# LIVE STOCK

### The Horse's Walking Gait.

How fast the horse walks regulates to some extent his value. The slow walking horse is a tiresome animal to labor with if one has an ambition to do a good day's work. On the farm the rate at which a horse can walk is seldom considered at breeding time, yet we must expect that slow walking horses will produce slow walking horses, and that fast walking horses will produce fast walking horses. This is a principle that it will pay to keep sight of when the mares and stallions are being mated. Some of our best farmers claim that it is largely a matter of training, and that the slow horses can be trained to increase their speed of walking. This may be so, but it is more likely that the habit of slow or fast walking is a matter of inheritance. However, it will be a good thing for the men that teach horses to work to take the habit of slow walking in hand if the colt has formed it and try to break it by teaching the animal to walk fast. One horseman says that if a colt is allowed to walk slowly when he is being trained to work he will hold to the habit all the rest of his life. A colt that is naturally slow may be taught to walk fast, so this man says, and once the habit is formed it will remain with him when he is actually engaged in work, though he may drop back to his old habit when he is out of harness. Slowness of walking is a great defect in the otherwise valuable horse. If there is another horse with him that horse also must walk slowly to adapt himself to the first horse, while the man that drives them must also lose his time. In the course of a year this amounts to a very large item, and when it is figured in dollars and cents is not a factor to be despised. It is desirable to have on the farm only fast walking horses, and such animals make all farm work easier where horses are employed. When we consider that some horses walk fifty per cent faster than do others, we can readily understand that the additional work done by a fast walking team of horses over a slow walking team might easily be the difference between profit and loss on the operations with which they were connected on the farm. It is suggested that when the colt is being broken to work he have a ration rich in protein, like oats, so that he may have sufficient stamina and latent force to make it easy for him to adopt a vigorous gait in his work.

### Light Feeds for Hogs.

Light foods have a particular value for the hogs, possibly for the reason that most hogs get a too concentrated ration. The chemist in figuring out the relative value of roots, fruits and grains, invariably shows that the grains contain large proportions of nutrients and that fruit and roots contain very little. But the roots and fruits have qualities that we have never yet been able to determine and are certainly worth far more than the chemist has been able to discover. There is an action on the general health and thrift of the animal that cannot be computed by weight. Roots and fruits tend to prevent both constipation and indigestion, and are in that quality medicine for the hogs. The time of the year is here when great quantities of wind-fall apples will be ordinarily left on the ground to rot. These should be gathered up and fed to the pigs as soon as the apples get large enough to be succulent. Many of the wormy apples and culls can later be disposed of in the same way. Sugar beets are particularly valuable, as they contain a large amount of saccharine matter, which helps in the fattening. Turnips also will prove of more value to the hogs than their analysis would seem to indicate.

# DAIRY

### Iowa Cheese Industry.

According to the last report of the Iowa dairy commissioner, there are now in that state 43 cheese factories, which is a decrease of nine from the preceding year. The largest factory in the state receives about 3,000,000 pounds of milk per year and pays for it at the rate of 90 cents per 100 pounds, averaging up summer and winter. The most successful factory in the state receives about 2,000,000 pounds of milk per year and pays for it an average of $1.08 per 100 pounds. The difference between these two factories is that one of them, the smaller, is in a dairy district and the other is not, and it costs more to get the milk to the large factory than to the small one. Other cheese factories in the state pay a generally lower average, some of them going down to an average of 68 cents per 100 pounds. It is estimated that the 43 cheese factories make about 3,000,000 pounds of cheese per year, and this sells for about $300,000. The cheese interest of the state does not seem to be in a very growing condition, the farmers and manufacturers being more interested in making butter than cheese. This is due to several causes. One is that the price paid for milk for cheese making is less, as a general thing, than that paid for the purpose of making butter. In the case of the cheese factory also the farmer gets back no skimmilk, which is a matter of importance to the man that has calves, pigs and chickens to feed. If this skimmilk is worth 20 cents per 100 pounds, as many claim it to be for feeding purposes, it will be seen that the price paid for milk for cheese must be very much higher than the price paid for milk to be made into butter, where the skimmilk is returned. Whether or not a cheese factory can compete with a creamery depends on whether the creamery is so situated and so run that it can pay a good price for milk. We may say that the unprofitable creamery makes possible the cheese factory under present prices for cheese. Out of the 43 factories reported in the state, 28 are known to pay by the test. Perhaps others do, but reports were not received from all.

### Use Heavy Parchment Paper.

When parchment paper is to be used in the packing of butter only the best kind and quality should be used. The cost is a small matter for any one package of butter and it is not safe to use an inferior quality though there is much of such stuff on the market. In the battle to secure trade, low priced articles are always being put on the market and this is as true of parchment paper as of anything else. Generally the very thin paper does not afford the protection that the butter packer supposes he is getting. The very light paper is some of it so loosely made that the spores of mold once in it find abundant opportunity to grow. The cheap paper often proves to be very expensive in the end.

### Illinois Butter Exhibit at St. Louis.

The butter exhibits of Illinois at St. Louis will be in the agricultural building. Illinois dairymen or farmers intending to make an exhibit must ship their butter to Chicago on June 2. The dairy butter will be in three classifications: A, from 8 to 20 pounds of butter from milk of mixed herd; B, same amount from milk of herd of one breed; C, not less than 8 one-pound prints made by exhibitor on farm. Address all communications to George A. Hunt, superintendent Illinois dairy exhibits, Hebron, Ill., until May 28. After that date to Geo. A. Hunt, superintendent Illinois dairy exhibits, World's Fair, St. Louis.

Overworking butter frequently gives it a salvy texture.

# POULTRY

### Summer Care of Geese.

Geese are very hardy birds, and it is easy to keep them over summer. They should have access to plenty of green forage, plenty of water to drink. The adult birds need no shelter, and can live on grass alone, but they relish a little grain and should be fed a small quantity at least once a day. At night is a good time, after the chickens and turkeys have sought their perches. In late summer or early fall if the drouth dries up the grass geese need a little more grain. One must gauge the feed by the quantity and succulency of the forage. Whole corn will do very well for the grain; that is all we use.

An adult goose seldom dies of any sickness. True, the very old birds drop off, but the per cent of loss is remarkably small with any reasonable care. The flock must be fed grain and vegetables, clover or fodder during the winter and early spring, before there is green forage. The breeding birds should be mated, one male to from one to three females. We put the different matings in separate lots, but they will do very well in flocks of ten to fifteen birds. It is natural for geese to choose but one mate, hence we must not attempt to make one male take too many females or we will not get the best results.

Geese (our experience has been altogether with the pure bred Toulouse) commence to lay early in March in our climate, time depending on weather conditions. A little straw thrown around in odd corners will furnish nesting for the geese. The female makes no attempt to hide her nest or slink away to it; she sits on it in full view, but she covers up the eggs. Robbing her nest has no effect on her, she will not change; she lays about every 36 hours. The eggs should be gathered soon after laying, early in the season, or they will get chilled. Set them on end in a box of sawdust or excelsior in the cellar, or some cool place (not too cold), and keep till ready to set. Some turn the eggs daily, but we do not if they are to be kept only a reasonable time. We set them under chicken hens and rear the goslings with same hens. They hatch in 28 to 30 days; if eggs are kept warm enough 28 days is sufficient. The little goslings should not be fed till they are 48 to 72 hours old; it is no harm to let them nip a little grass or green vegetable tops earlier, as this will not hurt them. For the first week or two feed three or four times a day on a little corn bread soaked and crumbled, or a little chick food made into a mash same as for young chicks. At first they are very dainty and eat very little, but in two or three weeks they are quite ravenous. Always give plenty of drinking water, but not to swim in. Keep them dry; see that they have a good warm coop with a dry board floor and that they are shut up warm and snug at night. After they are ten days old they can be let range about on grass with their mother (whether she be goose or hen) or they can be raised in small board pens by moving them when forage becomes short. After about three weeks a mash of corn meal, a small quantity of middlings or bran or both is a good addition to the meal and will make a good grain food; feeding two or three times a day, according to size and the ability of the gosling to get forage. Remember a gosling is helpless and tender till it gets its feathers, but with good care and feed every little downy bird can be raised, and, after they are three or four weeks old, one can feed them and rush growth to his heart's content, providing water, forage and grit are at all times accessible.

3 or 9 pounds, while a chick of the same age will weigh from 1 to 2 pounds. No wonder the gosling eats. We have had them gain two pounds each in their ninth week. It is best to get the goslings hatched as early as there is grass for them, as they are safe from the hot dry weather of summer and tough grass; but early birds require attention and must not be exposed to the cold spring rains. We often have the kitchen full of the little fellows in low flat boxes when it rains all day or for two or three days, and then a good tame chicken hen is the most desirable mother. They require lots of care, but when we get a gosling on its feet (they can't walk for about 24 hours after hatching) we count on a fine lusty goose the coming fall, and we seldom miss our count. We feed them all through the summer at least once a day. By Christmas they weigh: females 15 to 20 pounds; males, 18 to 25 pounds.

Mrs. B. F. Hislop,
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### The Deadly Chicken-Mite.

During all the warm weather we must fight the deadly chicken mite. The hotter the weather the faster they breed. They are death to young chicks, where they can have the chance to infest them, and are even known to kill old tough hens. Often a hen house is swarming with these little pests, and the hens with broods are permitted to hover their chicks in the houses at night. The hens naturally hunt out some place in a corner and collect their broods. Nothing is seen of the mites at that time. But after the chicks have settled down for the night the marauders come out of their hiding places under splinters, boards, roosts and rubbish and swarm by tens of thousands on the old hens and chicks. They suck their fill of blood and crawl back to their hiding places. In the morning the poultry raiser sees nothing of these insects and pays little attention to the piles of mites hanging like swarms of bees under the roosts. The chicks are so weakened that numbers of them fall down and die and the owner wonders what happened to them. The others, being bled every night, are prevented from growing and become stunted, never recovering from this subjection to mites when they were young. There are different ways of attacking mites, one of which is to wash the hen house with whitewash, and the other is to give it a thorough going over with water in which has been dissolved a great deal of strong soap and a large amount of kerosene.

### A Variety of Feed.

Whether the animals to be fed are cattle, horses or sheep, a variety of foods will give better results than will a steady ration of one or two things. We have seen horses fed corn and timothy hay year in and year out, in working time and resting time, and know that this is the practice on many of our American farms. Many a farmer has reduced his system of grain feeding to so many ears of corn per horse per day. Not only is such a ration out of balance, but it must become very monotonous to the animals that have to take it or nothing. We may not be able to explain why a variety of feeds is better for animals than a restricted ration, but there is every indication that such is the fact. We are equally unable to tell why one or two kinds of feed fed to a human being become objectionable to him after a time. Doubtless there is some great law underlying the taste preference. Careful feeders believe they can see far better results from feeding a variety of feeds than one, and this same idea is strengthened by the experience of our college men in their scientific experiments relating to the feeding of animals. The quality of being appetizing is one quality in foods that we have not yet fixed the value of, but it is one that it is worth catering to, even if we cannot figure out its processes.

The sire is the potent factor in