessary to select the hens of the desired type year after year, and if winter layers are desired, to make a further selection from these egg-type hens of those that are productive during the colder months. Some will lay in winter and some will not, so only those that do should be used as breeders. Some fanciers will tell you that hens that have laid all winter are not in a condition to breed from in the spring ; that the eggs will not be as fertile nor the chicks as strong. This I know to be a fallacy. If the fowls are not mated until within a week or two of the time you desire to use the eggs for incubation the eggs will produce just as strong chicks as though they were the first of the clutch. But the better plan is to breed from old hens that as pullets were known to be good winter layers. An old hen will not produce as many eggs during the cold weather as a pullet, and if there is anything in the theory that continued laying weakens the offspring you will thus avoid it.

The reason that a hen does not lay as well the second season is because she is more inclined to lay on fat, is fed less to keep her in laying condition, and consequently does not have the material wherewith to form the egg, her organs become relaxed and the egg yield grows constantly less. I do not believe it is possible to keep old hens in a condition of productiveness equal to pullets, but I do believe that their usefulness can be prolonged, and that they can be made profitable to the second and even the third year by careful management. We must work the fat off and feed only such foods as will keep the body in a healthy condition and furnish the proper material from which to form the egg. Old hens require more animal food than growing fowls and pullets. This may seem a strange assertion, but observation has convinced me of the fact. Green bone, though fattening, is also a physic and has to be fed with care to young fowls, but it does not harm an old hen to give her a plentiful supply. We must keep the fat from forming on the intestines. Animal food, peas, beans, clover, wheat, bran and foods of this character will do this, while giving abundance of material for egg production.—*L. E. Keyser in Reliable Poultry Journal.*

Grass in Orchards

It is customary among farmers who set out new orchards of young fruit trees to cultivate them pretty thoroughly while small, generally planting corn or potatoes as often as possible, as these afford opportunities for cultivating the surface most of the growing season. But as the trees grow larger the apparent profit from cropping the young orchard lessens very rapidly. Under the shade of trees in full leaf neither corn nor potatoes will do their best. Usually the orchard is cropped with grain between the hoed crops, and it is sometimes seeded with clover or with the grasses. This is always a severe check to the young trees. It often starts them to bearing, the check to growth being nearly always accompanied by the formation of fruit buds. So soon as the trees get to bearing, most farmers give up cropping the orchard, and if not seeded before, it is at once seeded with both clover and grass. But if the grass is