

The Agriculturist.

A WEEKLY JOURNAL DEVOTED TO AGRICULTURE, LITERATURE, AND NEWS.

ANDREW LIPSETT, Publisher.

AGRICULTURE THE TRUE BASIS OF A NATION'S WEALTH.

ANDREW ARCHER, Editor.

VOL. 1.

FREDERICTON, N. B., NOVEMBER 23, 1878.

NO. 38.

BOOK AND JOB PRINTING

of all description

EXECUTED ON MODERATE TERMS

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Agriculture.

BERSEYS AND GUERNSEYS.

Mr. J. H. Wallace (editor of *Wallace's Monthly*) in the course of his recent travels in Europe, visited the islands of Jersey and Guernsey. He was very much struck by their natural beauties, but the object of his visit was not to hunt up the picturesque and view the beautiful, but to see for himself whether there were better cattle in Jersey than any already imported into America, and to compare the less known Guernseys with the famous Jerseys. His decided opinion is, that there are better Jerseys in the United States than in the island. American purchasers have, in his opinion, called the best animals from the native herds so that the stock which should have been kept for breeding, has been undergoing a constant process of culling, and is now greatly reduced in its average quality. We quote what he says regarding the Guernsey cattle, and the milk-producing qualities of the Jerseys. Seeing that there are now many pure-bred Jerseys in the Province, the question raised by Mr. Wallace is important. Is it true, (as he asserts, of Jersey cows in the United States,) that many or any of the Jersey cows in New Brunswick are utterly worthless as milkers, what says Mr. C. Grosvenor of Canterbury, who, judging by the show he made and the position he took at the late Provincial Exhibition, is the champion Jersey man in the Province to this charge against this pet breed of cattle?

Not having had much opportunity of studying the importances of Guernsey, the visit to that island was of peculiar interest, not only because the cattle were comparatively new to us, but because it was our purpose to decide there and then, if possible, which were the better cattle of this country. There is a general line of resemblance between the cattle of the two islands, but the Guernseys appear less distinctive, as a race, than the Jerseys. It is quite evident that the Guernseys have been less carefully bred in the line of fixing and perpetuating family peculiarities. In looking over the different small herds and talking with the breeders, it seemed as though little, if any attention had been paid to any standard of uniformity. The only consideration appears to have been the greatest yield of butter without regard to either form or color. For example, some of the old stock are very dark browns, if not blacks, and we found the owners sticking to them as first-class producers. This disregard for all nice typical characteristics has operated powerfully against the popularity of the Guernseys with foreign purchasers. A few breeders are beginning to appreciate the importance of paying more attention to symmetry, beauty, and color, but it is doubtful whether these considerations have had much weight with the great mass of breeders in the past. As breeding for export is now likely to become an important factor in their interests, they will seek to meet the demand by greater care in the selection of breeding stock. There are a few herds on the island that are already in good shape to please the taste of visitors who are looking for typical animals.

In striking the balance between the cattle of the two islands, we will leave the question of the production of butter out of the question altogether. Notwithstanding all that has been written and pictured and said, there is no satisfactory evidence that the one breed are better butter-producers than the other. Nothing but a series of careful, disinterested, and official tests, can settle the question. So long as the Jersey cattle-men in this country persist in trotting out their stock on their own private tracks, measured with their own private tapes, lined with their own private watches, and that time written down with their own hands on their own private black-boards the whole matter of the amount produced is unscientific and unknown. An honest man may make a fair and honest test, but the next week some rogue is sure to beat him. Instead of a long array of "points" that are said to be inflexible of yield, let us have the one essential "point," the yield itself. This relieves us from the hopeless labyrinth of "points" that are a-seemingly indications, for all indications, are swayed up in the fact itself. In the matter of absolute production, the only points or indications worth a cent's worth of necessity, grow out of a series of tests. All the brains of all the cattle-clubs, with Col. Wallace's through it, cannot devise, in a thousand years a scale of points indicating production, until they determine which cows produce, and how much they produce. A scale of points, wisely considered, is a very valuable method of determining many things that are chiefly conventional, as color, form, parity of blood, etc. But the question of production is above all else, all form, and all parity of blood. For more than twenty years the beautiful, deer-like little Jerseys have received a full share of our admiration, but, at last, it is being whispered around that a great many of their points or no points, excitements or no excitements, are utterly worthless as milkers. They are purely bred, they are duly registered, they have all the "points," and they are kept travelling from herd to herd, bringing up, at last, in the hands of somebody who knows nothing about cattle of any

kind. These instances of failure are quite too numerous to be ignored; and if the gentlemen of the Jersey Cattle Club wish to preserve the goats that lay the golden egg, they must preserve the public confidence. "Points," as indications of production, are no longer current coin of the realm, and they must fall back upon actual tests of production thoroughly authenticated and conclusive to all the world. The supposed impracticability of making tests may be urged, but "where there's a will there's a way," and there is nothing impracticable about it. The club could easily select and designate three or four men, situated in different parts of the country, and possessed of the public confidence, with conveniences and appliances for taking cows and making the test under such rules as might be prescribed. The cost to owners would not be very heavy, for the products would go a long way toward paying the expenses. Is the club ready to consider and lay down a set of rules, and designate suitable men to make the tests under those rules? It need not be obligatory upon any breeder to have his cows tested unless he wishes to; but we would very soon find out who had stock that he was willing should be subjected to this conclusive ordeal.

But we have wandered away from the question immediately before us. With the question of production, as between the cattle of the two islands, eliminated, we then have left the two considerations—the ornamental and the useful. As to the ornamental, there can be but one opinion; but, as to the useful, there may be two. Considering the large size, and especially the greater strength and vigor of constitution, with a marked readiness to take on flesh when not milking, we do not hesitate to give the Guernsey the preference for this country and climate.

TALKS ON FARM CROPS.

"It is a great mistake, Deacon," said I "to feed the small potatoes now, when we have abundance of succulent food. They will keep till next June."

"True," replied he, "but I tell you a few bushels of small potatoes, boiled or steamed, and mashed up with hot corn-meal, will push forward young fattening pigs very rapidly."

"No doubt about that," said I, "but will not be worth more next spring to cook in the same way for sows that are suckling young pigs? Now you have soft corn, and lemons, and sweet apples, and the juices of cabbages, mangels, turnips, etc., which must be fed out soon or not at all."

With me, the fall is the busiest season of the year, and in determining how work should be done, this has to be taken into consideration. It is for this reason that I pit my potatoes in the field where they grow. Last year I had them dug by the job—paying 5 cents a bushel, and the men piled them in heaps containing about 30 bushels each. We aimed to place the heaps on high dry ground, where the water could drain off. We make the heaps as high and compact as possible. There cover them with straw about six inches thick, and throw on five or six inches of loose mellow soil.

"It is a good deal of work," said the Deacon, "and it is better to put the potatoes in the cellar."

"It is not half the work you might suppose. With two teams and ploughs, and three men with shovels, I think I can cover 1,000 bushels in a day. We plough round and round the heap, throwing three or four furrows towards it. Then plough the same ground four or five times, setting the plough as low as narrow as possible. In this way the plough leaves very little work to be done by the shovels, and the repeated ploughings make the soil fine and mellow. The horses soon get used to it, and will go round and round of their own accord. You should have a short evener, and whiffletrees; and the right hand half of the evener, should be two or three inches shorter than the left hand half, because the high horse has much further to walk than the off horse, and ought not to have so heavy a load to pull. You cannot plough too much or too deep. Loose, mellow soil is a capital non-conductor of heat."

"Then," put in Charley, "before winter sets in we repeat the operation. Last year we did it when the ground was frozen so hard that the men said we could not plow. But we found the loose soil around the heaps scarcely crusted over. We covered them with straw again, and threw on another layer of earth, and did not lose a potato by frost, except in one heap nipped at night while digging."

"We had a very mild winter," said the Deacon.

"True," said I, "but no matter how severe the winter may be, a heap well covered with two layers of straw and another on top, will be in no danger of freezing, and this is especially true if you are careful to plow up a quantity of loose dirt all around the heap. You cannot plow too much."

We pit our mangels-wurzels in the same way—only that we make much larger heaps.

"When we have force enough," said Charley, "to keep three teams going lively, it is real fun to harvest a good crop of mangels. We have over ten thousand bushels to get in this year, and the best we have ever had."

"You drew them in carts," said the Doctor, "and dump them into the pit?"

"No," said I "we have sometimes done so, but we usually draw them on stone-boats, tops and all, and top them at the pit. We have a man to help the driver to pull and load the mangels. We have three teams. One is loading up all the time, another is going back and forth, and the other is a pit. But you must recollect that this kind of work will not run itself. You must be there to lend a helping hand when needed. There is always a weak spot, and you must be prompt in detecting it."

"I do not know what you mean," said the Doctor. "It seems a very simple matter."

Charley laughed. He knows from experience that it is not half so simple as it seems. If left to themselves the men will soon get into a snarl.

"Sometimes," I replied, "the man and driver who are pulling and loading the mangels will get behind. That is the weak spot, and you must take hold and help for a few minutes, and put a little more snap into them. Then again, the men at the heap will not get through topping in time, and there will be two loads—there instead of one. That is a weak spot; and you must be on hand to help the men pit for another load of mangels. In this way you can make everything work smoothly, and your head will be worth two pair of hands—especially if you use your hands as well as your head!"—"What do you mean," asked the Doctor, "by a pit?"

"Nothing more," said Charley, "than a deep wide dead-furrow. We make it by ploughing three or four furrows on each side of the centre of the proposed pit. We repeat this three or four times, forming a dead-furrow four or five feet wide and two feet deep. A little work with a shovel levels off the bottom, and the 'pit' is ready for the mangels. We build up the mangels, about four feet above the level of the ground, like the roof of a house, and cover them with straw and earth, just as we do potatoes, but with less soil and more straw for the first covering, as the straw absorbs the moisture from the mangels. Last year we had so much warm weather, that the mangels commenced to grow before Christmas, and we had to open the pits. But we did not lose a dozen mangels out of 10,000 bushels, either from freezing or heating."

"I think the danger of heating has been greatly overestimated," said I. "The real point, as Charley says, is to use a plenty of straw for the first covering, and only soil enough to keep it in place, say three inches thick. You want to use the plough freely for four or five feet on each side of the pit. Do not let the mangels freeze, but the nearer they come to it, the better. The leaves not wanted for feeding, are thrown on the sides of the heap. The pit can usually be left in this way until about Thanksgiving Day. Perhaps if you do the work a few days before, you will have an additional reason for thankfulness. We cover the mangels as we do potatoes, with two coats of straw and two layers of soil. If the work is delayed until the heap is reduced nearly to the freezing point, you need not, in ordinary winters, trouble yourself about ventilators, though we usually make a ventilator every eight or ten feet, by pulling some straw up through the layers of soil."

"You have a famous lot of cabbages," remarked the Deacon, "I suppose you will try to winter them."

"Yes," said I, "and the more cabbage I raise the better I like the crop. We have over 25,000 head this year, and the cows and sheep must regard them with fond anticipation. If we have as good success in keeping them through the winter as we had last year, I shall put out more next season. There is very little trouble in harvesting them, and they are a valuable food in the early spring."

"We plough out a deep dead-furrow," said Charley, "put two or three cabbages abreast, heads down, and then with a plough, set narrow, throw several furrows of soil on them finishing with a shovel."

"Not forgetting," said I, "to plough the ground on each side three or four times over, and as deep as possible. You cannot have too much fine, mellow soil about them. But the matter you do the final covering the better. Be very careful not to bury them where there is any danger of standing water."

"We had capital luck," said Charley "in keeping our cabbages for seed last winter. We saved about a hundred of the largest and best heads in the field, and put them into a dead-furrow, like the others, except that we put the root down. We only lost two cabbages out of the lot. I should think every farmer would raise his own cabbage seed. It is very little work. When we were setting out our mangels for seed, in the spring, we set out a row of the cabbages. The rows were 3 feet apart, and the cabbages 2 feet apart in the row."

"Before winter sets in," said the Deacon, "you must attend to your corn-todder. I suppose you intend to let it remain in the field, and draw it as you want it in the winter."

"Yes," said I, "we know that it is a good plan, though I presume we shall some time discover a better. We cut the fodder with a self-raking reaper that threw the fodder into bundles ready for binding. We have about 15 acres, all of it good, and some of it so thick and tall that we thought the reaper would not cut it. But it did the work far better than it can be done by hand. We let the bundles lie a few days to wilt, and then bind them just as we do wheat, and then set them in stocks holding about a dozen bundles. We shall put nine of these stocks into one, and put a couple of bands around it. Mr. Hooker uses willow for bands. When these cannot be had, tarred rope is good, which, afterwards, if saved, will be found very handy about the house and barns. In tying these large stocks, we use, to bring them into shape, a quarter inch rope, about 15 feet long, with a loop at the end, this is put around the stock and drawn up tight, and then the tarred rope is put on, and the fodder will keep perfectly. The only difficulty we have experienced, is from the butts of the stalks freezing to the soil. This is especially the case if the stocks are made when the ground is soft and muddy, which work should be done while the ground is dry and hard. The stock should be made as tight and compact as possible. It is a job that the farmer must see to himself. It requires a little common sense."

"The farmers of New England and Eastern New York," said the Doctor, "will yet raise great quantities of corn fodder not merely for milch cows, but to fatten sheep in winter."

"That is true, but Eastern farmers can buy decorticated cotton-seed cake cheaper than those of the West can. And there is nothing better for sheep, and nothing that makes richer manure than that. Corn-fodder and cotton-seed cake will enable the Eastern farmer to fatten sheep in winter with great profit. We could ship thousands of sheep to England every week, if we only had those that were good enough and fat enough for the English market. Good mutton is worth more in England than beef, and live sheep will stand the voyage better than live cattle. Ten acres of corn-fodder and ten tons of decorticated cotton-seed cake would fatten 200 sheep, with say a ton of hay and two tons of bran for an occasional change of food. There is money and manure in the business."

"I am not sure about that," said I, "but at any rate I know of no crop that leaves the land in such admirable condition for barley, or potatoes, or mangels, or spring wheat. My corn-fodder this year is on old sod land that has not been ploughed for many years, and we did not put a hoe into the field; we cultivated once between the rows, but could not a second time, as the corn got too big for the horse to get through. The land now is in splendid condition, with scarcely a weed to be seen in the entire field. The soil has a remarkably rich look, completely ripe, this is favorable for decomposition and nitrification."

"But much of the land in New England," said the Deacon, "is too stony and heavy to plough."

"Very well," said I, "then pasture it with sheep, and give the sheep from half a pound to a pound each of cotton-seed cake daily. The sheep then make rich manure, and carry it on to the hilly portions of the land, where it is so much needed."—*American Agriculturist.*

An apple tree in Castleton, Vt., this year yielded 15 bushels of pound sweets, 5 bushels of tall pippins, 2 of russets, 3 of seek-no-further, and 6 of common fruit. The tree is 60 years old, and gives eight feet at the trunk.

PAPER FARMING.

As we glance at the great progress that the world has made, it first appears that the whole category must be exhausted, and that the inventions for the time to come, must be few and far between. But we have every reason to believe that it will be to the contrary, and that the advancement will be as much faster in proportion, as there is more genuine knowledge and literature. For knowledge has so much money put out at interest or invested in any good, legitimate business. The more capital invested the greater will be the income. The world must move the one way or the other; we cannot stand still.

There is no class of people who have been benefitted any more by inventions than the farmers have. In all civilized parts of the world farming is the foundation of all other business. In order to be successful in the different locations, and the different kind of crops, together with the thousand and one essential points there is that in farming, which requires great skill and the exercise of the very best judgment. The acquirement and judgment is materially hastened by reading the experience of others. But there is yet a large class of people who make a by-word of this "farming on paper," and those, too, who appear to think that after they have learned and exhausted everything else, they can fall back on farming; that most any good, common, intelligent man can be a good, successful farmer, without any particular study or very much experience. But this is a mistaken idea. Of course, any one can live on a farm (if they can make a living) but one of the great reasons why so many farmers are always so hard up, and have so little spending money and are always grubbing about hard times, is for want of better judgment and not being better educated in their business. Many appear to think that if they do as their fathers did it must be all right. But after a lifetime of study and experience there is as much chance to improve as ever. The world is progressing, things are all the time changing, and to be successful we must keep up with the times. It is profitable to converse together, and to learn from the experience of others who we go before us. And how are we to do this, except we do it on paper? Suppose all the printing presses were to be stopped, and all the literature obliterated in a moment; it needs no argument to prove that the world would recede to ignorance and degradation at a very rapid pace.

And this rule will apply to individuals as well as to the world. Because some things have been written about agriculture that were erroneous and impracticable, it is no reason why we should discredit the whole, and sneeringly call it "book farming." This is too much like disregarding all the true principles of regulation because one or more professors have made mistakes. Again, there who seem to think they cannot afford to subscribe for a new agricultural paper, and buy a book occasionally. And what they cannot learn verbatim they will try to learn from their neighbors. This appears unfair, to be all the time grinding on your neighbor's grindstone for nothing. Besides, we are in duty bound to educate our children all we consistently can, and a new book, or a paper directly from the office is much more eagerly devoured than an old one. There are very few in this country who do not spend enough money every year to supply themselves with good, practical reading matter, in a much more foolish way than to subscribe for some good agricultural paper, with their other papers. A good agricultural paper gives the farmer a great many valuable ideas that he does not get in other papers, and it keeps him posted up with the times, and acts as a stimulus to him in his business. I know this subject has been promulgated by more able pens than mine, but it is like many other questions of which the people need to be constantly reminded. Those who supply themselves with little or not any, good, intelligent reading matter (who are more numerous than we would suppose), would be woefully ignorant did they not mingle with others who are better posted and more intelligent. The young man or young lady, who, instead of first reading the love yarn and then throwing the paper to one side, would be as eager to read the practical parts, you may depend upon it, that person, with half a chance, will make her mark in life to some good purpose. And it matters not what the calling of each person may be, this paper farming will be a treasure to them which will endure for a life-time. But it is not expected that any one can be

wood successful farmer by literary farming alone; for it is often truly said, that experience is the best teacher, though it is often a dear one. But if one were sick who would think of calling a physician who had no literary education? Or who would think of calling a physician who never had one particle of experience, though he be ever so well read? And if they were compelled to choose one of the two, who would not choose a physician that was endowed with the experiences of others for two thousand years, than the ignorantus? What is true of physicians, is also true of farmers. Both have their literature, their periodicals, and it is necessary to read them and to keep them posted up with the times. In all branches of business the more papers the better. The experience of others is necessary, and we cannot compete with the world without it. Those who sneer at the many valuable ideas contributed to the agricultural papers, and are never willing to try any experiment, or to try to get out of their old tricks in a way to make it more profitable, but simply, call it "paper farming," have "paper heads," with no brains in them.—*Ohio Farmer.*

THE AGRICULTURAL SOLUTION.

It is becoming more and more plain that for the increasing problems of this modern age, whose leading characteristics seem to be unrest, agriculture presents the most sure and effective solution. "Attention is newly directed to the soil," remarks the *N. Y. Evening Post*, "as the safest object of labor. The earth has not a habit of going into bankruptcy. It does not embezzle. It does not speculate. It does not neglect to pay its debts. It makes no rash experiments. It does not violate the laws of nature, or try to put into their place the absurd notions of dreamers, or the villainous schemes of rascally demagogues." All this is strikingly true, and men are beginning to think about it as they have not done before in an entire generation. We need not but to revert to the record which shows how fast the public land is being occupied, to verify the assertion. And in New England it is characteristically true that men who are weary of waiting on waning business prospects are turning to the land as their surest resort.

THE RE-occupation and re-habitatation of New England farms is one of the most hopeful symptoms of this agricultural revival. Men are becoming persuaded that the land is after all the great panacea for individual and social troubles. They can see at this very time that it is not for agriculture the condition of the country would be greatly different from what it is, with fewer prospects of relief than are now apparent. It is this agricultural prosperity that bears everything else up. It is this that gives employment to railroads and employment and steam lines. Trade and commerce rely on that alone. In due time it will be found to give life and activity to other kinds of business and, in fact to industry to all its departments. The tilling of the soil is the last resource of the country. We are an agricultural nation above everything else. We could not today be in any sense a commercial nation without agriculture. The two interests support one another, but agriculture will always be the foundation, one. This generation was never more profoundly impressed with any truth in respect to human industry.—*Mass Ploughman.*

WHOLE FODDER PREFERRED.

Experiments by an agricultural society of Germany to determine whether it is better to give cows their fodder in its natural condition, as to length, or in small pieces, as when it passes through a cutting machine, resulted in showing that whole fodder is preferable because of the saving it effects without detriment to the yield of milk or weight, or general health of the animals. This saving is due to the whole fodder being better chewed and re-chewed and impregnated with saliva, whereby it is turned to better account. A distinguished veterinary surgeon has shown that when cut up as a chaff a considerable portion of the fodder passes at once into the second stomach, and so is not re-chewed, and is, consequently, only partially utilized. The decrease in the amount eaten, at first observed when whole fodder is used, is explained by the greater demands that this makes upon the masticatory apparatus. This is especially noticeable in the older cows. Learning of any sort becomes more difficult as years advance, and learning to chew is no exception to the rule. Hence, it is advisable to begin feeding whole fodder while the cows are young. The greater slowness of the bell, when whole fodder is given is explained by the more complete disintegration such food undergoes; none of the stems pass intact, and consequently, more or less hollow, into the stomach to distend it and put it on the stretch. The increased desire to drink is due to the increased employment of the saliva. The general improvement in health and condition under this form of feeding is due to its being more agreeable to nature.—*N. Y. Tribune.*

FEDING POULTRY.—In the matter of keeping poultry, the use of dried meat and scraps cannot be too strongly urged. We are too much in the habit of waiting for certain seasons of the year for hens to lay, when by supplying the proper food in sufficient quantity they will lay, with intervals of rest, throughout the entire season. Young chickens should be fed upon growing, not fattening food; for this reason they should have very little meal. Hens are sometimes said to be too fat to lay, and that is just the point. Don't feed so much fattening food, as corn-meal, &c., but more nitrogenous food, dried meat and bone, &c. We are apt to think an egg as an egg, but there is as much difference in the quality of the eggs as in the quality of the food consumed, and the richer the food the richer the egg.

PREPARING POULTRY FOR MARKET.

When prices of produce are low, as every farmer is aware is the case this season, there is all the more need that whatever is sent to market shall be not merely good in quality but attractively put up, and inferior articles carefully kept separate, to fetch whatever a poor product may be worth. This is so notably the case with poultry, for instance, that we often wonder farmers can expect half market rates for the badly prepared, imperfectly cleaned specimens which are so plenty about Thanksgiving time. The subject is freshly brought to our mind by a circular from a firm who deal in country produce, in which they give the following good advice to poultry shippers:—

"To ensure the best prices, the fowls must be well fattened; crops empty when killed; killed by bleeding, but do not take off the heads; pick nicely without breaking skin; entrails should be removed; cool thoroughly but don't freeze; pack in boxes with clean straw (rye is best) between each layer of poultry, in the same posture in which they roost; mark each box, specifying what it contains; send invoice by mail; ship to reach market about the middle of the week—never so late as Saturday. Fine fat turkeys are wanted for Thanksgiving; prime geese for Christmas; extra large and nice turkeys for New Year's. If you cannot find any profit in sending prime quality and well prepared, you need not look for any in ordinary or poor qualities."

FARM LIFE.—It is a common complaint that the farm and farm life are not appreciated by our people. We long for the most elegant pursuits or the ways and fashions of the town. But the farmer has the most sane and natural occupation, and ought to find life sweeter, if less highly seasoned than any other. He alone, strictly speaking, has a home. How can a man take root and thrive without his field? He writes his history upon his field. How many ties, how many resources he has; his friendships with his cattle, his team, his dog, his trees, the satisfaction in his growing crops, in his improved fields; his intimacy with Nature, with bird and beast, and with the quickening elemental forces; his co-operations with the cloud, the sun, the seasons, heat, wind, rain, frost. Nothing will take the various social distempers which the city and artificial life breed out of a man like farming, like direct and loving contact with the soil. It draws out the poison. It humbles him, teaches him patience and reverence, and restores the proper tone to his system.

Cling to the farm, make much of it, put yourself into it, bestow your heart and your brain upon it, so that it shall savor of you and radiate your virtues after your day's work is done!—*John Burroughs, in November Scribner.*

THE POULTRY HOUSE IN NOVEMBER.—This month should not pass, without the fowl houses being whitewashed and the nests made clean and free from lice. The floor should be covered with three or four inches of gravelly loam, so that the sun may dry it before cold weather sets in. If the windows are not so arranged that the sunlight may fall directly on the floor, have them changed so that it will; for this sunlight and dry earth will enable you to winter fifty per cent more fowls in the same quarters—by reason of their agency in deodorizing the droppings—than can be kept on a bare floor, or upon the ground, for, in the latter case, the earth will become damp and filthy. Have the flock in winter, quarters before the hunter's moon, and begin the feed of meat as soon as frosts cut off the insect supply, also providing green food, as chopped roots, &c.—*I. K. Felch.*

The veterinary editor of the *National Live Stock Journal*, in speaking of spaying heifers, says that it is a pretty new surgical operation, and should not be trusted to any one but a skilled, practical veterinarian, or one who has studied it under practical instruction. There is no doubt of the beneficial effect of spaying on the disposition to fatten, when skillfully done. It has been performed so many times with perfect safety, that there can be no doubt of its feasibility and profit, when experts shall be numerous enough, and near at hand. It is now mostly a question of expense to get on expert to perform the operation. At the experimental farms of our agriculture colleges, this operation should be practically taught by the veterinary professor, and in a few years expert operators would be widely distributed.

The wheat crop in the northwest, as it is being threshed, is turning out better than was reported, both in quality and in quantity. The bears will not get much consolation from this item.