

# FARM STOCK

## START BABY BEEF ON GRAIN

Provide Creep in Pasture So That Young Animals Will Not Be Disturbed by the Cows.

A creep should be provided in the pasture so that calves may have access to grain without being disturbed by cows, as it is very important to start beef calves on grain before they are weaned. They may be kept in a separate lot into which the cows are turned twice a day, if this method is preferred. In this case there will, of course, be no need for creeps or anything else to keep cows from the



Excellent Beef Specimen.

grain which may be fed at such times that the cows will not disturb the calves.

The calves may be started on a mixture of two parts of shelled corn to one part of oats by weight. The oats may be gradually reduced until none is being fed at the end of eight weeks, but while this is being done a little old process linseed oil meal or cotton seed meal should be added and the quantity gradually increased until it makes up about a seventh of the weight of the ration. On full feed calves should eat about two pounds of grain for every hundred pounds of live weight in addition to good roughage. Well-bred calves handled in this way should be in prime condition at the end of about 10 or 12 months.

## DIPPING TO ERADICATE TICK

Parasite Probably Does Less Damage Than Either Mite or Louse—Tobacco Dips Are Favored.

Of the commoner external parasites attacking sheep, the tick probably does less real harm than either the mite or the louse. The illustration shows a greatly enlarged figure of the sheep tick. This pest is not easily killed by



Adult Sheep Tick.

the lime and sulphur dips frequently used, but is killed very readily by any of the standard strength tobacco dips, extracts or solutions. The tobacco dips are in general use, as they will kill all the commoner types of external parasites without injury to the animal or the wool.

## CHEAPEST GAINS ON PASTURE

Result of Trials Conducted at North Dakota Station—Animals Need Some Grain.

Pigs make the cheapest gains on pasture. Trials at the North Dakota experiment station indicate that brood sows running on good pasture and nursing litters will do as well when receiving one to 1 1/2 pounds of grain per each 100 pounds live weight of sow, as sows in dry lot receiving 2 1/2 pounds grain per day per each 100 pounds live weight. The pasture just about cut the feed cost in two. The pasture alone does not furnish enough feed for either the brood sow with litter or for the weaned pigs. They should be fed some grain, so as to make a rapid growth. In this way the spring pig can be ready for market before real cold weather sets in.

Alfalfa, clover, bromus and winter rye make the earliest pastures. When these have not been provided early spring seeding of such grains as oats and barley or rape are the next best thing.

# WORK DONE BY TWO SUCCESSFUL BREEDERS IS MOST INTERESTING

Result Gained Is Secured by Practical, Near-Conservative Methods and Continuous Faith in Live-Stock Husbandry—Silos Are Important Feature of Improvements—Neatness and Order in Farm's Appearance Is Valuable Asset—Shorthorn Is Favored.

(By G. H. ALFORD, State Farm Demonstration Agent, Maryland.)

A study of the methods of any successful man or firm has more than a passing interest. The career of Tomson Brothers, Shorthorn cattle breeders, Dover and Carbondale, Kan., offers an instructive illustration of success attained along purely practical lines. Spectacular features such as attach to blooded stock breeding operations occasionally, have been few and far between. This has been a steady, even course, for the most part, but continuously in the forward direction.

In 1883, their father, T. K. Tomson, a Kansas pioneer of modest means, purchased a farm in the Mission Creek valley, a few miles out from Topeka, the capital city. The farm had been in the hands of tenants for years. The land was foul, the soil depleted. One field had grown corn for a period of nearly thirty consecutive years and the maximum yield rarely exceeded thirty-five bushels per acre. Mr. Tomson being a stockman by instinct and practice, began a plan of crop rotation and since then all of the crops grown on the farm and a considerable amount purchased from the neighbors, were fed chiefly to cattle on the farm and the fertilizer spread on the fields.

**Success With Grasses.**  
Tame grasses, timothy and alfalfa were introduced with increasing success. The field just referred to produced alfalfa for a period of ten years and was then broken up and planted again to corn. The first crop averaged between 90 and 100 bushels per acre. Another field sowed to clover, timothy and blue grass remained unbroken for 21 years, when it was again planted to corn. The first and second crops that followed made a yield similar to that just mentioned. The practice on this meadow, chiefly from necessity, was to allow the stock to pasture it until near the first of May and again during the fall. This late season pasturing had the effect of scattering the seed from the

prevalent and is regarded as the best of all grasses in season. It has been the practice to feed more or less tame hay in these native pastures where the grass had become thin and in this way the seed of the several tame varieties was scattered and many thin spots were set to tame grass, bluegrass naturally predominating. This plan resulted in lengthening out the pasture season, for prairie grass is only available from around May 1 until the first frost in the fall, whereas the tame grasses come earlier and continue later.

In the fall of 1887, a neighboring farmer who had bred a superior class of grade Shorthorns made a draft sale and included in the offering a registered Shorthorn cow which he had for slightly above the prevailing prices for grade females and in this selection purchased with a bull calf at foot at a Kansas City sale, with a view to obtaining a cheap herd bull. Mr. Tomson purchased this cow at the foundation of one of the best-known Shorthorn herds in the middle West was laid. Her next calf, a heifer, was of such attractive type and quality that T. K. Tomson and his sons definitely decided to purchase more registered females. A number were secured that year and later a well-known sire, Imp. Thistlefoot, bred by Amos Cruickshank in Scotland, was placed in service. He was somewhat advanced in years and was therefore available at a nominal price. He was kept in service several years. His daughters retained in the breeding herd were large, roomy, well-fleshed cows, a trifle prominent at the hips, but useful breeders. A small advertisement was placed in a standard agricultural publication in the hope of interesting prospective buyers from outside the local community, a hope that was readily realized.

The firm of T. K. Tomson & Sons became widely known under the active management of the junior members, who, in later years, succeeded to the ownership. They added well-bred females from time to time at modest

While the course of economy followed was a safe one, controlled largely by limited finances, yet Tomson Brothers are of the opinion now that they would have made large profits had they invested several thousand dollars in fashionably bred females for breeding purposes earlier in their operations. They did acquire them eventually, but they feel that they lost considerable time by not launching out earlier. They recognize, however, that the best successes in cattle breeding are made by men who grow with the business from a small beginning and learn each step by actual experience.

**Basis of Improvement.**  
During these years constant attention has been paid to farming methods. The use of tame grasses and barnyard manure is the basis of their soil improvement. The profits from year to year were invested in land and such improvements as were necessary. The original holdings of 255 acres have increased to 1,100 acres, and the improvements have been greatly enlarged and modernized. The farms have long since been nominally



Grass Is Abundant and So Are Calves.

free from weeds. Alfalfa, blue grass clover and timothy now abound in their stead. The soil has steadily increased in producing power.

The Shorthorn herd numbers over 200 head of the richest lines of breeding and is recognized among beef cattle authorities as one of the best individual herds in the entire country. This is the direct result of careful, patient, intelligent management and not any considerable expenditure of money.

While the breeding herd is of the beef type, the good milking females are given preference, for experience has shown that they are usually more reliable and useful producers. It is generally regarded that hogs should be a part of the farm's live stock. The Tomson farms are not exactly an exception, for a few are raised each year, but the number is small and experience does not encourage them to increase the number. The farms are devoted almost wholly to Shorthorns, for it has been observed that if there is room for more stock, that more Shorthorns best fit into the working plan.

On one of the Tomson farms, the main buildings are in the center of a 520-acre tract. Eight pastures open out from the barnyards, a most convenient arrangement. The herd is divided chiefly as to ages in the several pastures, most of which are in view from the highway. This plan has proven an effective means of advertising and lends an attractiveness to the farm that would otherwise be lacking. The pastures are skirted by native timber, providing ample shade and adding to the beauty of the landscape.

**Valuable Asset.**  
Neatness and order in the farm's appearance is regarded as a valuable asset. Silos are an important feature of the improvements. Automobiles are a necessary part of the equipment. The whole achievement is based upon safe, practical methods and the intelligent use of good blood, good seed and crop rotation. The farms today have more than doubled the producing power they had twenty years ago. With these methods continued what will the producing value of their acres be in the next twenty years?

The accomplishment of Tomson Brothers is one of the most interesting and instructive within our knowledge, considering it is the result of practical, near-conservative methods and a continuous faith in live-stock husbandry. With the improvement of the farm and herd, Tomson Brothers have grown in influence. John R., the senior member, is director and vice-president of the American Shorthorn Breeders' association, the strongest organization of its kind in America. Both he and the junior member, James G., are recognized as expert cattle judges and their services in this capacity are in demand in leading shows from Chicago to the Pacific coast. The third member, Frank D., has been conspicuously identified with the agricultural press for a decade and more.

**Cure and Prevent Thumps.**  
Exercise in the open will cure and prevent thumps. Growthy, active pigs never have thumps.

**Fattening Beef Cattle.**  
Corn silage is a better and far cheaper feed for fattening beef cattle than cottonseed meal and milk.

**Silencer for "Choo-Choo."**  
Hartford, Conn.—Hiram P. Maxim is ready to equip noisy switch locomotives with a "silencer" which will quiet the "chug-chug" exhaust of an engine.

**Cheese Closes School.**  
Summit, N. J.—Limburger cheese spread on the radiators by five boys resulted in the closing of the Short Hills high school for the day.

There are over 50,000 aviators in the world.

## POULTRY EXPERTS OFFER SUGGESTIONS



Artificial Incubation—Chicks Just Hatched.

(From the United States Department of Agriculture.)

Brooding with hens is the simplest and easiest way to raise a few chickens and is the method which is used almost exclusively on the average farm. Artificial brooders are necessary where winter or very early chickens are raised, where only Leghorns or other nonsitting breeds of poultry are kept, or where large numbers of chickens are raised commercially. Sitting hens should be confined to slightly darkened nests at hatching time and not disturbed unless they step on or pick their chickens when hatching. The eggshells and any eggs which have not hatched should be removed as soon as the hatching is over. Hens should be fed as soon as possible after the eggs are hatched, as feeding tends to keep them quiet; otherwise many hens will leave the nest. In most cases it is best that the hen remain on the nest and brood the chicks for at least 24 hours after the hatching is over. All the chickens should be toe-punched or otherwise marked before they are transferred to the brooder or brood coop, so that their age and breeding can be readily determined after they are matured.

**Use Insect Powder.**  
Hens will brood successfully 10 to 15 chicks early in the breeding season, and 18 to 25 in warm weather, depending upon the size of the hen.



Brood Coop.

Powder the hen with a good insect powder before moving her and the chicks to the brood coop. The hen should be dusted every two weeks or as often as necessary until the chickens are weaned. If lice become thick on the chickens, or if they are troubled with "head lice," a very little grease, such as lard or vaseline, may be applied with the fingers on the head, neck, under the wings, and around the vent.

Brood coops should be made so that they can be closed at night, to keep out cats, rats, and other animals, and enough ventilation should be allowed so that the hen and chicks will have plenty of fresh air. The hen should be confined in the coop until the chickens are weaned, while the chickens are allowed free range after they are a few days old.

**Keep Brood Coops Clean.**  
The brood coop should be cleaned at least once a week and kept free from mites. If mites are found in the coop, it should be thoroughly cleaned and sprayed with kerosene oil or crude petroleum. From 1 to 2 inches of sand or dry dirt or a thin layer of straw or fine hay should be spread on the floor of the coop. Brood coops should be moved weekly to fresh ground, preferably where there is new grass. Shade is very essential in rearing chickens, especially during warm weather; therefore, the coops should be placed in the shade whenever possible.

Chicks are usually left in the incubator from 24 to 36 hours after hatching, without feeding, before they are removed to the brooder, which should have been in operation for a day or two at the proper temperature for receiving the chickens. A beginner should try his brooding system carefully before he uses it. After placing the chickens in the brooder they can be given feed and water. Subsequent

loss in chickens is frequently due to chilling received while taking them from the incubator to the brooder. They should be moved in a covered basket or receptacle in cool or cold weather.

### Brooders and Hovers.

The capacity of brooders and hovers is often overestimated, and one-half to two-thirds of the number of chickens commonly advised will do much better than a larger number. The danger from fire, due frequently to carelessness and lack of attention, is considerable in cheap brooders and hovers, while there is some risk in the best grades, although proper care will reduce this to a minimum. Individual hovers in colony houses or several in one large house are giving quite general satisfaction on small poultry farms, while the pipe system of brooding is commonly used in large commercial poultry plants and where extensive winter brooding is done. Gasoline brooders, brooder stoves burning engine-distillate oil, and a separate individual hover heated by a coal fire are coming into more general use, each with a capacity varying from 200 to 1,500 chickens. These large individual brooders are used in colony houses, and when the chickens are weaned the colony house is used as a growing coop, which requires a smaller investment than the long, piped brooder house and allows one to rear the chicks on range to good advantage.

### Best Temperature.

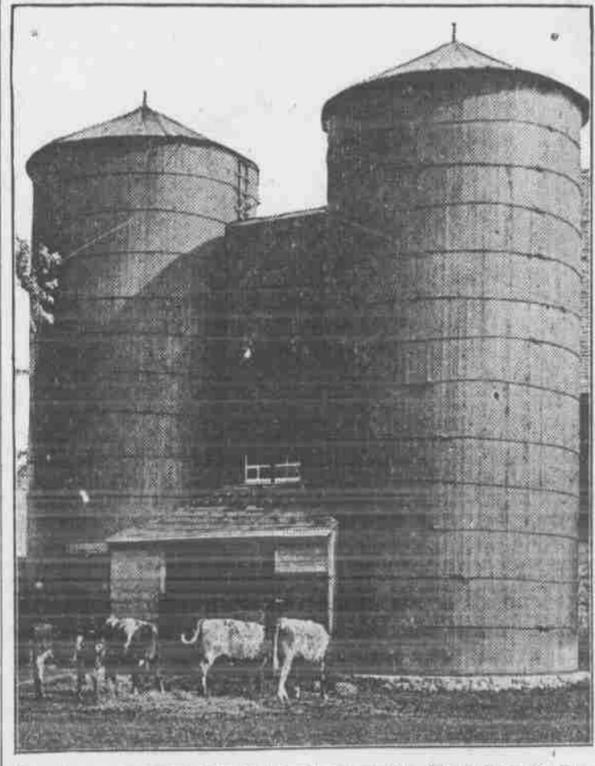
The best temperature at which to keep a brooder or hover depends upon the position of the thermometer, the style of the hover, the age of the chickens, and the weather conditions. Aim to keep the chickens comfortable. As the operator learns by the actions of the chickens the amount of heat they require, he can discard the thermometer if he desires. When too cold they will crowd together and try to get nearer the heat. It is impossible to state for each case at what temperature the brooders should be kept to raise young chickens; however, it will run from 90 degrees up to 100 degrees in some cases, as some broods of chickens seem to require more heat than others, an average being 93 degrees to 95 degrees for the first week or ten days, when the temperature is gradually reduced to 85 degrees for the following ten days, and then lowered to 79 degrees or 78 degrees for as long as the chickens need heat.

### Feeding Young Chicks.

Young chickens should be fed from three to five times daily, depending upon one's experience in feeding. The young chicks may be fed any time after they are 36 to 48 hours old, whether they are with a hen or in a brooder. The first feed may contain either hard-boiled eggs, Johnnycake, stale bread, pinhead oatmeal or rolled oats, which feeds or combinations may be used with good results. Feed the bread crumbs, rolled oats or Johnny cake mixtures, moistened with water, five times daily for the first week, then gradually substitute for one or two feeds of the mixture finely cracked grains of equal parts by weight of cracked wheat, finely cracked corn and pinhead oatmeal or bulled oats, to which about five per cent of cracked peas or broken rice and two per cent of charcoal, millet or rape seed may be added.

After the chicks are ten days old a good growing mash, composed of two parts by weight of bran, two parts middlings, one part cornmeal, one part low-grade wheat flour or red-dog flour, and ten per cent sifted beef scrap, may be placed in a hopper and left before them at all times. As soon as the chickens will eat the whole wheat, cracked corn, and other grains, the small-size chick feed can be eliminated.

Fine charcoal, grit, oyster shell and clean water should be kept before the chickens at all times, and cracked or ground bone may be fed where the chickens are kept in small bare yards, but the latter feed is not necessary for chickens that have a good range.



Silos Are an Important Part of Farm Improvements—The Bulls in the Fore-ground Sold for an Average Price of \$500.

second growth clover more evenly and tramping it in, insuring reseeding each year and a uniform distribution of the fertilizer.

If a field, or a portion of it, did not show a satisfactory yield, the ground was fertilized and grasses sown and tested until the proper grass or variety was found. In this way all of the farming land was brought to a higher state of production. No unusual means were employed to bring this about, for the Tomsons are not much given to experimenting. Possibly the results would have been better if they had, but the point is that only such methods were used as could be readily applied on any farm, by any average man.

**Best of All Grasses.**  
In Kansas, particularly in the sections more or less broken, the native prairie grass, largely blue stem, is

prices, and from the first continually weeded out such as did not prove satisfactory breeders, or that represented blood lines of less desirability.

From the first they recognized the importance of the sire, and their selections have been made with discrimination. In several cases, bulls that had demonstrated their prepotency in other hands were secured, among them Brampton Knight, whose get in Tomson Brothers' hands were champion winners at the International, American Royal and other prominent shows. Tomson-bred cattle, both in the breeding and fat classes, have been champion winners at the International, American Royal, at St. Joseph, Oklahoma City and various state fairs. These facts are mentioned here to show the actual result from the use of good blood and intelligent breeding methods.

## WOMEN IN CUSTOMS SERVICE

Another Innovation Is Made in Department of the British Government.

London.—Woman customs watchers will appear shortly in London and other ports. They are a war-time innovation to fill the places hitherto reserved for pensioned soldiers and sailors.

They will be spared the rougher work at docks and other exposed

places. Their "beat" will be in bonded warehouses, where, as their name implies, they must keep watch for the customs on the reception and issue of dutiable goods.

The work is not arduous and will involve no night duty for the women. Pay ranges from 18s. (\$4.50) to 21s. (\$5.25) a week, with overtime.

Secretary of War Baker suggests the establishment of a military camp for actors and other theatrical people who are at liberty during the summer.