

FARM, ORCHARD AND GARDEN.

BY J. S. TRIGG.

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The hired girl on the farm is always more contented if there is also a nice hired man around.

A new country always begins to improve in an agricultural way when the farmers quit burning their straw.

The small boy now anxiously asks his mother how soon it is safe for him to drink milk after filling up on choke cherries.

By using all the improved appliances hay can be put in the stack for 80 cents a ton, where the work is done on a large scale.

Canned rabbit solved the question of the rabbit pest in Australia. Bunny in a tin can is good meat for a dago in Italy or a horse eating peasant in Bavaria.

So far as it is possible it is best to keep the strawberry bed in rows. It will be always found that the biggest berries are where they have the most room to grow.

The weak point in many a man's morality will crop out in a horse trade if in no other way. For some reason the Ten Commandments do not seem to include a horse trade.

The best rat trap on the farm is a cat with a litter of kittens. You want to remember that new milk goes with the rat ration and that the barn cat must have it to make her a good ratter.

Time is becoming more and more an important factor in the matter of freight transportation, and so it comes that water transportation by canal is unable to compete with fast freight trains.

Future improvement in the line of agriculture will lie in the improvement of methods rather than in improved facilities. About all that can be done has been done in the line of improved machinery.

The Hibernian apple is a pretty coarse fruit, but it is so hardy that it will be hard to find a spot in all the north-west where it may not be grown, and a poor apple is a long way ahead of no apple at all.

Nature establishes very arbitrary limitations on numbers. One hundred hens, 50 sheep, 10 cows, 10 swarms of bees, thirty hogs and five kids in the house will invariably give better satisfaction than where the number is doubled.

The finest timber which ever grew in this country was logged and burned to get rid of it 40 years ago. We know of an old snake fence doing duty today which is made of black walnut trees which would sell for \$100 each were they now standing.

Kansas bids fair to come to the front as the champion corn state of the Union this year. Conditions especially favorable to the maturing of a large crop have prevailed, abundance of rain and an absence of hot winds. A crop of 400,000,000 bushels is said to be in sight.

While the law is an indispensable factor in our enlightened civilization, the less the man on the farm has to do with it the better he is off. For himself, he should live superior to law, his conduct governed by the moral law which embraces all statute law. Business disputes which arise and which come to all are far better settled by arbitration.

The general loss of the clover crop through the northwest by reason of the hard winter should in no manner discourage any farmer in the effort to grow it. The fact is, clover is the sheet anchor of the northwestern farmer's prosperity. It is invaluable as a forage plant, and as a soil renovator and fertilizer it has no equal.

Line fence trees are a costly farm luxury. The trees are all right, but they should be grown in a grove instead of on line partitions between fields. If your neighbor don't object, why you can make him pay for half the cost, it is true, but he will soon rat on to the fact that you are using two or three rods of his farm.

Drought affects some sections of the United States nearly every year. This year it is the state of New York and some parts of the New England states which suffer and which will have but a light crop, while the usually arid regions of western Kansas, Nebraska and the Dakotas have had an abundance of rain and a bumper crop. Every man has his turn in this country if he will only work and wait.

A high latitude with an abundant snowfall and a low thermometer will insure more success with fruit culture than snowless regions where such extreme degrees of cold are unknown. The fruits of southern Iowa and of other states of corresponding latitude were slaughtered unmercifully last winter solely for want of a snow protection for the roots, while much farther north, where the earth had a covering of snow, no harm was done.

ATAVISM IN ANIMALS.

A Scientific Explanation of Many Traits of Character.

Dr. Louis Robinson, an English zoologist, has just given to the world an account of his investigations as to the origin of the habits and mode of life of certain animals, and the conclusion at which he seems to arrive is that all such phenomena may be explained on the ground of atavism. Thus he claims that the horse of our day derives his swiftness and power of endurance from the fact that his ancestors in former days were obliged to flee from and frequently to defend themselves against their great enemies, the wolves. In like manner he claims that the reason why the horse shies is because his ancestors were forced to be constantly on the alert against hidden enemies and that the reason why he rears and plunges is because only by pursuing such tactics could his forefathers shake off wild animals who had leaped upon their backs.

Sheep when frightened immediately rush off to the highest point they can reach. The reason, says Dr. Robinson, is because all sheep originally inhabited mountainous districts. And this, he claims, is also the reason why they wear a thick fleece of wool all the year through, the summer temperature in mountainous districts being almost as cold as that of winter. Finally, we are assured that the reason sheep invariably follow a leader is because their ancestors were obliged to go in Indian file through the narrow mountainous passes.

Pigs have also engaged Dr. Robinson's attention. He was puzzled for a good while as to the cause of their grunting, but now he thinks he has discovered the real reason. The pigs of today, he says, evidently grunt because their ancestors made their homes in thick woods, and only by making this sound could they keep track of each other and guard the common herd. Commenting on this latter explanation, a scientist suggests that Dr. Robinson might now do well to spend some time in trying to find out why the horse neighs and why the dog barks.

Bad Range Sheep Conditions.

Reports as to winter losses on sheep are rather more definite than on cattle and indicate a loss of from 12 to 30 per cent. Probably 15 per cent might be a conservative estimate. Cold nights were bad on lambing in nearly every section, and losses have been heavy, few sections reporting over 50 per cent of a crop and some as low as 40 per cent. Idaho, Wyoming and Montana report most successful lamb crop; Utah only fair; New Mexico, Colorado and Arizona and the extreme western Texas very bad. In the south-west the drought left so little feed for the ewes that in many sections the lambs were killed to save the mothers, and the herds are kept alive only by cutting down brush and young trees along dry creeks or the foothills for them to browse upon. A heavy loss will result to the Utah sheepmen by the action of the government in excluding them from forest reservations, where heretofore they have found summer range. They are now thrown upon the desert, which, at this season of the year, will cause the destruction of thousands of animals from heat and lack of water. Reports from Arizona and New Mexico indicate less than half a lamb crop and heavy losses in ewes. Movement of lambs to feed lots from south will be late, and lambs will be poor. Western lambs will be in better demand for the feed lots than southern stuff, owing to the fact that there has been better feed in the north-west.—Bulletin National Live Stock Association.

Green Corn as Forage.

If we were called upon to provide green forage during the months of August, September and October and had no alfalfa, we would plant sweet corn, which is no doubt the best crop for such a purpose. It is much better than common field corn, as it contains more sugar and less starch and remains succulent much longer. Plant Stowell's Evergreen in drills 2½ to 3 apart and kernels 6 or 8 inches apart and irrigate two or three times. It is best to feed when in the roasting ear stage, and hence, if to be fed through September and October, it should be planted at different times so as to have a succession. As it requires about three months for this variety to be fit for table use plant a part of it about June 1 and 15 and July 1. It will not injure cows after they become accustomed to it, and then an ordinary cow can be fed 100 pounds a day and gradually increase the amount. Some barn, cornmeal or other grain food should always be fed with green food in this way.—Denver Field and Farm.

Grasses For Swine Pasture.

I can conceive of nothing better for swine pasture than alfalfa. Its tender, succulent stems are full of sugar and protein. They are not only delicious to the palate of the growing animals, but they promote growth and digestion as no other grazing with which I am acquainted does. It is especially valuable for young pigs or for any growing animals. It starts very early in the spring and continues to grow until after hard frosts in the fall. Tramping it in dry, warm weather does it little injury, although the tramping done in winter is very destructive to it, and live stock should be carefully restrained from treading upon it when it is frozen. One beauty of alfalfa is that, while drought checks it, it does not entirely prevent its growth, so that we are sure of having more or less succulent grazing even during the hottest periods and the longest droughts.—Country Gentleman.

SALT BUSH.

It Furnishes Good Sustenance For Cattle in Arid Regions.

The California experiment station at Berkeley has recently scored another remarkable triumph and has won the gratitude of thousands of farmers in the arid and semiarid region west of the Mississippi, says a correspondent of the Boston Transcript. Ever since 1881 experiments have been conducted at Berkeley and at the substations throughout California to test certain Australian plants, known in popular language as "salt bushes." It seems to be acknowledged now that some species of this large class of plants can be profitably utilized on land heretofore considered worthless.

About 1881 the late Baron von Mueller, a man whose whole life was devoted to the study of economic botany and to the distribution of valuable species over new districts, sent seeds of many Australian salt bushes to California. These salt bushes belong to a very large class of curious and useful plants formerly called chenopodiaceae, but more recently salsolaceae. The common beet of our gardens and the pig-weed of the roadside belong to this family. Its members often possess remarkable powers of resistance to alkali in the soil and grow where other plants would quickly perish.

Many plants of the desert belong to this family, which is also unusually drought-resisting. Unfortunately, only a few of the hundreds of species of salsolaceae have any economic value. Those species at first received from Australia proved unworthy of general use. Experiments were made with many kinds, but without marked success until a species known as atriplex semibaccata was tested near Tulare City, in the upper San Joaquin valley, on very strong "black alkali."

Such alkali land contains so much carbonate of soda and other salts that common barley dies there. Barley will withstand 25,000 pounds of alkali salts to the acre, but dies when the total reaches 30,000 pounds, while salt bush has been known to grow when the total reached 75,000 pounds to the acre. No other useful plant can show such a record.

The value of salt bush, commercially speaking, is as a food plant for sheep, cattle, horses, hogs and to some extent for domestic fowls. It keeps green all summer, grows rapidly, yields from two to four crops in a season and appears to possess as important a place in farm economies as the well known alfalfa. The most careful analyses of the plant made at the experiment station show that its food value, pound for pound, fairly approaches that of alfalfa. Since it can be grown on soil too alkaline to produce alfalfa, its value is evident.

Further experiments, extending over a long period of years, have determined new and larger possibilities. Atriplex semibaccata thrives in regions of very light rainfall, on extremely poor soil underlain by hardpan. Its habits of growth in such places are modified, of course, the plant is much smaller and yields less, but it covers the ground, keeps green and grows until heavy frosts come. The perennial root remains in the ground, ready for another season. Its value, under such circumstances, can hardly be estimated. All that one can say is that such a plant makes thousands of acres of almost worthless land capable of sustaining large flocks and herds.

Feeding Qualities of Artichokes.

A report recently received at the department of agriculture from the Oregon station contains some interesting and valuable information concerning the food value of artichokes. To determine the proportion of rations for farm animals that can be profitably made up of these tubers the Oregon station fed six thrifty Berkshire pigs which had been running on wheat stubble and weighed from 117 to 215 pounds. For two months the pigs were fed on artichokes supplemented by a small ration of equal parts of clopped wheat and oats. An effort was made at the outset to compel the pigs to subsist on a diet of artichokes alone, but in the absence of grain there was very little gain, and the pigs were not contented. They were vigorous in their demands for something more substantial. The artichokes were grown near the pens, so that the pigs could have access to them whenever they desired. The tubers were left in the ground for the pigs to root out as they were needed. A portion of the plot was measured and the artichokes dug to determine the yield, which was found to be 740 bushels per acre. During the experiment the six pigs consumed the artichokes grown on one-eighth acre and made a total gain in live weight of 244 pounds, or an average daily gain per pig of 0.81 pound. The pigs consumed during the period 756 pounds of grain, or at the rate of 3.1 pounds of grain for each pound of gain in live weight. In other experiments it had been found that it required about five pounds of mixed grain for each pound of gain in live weight. On this basis the feeding of the artichokes resulted in a saving of nearly two pounds of grain for each pound of gain in live weight.

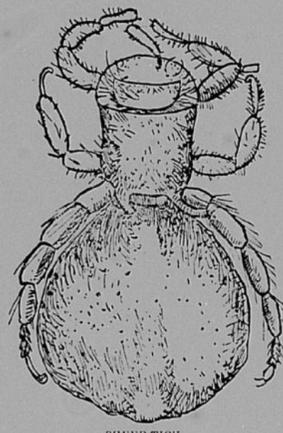
American Pork in Sweden.

Official advices received from Sweden by the department of agriculture show that notwithstanding a rigorous inspection there is a good market there for American pork products. During one month recently the inspection of 7,040 hogs slaughtered in Sweden and 19 pieces of American "short clears" showed trichinosis in 24 carcasses of Swedish pork and in only one piece of American "short clears." Americans who contemplate engaging in the trade should study the market requirements and the climatic conditions, because pork for Sweden must be properly prepared, as it will otherwise spoil quickly.

SHEEP TICKS.

Something About Their Natural History and Habits.

The sheep tick does its evil work under cover, hiding in the fleece and quietly sucking the life blood of its victim, who may suffer seriously without the knowledge of the shepherd. It takes refuge, after the shearing, on the lambs, in whose closer wool it hides, and fixes its proboscis or sucker in the skin of its victim. It lives on the blood which it is constantly drawing from the veins. Its voracity is enormous, and a few of them will easily stop the growth of a lamb, and unless checked will soon kill it. Many



SHEEP TICK.

a lamb is supposed to be suffering from the common pale skin, thought to be due to the anemia or bloodless condition consequent on the effects of the throat worms, but in reality a result of mere loss of blood resulting from the constant sucking of it by the ticks, which hide themselves from sight in the fleece. It is only when the heat overcomes them that these pests loosen their hold on the skin in which they have imbedded their sharp claws and their proboscis or sucker and appear on the outside of the fleece, where they may be seen sometimes by scores when the shepherd may not have suspected the presence of a single one.

The ticks are really flies, but without wings. They belong to the family known as hippoboscidae, so called because they live in the woods, and the most conspicuous family of them infest horses and mules as well, and one of the class which infest cattle.

The well known cattle tick, as it is called, has been discovered to be the cause of the southern or Texas fever of cattle, one of the most virulent of contagious diseases to which cattle are subject. This tick is not really deadly to acclimated cattle of the south, but is almost universally fatal to northern cattle, either infected by southern cattle brought to the north or when they have been taken south. The fact is we do not know enough of the life history of the sheep tick to follow all its probable mischief to lambs and sheep or identify it as the cause of diseases to which sheep and lambs are subject and supposed to be due to other causes. We need, in fact, to study this creature more closely before we can say what its actual character in this respect is. But we may believe all we may think of it and so take every possible means of exterminating it along with such well known enemies of the flock as the scab mite.

And dipping the flocks, whether the scab is present in it or not, or whether the tick has fastened on it or not, but simply as a precaution and a means of safety, is the peremptory duty of the shepherd now, at the beginning of the summer and the breeding season of these pests. One dipping is not sufficient, for the eggs of the tick, as they seem to be, and which the larvae of the creature may be, will not all be killed by the first dipping, and a remnant of them will be left to supply the places of those destroyed unless the dipping is repeated in ten days or two weeks after the first. And as this interval is about the time for the repetition of the dipping to destroy the second brood of the scab insects both will be destroyed at the same time. And it is very sure and clear that if this second dipping is neglected all the good done by the first goes for nothing. To be quite sure we would, and we have so done, make a third dipping at the end of the summer, so that the flock goes into the winter free from those tormentors to which thousands of dead sheep are owing, which may be supposed have perished of some other disease.

Teach Colts to Walk Fast.

There is no pace so valuable or so much appreciated and so practically useful in a horse as a fast, fair, square walk, and there is nothing that will cause an animal to be driven harder and kept so continually on the other paces as a deficiency in this respect, says The Horse Fancier. Months of time and hours of patient, intelligent effort are expended to make the horse a fast trotter, a high actor, a perfectly gaited saddle horse, but so far as the walk goes, he is generally put upon the market as nature made him and rolls along at the pace his ambition dictates, commended by his owner as a wonder if he happens to walk fast, and sworn at and overdriven by every one if he chances to be lazy and slow. The fast walker is often made so by being put with a mate while breaking which happened to be a quick, free mover, and no farmer or breeder can be too careful in seeing to it that no colt of his is ever driven or led beside a sluggish, inactive partner.

HOG LICE.

Persistent Insects That Are Not Easily Exterminated.

The hog louse is the only insect which causes much trouble in raising hogs, says a government bulletin, and when it once becomes established in a drove it is not easily exterminated. Fortunately, the lice are so large that they can be seen easily, and their presence may therefore be known before they become very abundant. They are liable to appear at any season of the year, and they thrive on hogs of any age or condition. They are found in and behind the ears, back of the shoulders and in the creases on the lower part of the ham more frequently than elsewhere; if those places are free from them, there is little danger that they exist on other parts of the animal.

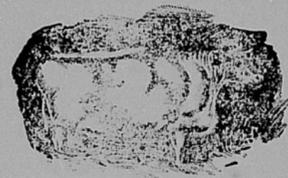
Coal oil is sure death to every louse it touches, but does not always kill the eggs and must be used with caution to prevent its blistering the skin of the hog. When a large drove is to be treated, the work can be done very quickly by using a spray pump having an attachment for mixing the oil and water, and the pump should be set so that it will use about five parts of water to one part of oil. When such a mixture is thrown over the hogs in a fine spray, only a little of the oil is used to cover the whole animal, and if the spraying is done in the evening nearly all of the oil will be evaporated by morning, and there will be no blistering of the skin when the hogs are exposed to the hot sun on the following day. So little oil is used in the spraying that few of the eggs will be killed, and the work should be repeated at the end of a week and again at the end of a second week. If the work is thoroughly done, three sprayings will be sufficient. If a spray pump is not available, the hogs should be rubbed with a mixture containing two parts of lard oil to one of coal oil, repeating twice at intervals of a week. The sleeping places should be thoroughly cleaned, the bedding burned and the inside of the buildings thoroughly wet with coal oil.

Even with the most thorough treatment it requires time and patience to clean a drove which has become badly infested, but it must be done if the hogs are to be kept in a thriving condition. It is not difficult to destroy the larger part of the lice, but that is not sufficient, for where there are even a few eggs left in the ear or under the folds of a single animal the pest will soon become as bad as ever.

Lice never infest clean hogs when they are not brought from an infested drove, and the hog raiser who has a clean herd cannot be too careful to keep it so. No stray hog should be allowed on the premises, and any which are purchased should be examined very carefully before they are allowed to run with the others. The oil mixture should always be kept close at hand where it can be used immediately if any indications of lice are seen. It is much easier to kill a few lice on a few animals than to clean a thoroughly infested herd.

An Old Time Celebrity.

The Breeder's Gazette publishes an illustration of "The White Heifer That Traveled," an early Shorthorn. This extraordinary animal was bred by Robert Colling in the county of Durham, England, about 1806. She was twinned with a bull and was fed up to



"THE WHITE HEIFER THAT TRAVELED," a weight of about 2,500 pounds. She acquired her name from having been extensively exhibited, and did much toward attracting the attention of the farmers and feeders of northeastern England to the merits of the old Tees-water or Shorthorn stock. The illustration is reproduced from an old lithograph which, while an exaggeration in some respects, will convey some idea of her character. She grew very rough in her flesh after maturity, but presented such a heavy carcass, combined with neatness and finish, that many were led to adopt bulls of this breed as a result of her extended travels.

Live Stock Without Farming.

Live stock without farming is a condition that does not exist to any extent outside of the range country, but the tendency in certain sections is in that direction, says The National Stockman. For example, a man is located in a natural grass country, too hilly for the most economical farming. His permanent pastures furnish abundant forage for the greater part of the year. He buys most of the stock cattle or sheep that convert his grass into meat, just as does the feeder in the corn belt, and he does not winter much stock or feed much grain. This man is making a study of the problem of live stock without farming. Not absolutely without farming, for he knows that his meadows must be renewed, that some straw is desirable and that some coarse grain is essential, but he is studying to reduce the area that he must devote to corn, to wheat and oats and to increase the extent of his permanent pastures. He finds it a many sided problem. Securing uniformly good meadow, maintaining pastures in satisfactory condition, buying stock at favorable prices when it is needed, buying grain at prices in proportion to live stock are some of the major difficulties to be met. Among the advantages are the saving of labor, the saving of land, which in a hilly country always deteriorates by cropping, and the saving of a heavy investment in implements and machinery and fences.