

HINTS ABOUT WORK.

THE WINTER'S STUDY.—Now that the season for active labor is over for 1875, the farmer has leisure before him that may be turned to good account. With the general spread of information, the farmer cannot afford to be behind his fellow citizens in the knowledge of common things. Every farmer should club with his neighbors to form a library of at least one hundred well-selected, standard, practical books, relating, first to his own profession, agriculture, and the sciences connected with it; there are now many excellent, plainly written manuals upon all the collateral sciences; then there should be works on American and general history, on political economy, and lastly in general literature.

FEEDING STOCK.—There is opportunity now for those who desire—and every one should—to try some of the experiments in feeding, referred to in the articles by Prof. Atwater, which have been published in the *American Agriculturist* during the past year. These articles are worthy of close and careful study, for they put many things in quite a new and different light from that in which most farmers have hitherto viewed them. Economy demands that every ounce of nutriment should be got out of the fodder we feed. There is no doubt that some of it is lost in our usual methods of feeding stock.

HORSES.—Care is required in grooming and cleaning horses. No gathering of scurf, or waste of the skin, or of dried perspiration, should be permitted to collect beneath the coat. But this should not in every case be torn away with sharp curry-combs. A tender skin is injured by rough currying. A moderately stiff brush, made with an uneven surface, is sufficient in nearly every case. But labor must not be stinted in keeping horses clean.

COWS.—Fresh cows need a large quantity of water at this time, and this is best given in the shape of warm slops of bran, or a mixture of corn-meal and middlings. Our milking cows have done very well on finely cut, well cured corn fodder, wetted and mixed with corn and middlings ground together very fine. One bushel of cut fodder and 3 quarts, or 4½ pounds of the meal, is the daily allowance. A sheaf of oats, or a small feed of good clover hay, is given at noon. In the case of some very large milkers and butter-makers, this allowance of meal may be sometimes doubled with good effect. Cleanliness is of the greatest importance in the winter time. The cows and calves should be washed every day, and their coats kept free from filth. Lice will never be found upon stock thus managed.

CALVES may be kept loose in a shed by themselves, with an open yard in which they may run in the day time. They should be kept well littered, and the litter need not be removed until spring. If the litter is short, the manure will be fine and in excellent condition for use. If whole corn stalks are used for litter, this plan will not answer.

BEDDING in the stables is of great importance, both as regards the comfort of the stock and the condition of the manure heap. It will pay to cut all the litter with a fodder cutter, when it can be done by horse-power. Where leaves or sawdust can be procured for bedding, every pound of straw should be used for feed. Otherwise cut straw, when used for bedding, is more absorbent than long straw, and more quickly rots in the manure heap. The stock can be kept very clean with short bedding.

SHEEP.—The sheep sheds and yards should be kept well bedded with short litter. This may be shaken up every day to keep the surface clean, and if it is not removed at all until spring, the sheep will do as well or better than if the manure is disturbed. The litter and droppings become firmly packed until two feet thick, without any evil or disagreeable effects. The feed racks should be arranged so that the sheep can not thrust their heads between the bars and tear the wool from their necks, or scatter dust, etc., amongst the wool.

SWINE.—There is a good prospect for high prices for pork for some time yet. Pork and corn generally bear relative values, and whatever the price of corn, it can be turned into pork with profit. But the better the machine (or the pig) for working up the corn, the greater is the profit. There has been a vast change for the better in the stock of pigs and hogs, but there is room for further improvement. The aim should be to reduce the offal and produce a pig or hog as nearly as possible all bacon and hams, and one that will come to market without being wintered over.

PURE WATER is as necessary for stock in the winter time as in the summer. There is much suffering and consequent loss amongst stock for want of water. Ice cold water is injurious, and animals will not drink enough of it to supply their wants, unless sufficient is supplied, digestion cannot go on properly. Water should be given in the yards three times a day. It should be drawn from wells or cisterns. The trough should be emptied into a drain as soon as the animals have drunk, so that ice does not gather in it.—*Am. Agriculturist*.

PROFIT FROM GOOD STOCK.

Mr. Warnock, a well-known breeder of Shorthorns, reports the produce from "Easter Day," a cow nine years old, and costing \$350 in 1868, as follows:—"Airdrie Belle" sold for \$1,700; "Airdrie Belle 2nd," \$900; "Airdrie Belle 3rd," \$940; "Rosette," \$750; "Cambridge Rose," \$800; "O. Rose 2nd," \$1,000; "C. Rose, 4th," \$350; and three bulls sold for \$1,150. Another cow, "Miss Jackson," purchased with her calf, "Rose Jackson," for \$600, in about the same length of time produced stock which sold for \$6,488. The total profit on the two cows amounted to \$13,470, for which the cost of their food, care, and the interest on the money, would have to be deducted. Although this stock is what is called fancy stock, yet the result in the

case of ordinary good stock would be the same, but in a less degree. There are cows, sheep, and pigs which are worth, for actual marketable material, many times as much as common poor animals would be. Yet they cost no more to keep. It is this fact which makes the basis of the value of the better class of pure-bred stock. There will always be a demand for good breeding animals, at a price far above their value as dead meat, because the value of the produce increases in such an enlarged ratio. If we double \$20 and the product, four times, we have \$320. But if we take \$100 and do the same, we have \$83,200. The difference is \$2,580, or 30 times the first difference, instead of 4 times. This gain in the value of the produce is the secret of the high value set on improved stock, which costs no more to keep—often, in fact, it costs less—but which makes a vastly greater profit in proportion to its first cost, than ordinary stock. And the demand for good stock can not be supplied in our day.—*American Agriculturist*.

STOCK SALES.

LINCOLN SHEEP.—The fine flock of Lincoln sheep formerly owned by Mr. Richard Gibson, of Canada, has been purchased by Col. W. S. King, of Minneapolis, Minn. Col. King's stock of Lincolns is now the largest and finest in America. If his Lincolns thrive as well as his Shorthorns and Ayrshires, they will soon acquire the high reputation in this country, which this fine breed of sheep deserves.

Messrs. A. & A. Stewart, the large cattle-breeding firm of Lobo, have sold a herd of Durhams, consisting of four females, to Mr. Terrill, of Middlefield, Conn., for \$3,000. The cattle that brought this handsome figure are of what is termed the Seraphina strain, and a two-year-old of the same family was sold by them last year for \$1,000. At a recent sale in Kentucky, an animal of the same family sold for \$2,600 and another for \$1,600. The last-named came to Canada. The same breed of cattle is also very popular in England. The Messrs. Stewart deserve credit for their enterprise, and it is to be hoped that the venture will be one of continued profit to them.

John Snell's Sons, Edmonton, Ont., report sales of 25 Cotswolds at the St. Louis, Mo., Fair, 13 of them lambs, at an average of \$85 each, thirty Cotswold ram lambs, in the last three months, at an average of \$55 each, five of these sold at \$100 each—lowest price, \$25. Six imported shearing rams at \$200 each. Imported ram Palmer, three years old, to W. W. Thornton, Shelbyville, Ill., \$225.

Sixty-five Berkshire pigs, in the six months, at an average of \$43 each; lowest price, \$16; highest, \$300.

Received from England, Oct. 26, four Berkshire sows and one young boar. Sold one of the sows to M. F. Dunlap, Jacksonville, Ill., for \$300 gold.

Demand for good Berkshires and Cotswolds unusually good, and prices very satisfactory. F. W. Stone, Guilford, Ont., has made the following sales:—To Hon. F. Stump, Cecil Co., Md., a Shorthorn bull calf, to Hon. A. McQueen, Frederickton, N. B., the Hereford bull Chieftain, winner of the first prize at Ottawa, 1875.

Wm. M. Miller, Brougham, reports having just received from Messrs. Colo and Walker, Gloucestershire, Eng., about eighty Cotswold shearing ewes, and a number of shearing rams and ram lambs. They were selected by Mr. S. Beattie in person and brought over by him. They are said to be the best lot yet imported. Mr. Miller also reports that all his stock are doing well, and that he has four young calves, all red, which are also doing well.

Hon. M. H. Cochrane, Compton, P. Q., effected some important sales of Shorthorns while in England, among them the Booth bull Royal Commander to Hugh Aylmer, Esq., for 1,150 guineas, and to A. H. Brown, Esq., the two-year-old cow Forget-me-not, and four of Royal Commander's heifers, receiving 3,500 guineas for the five.

Hugh Thompson, Kineller Farm, St. Mary's, reports having lately made sales to M. W. Serrell, of Middlefield, Conn., of the following Shorthorn cattle, viz. Matchless 17th, three years old, \$800; Orange Blossom 25th, one year old, \$1,000; Village Lass, calf, \$600; Myalo 38th, calf, \$500. All to be paid in gold.

WELL-BRED SHEEP.—Mr. Wm. Boulton, of Mount Pleasant, township of Mara, Ont., has just purchased an imported thorough-bred Leicester ram three years old. It was bred by James Stewart, Esq., Shepherd Park, Yorkshire, England. The ram was imported by the celebrated breeder and importer of Lincolns and Leicesters, John Darling, Esq., of London township. The animal took three silver cups, at different exhibitions, in Great Britain, and these honors were awarded when he was only one year old.

PREVENTION OF SWARMING.

I had a little experience in trying to prevent swarming by clipping the queen's wings, as Mr. Langstroth suggests in a recent article. The queen would come out and try to travel to the swarm; but never tried to crawl back into the hive. Part of the swarm would find and cluster round her on the grass, after clustering on an apple tree. I returned her to the hive every day for about a week, when one morning I found her dead. The whole swarm hung round the hive all this time, and got so used to hanging round that they continued to do so until the young queen had hatched. When the honey season was over they had less honey than they would have had if the swarm had been hived at first.—J. L. Hubbard, in *American Bee Journal*.

Stock Sales are reported regularly in the Granger.

BROWN LEGHORN.

The Leghorns have a high reputation as layers. Of these Italian fowls the brown variety has recently become very popular. It was introduced by Mr. F. J. Kinney, of Worcester, Mass., who bought the first trio that was imported, in 1853, from on board a ship in Boston harbor. Since then Mr. Kinney has made several importations from Leghorn, in Italy. The character of these birds is of the very best. They are yellow-skinned, and excellent table fowls, are extremely hardy, and enormous layers. Mr. Kinney reports that his hens lay on the average 210 eggs in the year. They are heavier birds than the White Leghorns, and are much harder and precocious; pullets often begin to lay before they are two months old, and continue laying during the whole winter. They are gay plumed birds, and have become very popular of late amongst fanciers, as they must also soon become amongst farmers, if they have not become so already. The Brown Leghorns are described as having the comb of the Black Spanish fowl, with its head and body, and the plumage or color of the Black red Game. The Brown Leghorn cock is black-breasted, with hackles of orange-red, striped with black, the ear-lobes are white. The hen is salmon-color on the breast, with the rest of the plumage similar to that of the partridge, or brown, finely penciled with dark markings. They thrive in confinement well, and Mr. Kinney informs us that he has raised a thousand healthy birds in ten yards only. We are not informed as to the size of these yards, but if they are more than usually spacious, this fact is proof of the hardiness of this breed. A prominent English poultry fancier is of the decided opinion that this breed is the best of all our American breeds, when size and product of eggs is taken into consideration. A pair of fowls which Mr. Kinney has in possession descended from Brown Prince, a noted premium bird, which is three years old, and weighs seven pounds, and from two hens which are of the Signora strain. The hen Signora is eight years old, and weighs six and a quarter pounds. She has laid in all 1,530 eggs, and is still laying as well as ever. This fact is remarkable, and shows the value of this breed, and especially of this strain, which has been carefully bred from the best selected stock, with a view to the production of flesh and eggs. There is scarcely any stock of the farm which is so poorly managed as the poultry, yet there is none that may be made more productive. A yield of two or three dozen eggs, and a brood of three or four chickens, is generally considered a fair season's production from a hen. This is the consequence of keeping poor stock, or neglecting that which is better, and capable of doing better with proper treatment. Poultry may be improved by careful breeding as well as a pig or a cow. An infusion of new blood should be procured every year or two, and a bird of undoubted excellence should be bought.—*American Agriculturist*.

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WINTERING BEES.

By the beginning of December, according to the weather, and time varying of course with the locality, bees must be put into winter quarters and protected on their summer stands. It is not well to house them too early.

A cold time should be chosen to take them in, and they should be moved easily, so as not to stir them up. We have carried fifty hives into a cellar without a buzz from a bee, and then again, by an unlucky jar, a colony had been stirred up so that it did not quiet down for hours.

Under favorable conditions bees, in the winter, remain very quiet. A noise from the hive is evidence of discomfort. As long as you do not hear from them you may be sure all is well, but if a constant noise is heard be sure something is wrong.

Much has been said about ventilation in the winter. We have found that very little is necessary where the bee quilts are kept on. These absorb the moisture as it passes off from the cluster, and yet prevents all draughts through the hive.

After your bees are put away for the winter let them alone. To those who winter them out of doors we can only say: be sure that they have plenty of honey in the hive, while, at the same time, they have empty comb, in which to cluster. It will require much more honey for these left out of doors, and they should, by all means, be sheltered from the rays of the sun upon the entrances. This is more dangerous than cold or snow, as it tempts the bees to activity in weather too chilly for them to fly. We have all seen bee hives covered with a snow bank for weeks without injury. Whether bees are in houses, cellars, or out of doors, a quilt, carpet or mat over the tops of the frames, is a great protection worth many times the cost and trouble.—*E.S.T., in American Bee Journal*.

INSTINCT OF THE BEE.

In building combs bees make them a certain distance apart, and they should be kept frame to frame, just as the bees construct them. If artificial combs are mismatched, and not kept a uniform distance apart, such colonies will not do as well. For instance, if we take out one frame and move the rest to make equal distances, they will be about three eighths of an inch wider apart than the bees would naturally build, and the bees and queen could not readily pass from comb to comb. Bees go by instinct, and hence we should mark each frame, and place it back just as arranged by the bees.—*Aaron Benedict, in American Bee Journal*.

FEEDING vs. PLOWING UNDER CLOVER.

A farmer, in a late number of the *Rural New Yorker*, savagely objects to plowing under green clover. He prefers feeding it, and plowing under the dung and urine. He says:—

If professors of chemistry would tell us whether a crop of clover plowed under would be of more value treated in that way than if sheep were folded over the land and daily fed with it in racks, it would be of more service than making statements every practical stock farmer knows to be erroneous (such as, for instance, potatoes not being good for animals, unless in such small proportions as to be of little use) by giving good and correct reasons for the raw herbage giving more fertility to the soil than it would after passing through the sheep, and being added to the earth as dung and urine.

In England sheep are kept in what would be called here very large flocks, and on the farms occupied by the best tenant farmers they are used to eating green crops, by being hurried over the ground day by day, as much for the benefit of the ensuing crops as for the profit derived from the flesh and wool gained. Thus hundreds of sheep lie in pens in the fields all winter without shelter, having fresh bits of ground given them every day, and in summer the same plan is carried on by first eating vetches, and then clover or rape until the turnips are ready again. Many good farmers keep hundreds of sheep without adding any food to the produce of the farm, but there are more who, finding how the land is enriched and the crops increased by giving oil cake, use great quantities, and find it pays very handsomely. These are genuine "farmers looking ahead," and the continued universal custom in England shows it pays generally. Therefore, if farmers in America would keep sheep, and use them to eat their green crops, instead of plowing them under, and give them some of the grain and corn that has to pay exorbitant freight, they would not "run down" their land, and if college professors would go into these subjects, giving chemical reasons for the advantages obtained by sheep husbandry, it would enlighten the pupils and be interesting to practical stock masters, although they would know from experience how the sheep increased the crops by enriching the soil, and how it added to their yearly income by having so much wool and mutton to sell.

Plowing one crop into the ground to force the next one is expensive work, especially when manure is used to get something to plow in, and it would be much cheaper and show more clearness of brain in looking ahead, if the growing of every crop was with the view of consumption, so that while making wool, mutton, etc., to sell, the food consumed would all return to the farm to double and treble the crops. When every respectable farm has a shepherd upon it, prosperity will reign over the agriculture of America, and it seems extraordinary that clover and other good crops should be plowed under, and shepherds be unknown in whole districts, when in reading old history, and the Bible, too, there is proof of there being shepherds and flocks everywhere. At the present day the best farmers in the best agricultural communities in the old world owe everything to sheep and other live stock. Growing wool upon an intelligent system of rotation, cropping in the South would eventually pay far better than raising cotton, or both of those staples might be grown with much better results than cotton alone.

Where there is a will there is a way, for though shade is seldom required in England, and would be essential in the South, movable shade frames could be used which could be shifted daily, the same as the moving of hurdles or whatever was used to make the division from the food to be eaten one day and for future days. In short, it is a shameful pity that wool has to be imported into a country that plows under good food for sheep.

DIARRHOEA IN YOUNG PIGS.

An eminent writer on this subject, M. D. Mulford, M. D., in the *American Science and Poultry Journal*, says:—"Many of our swine-breeders in the West sustain considerable losses annually by their pigs dying from the effects of what is commonly called scours, caused by the bad quality of the sow's milk. The disease is more apt to make its appearance when the sow has been fed upon dry corn or musty food. It generally attacks them within one or two days after their birth, and seldom after eight or ten days. I have never failed to cure this disease by giving the sow as much sulphur of the third decimal trituration as will stand on a nickel five-cent piece, once a day. It may be given in a little sweet milk or upon a small piece of bread, and should be given one hour before feeding. The medicine can be procured of any homoeopathic physician. I have cured many cases with common sulphur, but prefer the above."

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FARMERS' PAPERS.

The efforts of some to destroy the influence of the agricultural press and create distrust in the minds of the members of the Grange, will, of course, prove futile, as all such narrow-minded and selfish or jealous efforts deserve to do. You may separate the Grange from the farm possibly, but never can the farm be separated from the Grange. The house may be separated from the foundation, but not the foundation from the house. The agricultural paper is the dependence of the farmer, whether he is a Granger or not; and if friendly to the Order, he has a double motive for patronizing it. This the Grangers are beginning to understand, just as churches, masons, merchants, iron dealers, carriage makers, leather merchants, and, in fact, all other classes, understand the importance of patronizing papers devoted to their interests.—*Journal and Farmer*.

DO NOT MIDDLE WITH OTHER QUESTIONS.—The future of the Order of Patrons of Husbandry depends greatly for results upon the wisdom it displays in acting upon the real questions that belonged to it, and of steering clear of those in which they are not concerned.