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Agriculture.

[For the Agriculturist.]

LETTER FROM P. E. ISLAND.

CROP PROSPECTS—ALFALFA OR CHILI CLOVER—POTATOES, CHANGE OF SEED DESIRABLE—POLITICS, DOMINION AND LOCAL.

To the Editor of the Agriculturist:

SIR,—On coming to the Island last week I found spring work advanced and ploughing in the vicinity of Charlottetown about finished. In the western part of the Island the work is about half done. The season has thus far been very favourable, and, so far as judgment can be formed, it is the general opinion that the hay crop will be better than for some few years back. The grass looks very well indeed, and of a fine color and good thick growth. It seems odd to find no evidence of development in the trees—no signs of spring life are visible, and on enquiry, the answer is that not until the end of May or beginning of June, do the trees put out their new leaves.

A Mr. James McClatchy, Proprietor of the *Sacramento Bee*, having friends on the Island, visited them last summer and had much to say about Alfalfa or Chili Clover, which in California cuts from six to ten tons to the acre, that is when cut as it is there three times a year. The roots of Alfalfo go down from ten to twenty feet, and after fifteen years trial in that country the last crops off the same fields were heavier and better than the first. The Hon. R. B. Reid, of Alberton, has received sixteen lbs. of Alfalfa seed from Mr. McClatchy, and, keeping half for his own use, has sent the remainder to a few friends in other parts of the Island to be tested. Judge Pope, of Summerside will sow four lbs of it. Mr. Reid intends testing it on a heavy, wet piece of land, and on a dry, light field. The only fear he has, is that frost may kill it, but newspaper clippings sent by Mr. McClatchy show that Alfalfa has been successfully grown near Chicago. Agents from Belgium and Russia bought large quantities of the seed last season in California and sent it home. Mr. Reid's experiment will be anxiously watched by the farmers on this Island, and the result may be worth noting by our own farmers. The seed of Alfalfa is of a grayish tinge, and about double the size of red clover.

During the past winter Islanders have been struggling along under the discouragement of very low prices for oats and potatoes—the staples of the country. Prices for both are just about one half less than they were this time one year ago. Last fall several cargoes of potatoes were sent to England with most disastrous results to the shippers. Loss resulted in every case. It is claimed that much of this is owing to the inferior quality of the potatoes grown here, which are nearly all of the blue chenangoe kind. In England the potatoes sent from the Island were sold at from $15 to $20 per ton; while the white, better shaped potatoes sold in the same markets at from $35 to $50 per ton. At the end of April, potatoes of the popular kinds sold in Boston at 50 cts. and 60 cts. per bushel, but Island potatoes were hard to sell at a third lower rates. The Government has been asked to import several thousand bushels of first-class saleable potatoes and distribute them by sale, at cost, to the farmers, but it is doubtful if they take action in the matter. There is no doubt, however, but that a change of kind would be largely beneficial to all parties.

The political chaldron began to simmer Friday night last, when the Hon. J. C. Pope blew the first ember into flame at a Liberal-Conservative meeting at Charlottetown. His definition of what he calls Reciprocal Free Trade was adroitly given, and may suit his constituents who do not look with much favor on a pronounced Free Trade politician. The current of public opinion seems to decide that two members to the Commons will be gained to the Opposition, and the representatives to the next House be three and three instead of five Government supporters to one Opposition, as at present. This perhaps would not occur if the leader of the Local House, the Hon. L. H. Davies, could see his way clear to become the standard bearer of the Mackenzie party and seek election at Ottawa.

The Assessment Act of last year has so far proved very unpopular, and though some needed amendments were made at the late session, the situation is such, that if Mr. Davies was to give up the leadership of the Island Government, the party in power would not be able to find any one capable of taking his place and chaos would result. It is for the best interests of his friends and the country that will keep Mr. Davies from announcing himself as a candidate in opposition to Mr. Pope, and not, I fancy, his own inclination which must be strong to enter the wider and more influential field, which his great natural abilities so well fit him to occupy.

JOHN.

P. E. Island, May 8, 1878.

THE EXHIBITION.

Now is the time for farmers to make the real preparations for the Exhibition, and we hope they will bear this in mind when they are putting the crop into the ground—for if they don't put it in and take good care of it they will not be likely to take much out, much less of a quality fit to send to an Exhibition.

Farmers need not be afraid that the Exhibition will not be held, there is no doubt but it will take place early in October, and it should be the best exhibition of the produce of the Province that has ever been made. It is some time since the last show was held, and quite an advance has been made by our farmers since then, and this should be made very clear at this display. The great advantages of these Exhibitions are to compare the present state of Agriculture and Manufactures with what they were when shown before, and every person who has an interest in the prosperity of the country should do what they can to place the Province in its true position. If we are not improving we should know it, in order that we may be under no delusion, and endeavor to improve as soon as possible. If we have made substantial advance since the last comparison it is encouraging to know it, and the fact will stimulate those who have not done quite as much as they should—and unfortunately there are too many of this class in all countries.

We would therefore urge that care be taken in putting the crop in the ground, and although nearly all the crops grown in New Brunswick are included in the premium list it will be well to consult the list, as there are rules and regulations that might not be complied with, and prevent the producer exhibiting, when a little care at this time would obviate the difficulty. The prize list was printed in the last Report of the Secretary for Agriculture, which has been pretty generally circulated through the Province, and may be consulted by any one. No doubt another edition of the list will be published in good time, but that in the Report before alluded to, will answer for those who desire to know what premiums are offered.

Care should be taken from this time of the cattle which owners intend bringing forward. In some countries cattle are brought to these shows in an unhealthy state of fat, and much fault has been found with the practice; but we are in no fear of this being the case here, and we feel more concern about their being in condition fit to bring into a show yard; and certainly if they are neglected until within a few weeks of the show they cannot be put in proper condition to exhibit. They should always be in good healthy condition, and if they are that way, there will be but little trouble in having them look well in October. Those that are not quite up to the mark now should receive good care and attention from this out.

We would again say that this should be the best display of the capabilities of the Province ever made, and we feel confident our people intend making it such. Let all do a little and show the right spirit and we have no fear of the result.

SALE OF SEED WHEAT.

The most of the seed wheat imported by the Government was sold by auction on May 1st, bringing an advance on the upset price. We learn that a small quantity of the Black Sea variety is still on hand, and we would recommend those desiring a change of seed to apply for this at once It is worth the price for flour, so that a farmer may buy this and send what he has to the mill and have new seed, without paying an exorbitant price, which is generally the case in introducing a new article.

Save eggs from the best hens for setting. Many poultry-keepers do not know which are their best layers, but this may be discovered by a little attention. Old hen lay larger eggs than pullets, and the chicks hatched from two-year-old hens, when mated with a vigorous one year old cock, will be larger, more thrifty, and also better than chicks from pullets' eggs. In selecting eggs to hatch, take those that are of a fair average size, reject the small or ill-shaped ones, or the very large ones. There is no way to determine the sex of the chicks by an examination of the size, shape, or other external appearance of the egg.

MILK AS FOOD.

We take the following from a very excellent article in the Report of the Ohio Board of Agriculture for 1868, on Dairy Husbandry by Ansan Bartlett:—

"Milk is an animal secretion, produced by the class Mammalia, for the sustenance of their young, and is the nearest a perfect food, that is, it contains every element necessary for the growth and development of the physical system, its quality and properties varying and being controlled by the orders of animal producing it; different families, the several genus of the same family, different species of the same genus, and even different individuals of the same species, exhibit marked differences in quantity, quality, and constituent proportional elements. Therefore, in considering this matter, the animal producing the milk comes naturally to be treated of first. Although the milk of the goat, the sheep and the camel are used for human food, the milk of the cow is the variety of milk most in use for that purpose, and it is that to which we are to direct our attention in this essay.

"Our own country has no well-defined and marked breed of cows peculiarly its own; whereas, England, Ireland, and various continental countries have their own peculiar and distinctive breeds well marked and defined, many of which have been introduced into this country and are being bred to a greater or less extent, each different breed presenting different characteristics in regard to their milking qualities. The Ayrshire is well known as a superior milk breed, so far as quantity is concerned, while the Alderney is considered its superior for butter, and the Shorthorn Durham, although giving less in quantity, is thought to be unexcelled in quality The Devon produces a milk rich in butter and unsurpassed for its fine golden color Each breed has its favorites and its advocates. All things considered, I am inclined to give the preference to the Ayrshire for general dairy purposes, and think dairymen would do well to introduce that breed for crossing with their herds. The age of the cow, also, exerts an influence on the milk, heifers under four years generally producing milk less rich in butter and caseine than that produced by older animals, and also lacking in color, and as the animal advances in life the proportion of solid matter increases and the color is heightened until about twelve or fourteen years old, when a decline usually begins, and after sixteen, progresses rapidly, rendering a cow usually worthless or nearly so at seventeen or eighteen years old, although there are instances of cows continuing useful in the dairy up to twenty, but such instances are rare.

"The health of the animal is a very important consideration, and should never be overlooked, if we propose to use her milk for food, as much mischief has been done and much misery caused by using milk from diseased animals, and butter and cheese manufactured from the same. We have laws for the punishment of those who offer for sale the flesh of diseased animals to be used as food, and it is very proper and right that it should be so, that the public may be protected from the ills that might follow from the use of diseased food. But, while granting protection against diseased flesh, our law-makers have left us entirely at the mercy of the unprincipled wretch who, for a few dimes, would endanger the health, and perhaps the life, of his fellow beings by the sale and use of milk from diseased animals, which I regard so much more dangerous to use for food than diseased flesh.

"It is, I believe, a tolerably well established physiological fact that females of the class Mammalia, while giving milk, are frequently relieved of disease, and especially of poisons, through the agency of their milk, this secretion taking up and carrying off from the system the active principle, thereby becoming charged with it to that extent that the life of those partaking of the milk under such circumstances was lost or greatly endangered. This I believe is especially true of contagious diseases: the mother, in numerous instances, being exposed to contagion, conveys by her milk the disease to her nursling, at the same time escaping entirely herself from all taint of the contagion.

"Cattle diseases of various kinds are becoming fearfully common in our country; hence great care is necessary to guard against the use of milk from diseased animals, either in its unmanufactured condition, or when manufactured into butter and cheese.

"In order to secure a healthy condition of the animal, care is requisite in regard to food, drink, shelter, general treatment, and a proper and due consideration and regard for the varying conditions and vicissitudes of our changeful and ever-varying climate.

Not only should the food be sufficient in quantity, but the quality should be good, and such as is adapted to the production of milk. Hence green fodder is a requisite, which can be substituted in our climate during the winter only by root crops, such as potatoes, carrots, turnips, parsnips, beets and mangolds. I do not purpose, at this time, to discuss the comparative merits of these several roots and tubers. They are all good, and each farmer must be the best judge as to which he can grow most easily and cheaply. In fact, I consider every farmer should try experiments to test this matter of growing root crops for cattle food, and when he has determined which variety will furnish the most food at a given cost, to go on and continue to grow that crop. In addition to his root crop, he should, of course, be provided with corn fodder, and also grain of some kind, and in my experience, I have found buckwheat, rye, oats and corn, in the order named, excellent food for milch cows, when ground and made into slop. And here let me say, I would never feed meal *dry* to milch cows, unless feeding largely of roots at the same time.

"During the summer, fresh green pasture, supplied in liberal quantities, is nearly all that is requisite to secure the greatest flow of milk; still there is in fact but a very small portion of the season that additional feed is not requisite and will largely pay, particularly when drought begins to shorten the pastures. Our fields of drilled corn are just what is needed, not only to keep up the flow of milk, but to prevent waste of flesh, and enable the animal to better withstand disease.

"Also, during seasons of protracted drought, is the time when we should be particularly watchful in regard to supplies of pure wholesome water for the stock. But little need be added here to what has already been said on this subject. I can only entreat all dairy farmers to give the subject serious thought, and where there is a liability to a short supply of pure water for your stock, during periods of long-protracted dry weather, not to wait until the evil is upon you, but set about providing a never-failing supply against the time of need.

"Another point I would like to urge upon you, is the importance of shelter from the rough storms of our winters. Although your food may be of the best quality, although you may deal it out with a prodigal hand, if your cattle must shiver in the storms, and pick their food from the half-frozen mud of your yards, there will of course be no thrift, but on the contrary a constant waste, a drain on your deposits, which you ought not to allow. Nor is this the only reason why shelter should be provided for the stock. There are times when the comfort and enjoyment of the animal require that they should be sheltered as well from the scorching rays of our summer sun as the sweeping blasts of our fickle winters. Especially while being milked should the cows be under shelter, and so disposed as to be quiet and contented. All excitement should be avoided; everything which might tend to produce a fevered state of the blood; and in no way can these conditions be so well observed as when the animals are comfortably housed. All running, racing and chasing by those who are doing the milking, can be avoided; all worrying and hooking of one animal by another is obviated; and if they are to be fed here, it can be done as it should be—each cow getting her share undisturbed by others. The advantages of shelter for the purpose of milking, if for no other, are so great that I should provide stabling for that purpose, if from no other motive.

"The animal organism is such that whatever is inhaled or drawn into the lungs in the act of respiration, comes in more immediate contact with the blood, and is sooner absorbed and carried through the system, than when taken into the stomach; hence, whenever a milk giving animal is compelled to breathe an atmosphere loaded with foul odors, more or less of them are absorbed by the blood, and from thence pass into the secretions, and especially into the milk secretion. This has been fully demonstrated to me in various ways and at different times during my past experience; and I regard the practice as totally wrong and altogether reprehensible, to keep milch cows where they are compelled to breathe a foul or fetid air, such as arises from filthy stables, or the decomposition of animal matter. One practice I have observed, which I cannot too strongly condemn, namely, that of allowing the carcasses of slaughtered calves to lie about the milking yard or barn, to throw off a vile and sickening stench, very offensive and postively endangering the sweetness of all the milk drawn from the dairy for weeks; and I must in all candor say that I regard milk drawn from cows under such circumstances and conditions, as totally unfit for human food; in fact, although the cow kept in such a stinking, nauseous atmosphere, may not exhibit marked disease, still I must and do regard milk secreted by her at such times as containing the germs of disease and death to all who use it. Hence I think too much cannot be said on this point, and farmers cannot be too strongly urged to look to the purity and wholesomeness of the air which their cows are obliged to breathe.

"We suppose that all the conditions heretofore mentioned have been attended to, and that we have a healthy, well-fed cow, standing quietly in a clean, well-kept and well-ventilated stable; that her food has been not only abundant, but of good quality, and that she has been well supplied with pure wholesome water; that she has not been roughly handled or hard driven, but all of her treatment has been mild and gentle; in short, that as she stands, she is the very personification of content and quiet enjoyment; we are prepared, and have a right to expect, to draw from her udder a nice mess of pure, healthy, wholesome, fine flavored milk. But before proceeding to do so, let us be sure that we are duly and truly prepared. First, what sort of a vessel is that you have to receive the milk? A *wooden* pail! Put it aside; it is unfit for drawing milk into from the cow, and *never can be* otherwise; the pores of the wood absorb a portion of the milk, which will become sour and putrid in spite of washing and scalding, and will inoculate the milk with an acid or putrid ferment, and your milk will be on the high road to ruin immediately. No! discard your old wooded milk pails, and get tin, let these have been *thoroughly* washed and scalded. Now are you ready? See there! the cow has tramped through the mud somewhere, and her udder and teats are covered with it. Get your old wooden pail, and bring some water; warm it enough to remove the chill, if it is cold, and proceed to wash the udder and teats very clean; let it be a few minutes, to dry, and then proceed. But stay! your hands are filthy; wash them first. This idea that you can get clean milk on any other principles, or by any other process than that of perfect cleanliness in every step and stage of the process, is simply impossible. Now I believe you are ready. Proceed to draw the milk quietly and rapidly, being careful not to hurt or annoy the cow; and should she manifest restlessness, do not undertake to cure it by harsh treatment, but use her kindly and gently, and, my word for it, you will have a bucket of milk fit for a king, or even a free-born American citizen.

(*To be Continued.*)

THE BEST BREED OF CATTLE.

I do not wish to discuss with any of your correspondents, the good or bad qualities of the different breeds of neat stock. I think every breed possesses some points of excellence, superior to that in any other. I never have succeeded in getting the color of the Devon, the large, noble form and feeding capacity of the Durhams and Hereford, the large even flow of milk of the Ayrshire and Holstein, and the gilt edge cream and butter of the Jerseys, all combined in one animal of any breed. That some of these breeds have more desirable qualities than others, necessary to the successful raising of beef, the supplying of milk for market, and for butter and cheese, every one will admit. But the breed that is the best adapted to any particular locality, excepting my own, I am not competent to select. I know which is the most profitable breed for me to keep; but I cannot say that it would pay the farmers near our large towns and cities, se well as some other breed might. This brings us to the point which every one must settle for himself, that is; "What breed is best adapted to my farm and market; and also what breed have I most taste for and skill in handling."

The farmer who can see beauty only in the noble, stately forms of the Durhams and Herefords cannot easily adapt himself to the Jerseys. And the dairyman who can see more beauty in the fawn like appearance, the graceful movement, and the domestic qualities of the Jerseys than in any other breed, will have better success with Jerseys, for the reason that he will unite pleasure with business. Many of our Maine farmers still believe that a cross bred, or grade animal is better than a thoroughbred. Why they should think so I cannot tell. I have proved to my own satisfaction, that a thoroughbred Shorthorn is better than any grade. If it is not so, why do our most enterprising farmers continue to use thoroughbred males until they breed up high grades, all the time keeping in view the thoroughbred as the type of perfection? I believe that when we cross the different breeds we are taking a step backwards; we have breeds enough already, and some one of them is better adapted to any locality, than any breed that can be made in one generation.

A Jersey and Ayrshire cross will produce less milk than the Ayrshire, but of a better quality; it will also increase the quantity of the Jersey, but the quality is not so good. I fail to see any advantage in a cross of this kind, yet I believe there is as much to be gained in this cross as any. I am aware that every farmer cannot at once become a breeder of thoroughbreds, but when he makes up his mind what breed is best adapted to his wants, he can use thoroughbred males until he gets the grades up to that high state of perfection where only the expert can discover the difference. For village or city families, or the farmer who is so situated as to secure a regular set of customers to whom he can deliver gilt edge butter every week, I think the Jersey stands at the head. This is the result of long, careful, intelligent breeding for this purpose, and her place can never be filled by any other breed, nor by grades. But the Jersey stock is not what a majority of our farmers want. We want the cow that has the two qualities of milk and beef more perfectly combined—one that will milk well for some years, and then fatten readily and sell to the butcher for the highest price. The qualities supposed by some to be utterly incompatible, will be found united in some animals and breeds to a greater extent than in others.

As a dairy cow, there are but few places that the Durham will not satisfactorily fill. We have milking herds of thoroughbred and high grades that are hard to beat. Where the milking qualities have not been bred out in breeding for the show ring, they are retained in as high a state of excellence as in any other breed. I know of one thoroughbred Durham cow that has a record of sixty-two pounds of milk per day on grass; and a herd of six that made an average of forty-three pounds per day. These are milking Shorthorns such as we have in Maine, and such as every farmer may have for his dairy, and from which to raise his his oxen.

The Durhams excell any other breed in their quiet, docile disposition. This is a quality which should not be overlooked. A nervous, restless animal is hard to fatten; it will not work in to beef or milk so large a percentage of its food as the quiet one will, consequently there is a loss, and often times a heavy one. It is not always the largest consumers of food that produce the largest amount of butter or beef; every farmer has observed this in pigs of the same litter, and in other stock. It has been said, that the Durhams improve every breed with which they have been crossed. I think this saving holds good with all, excepting the Jerseys: they have been bred for the place they now fill, and no amount of crossing can improve or fit them for any other places. The same is true of the Durhams—I never yet have seen grades equal to the thoroughbreds.

I think there need be no jealousy or competition between breeders, as our farmers generally understand the good and poor qualities of each breed; the purposes for which they have been bred, and whether they have the qualities desirable for their locality and success. Knowing this, they can readily select for themselves the breed they want.—*Cor. Maine Farmer.*

PIG RAISING PROFITABLE.

How many farmers in New England keep hogs at a profit? Not many, I trow, if we beleive what we hear. And why? Nowhere in the country is their a better demand for fresh pork and hams than here, and yet our farmers *buy* hams and pork;—lots of it. Go into any country store, and ask for yourselves if this is not so.

Is this owing to the fact that "the West" can grow cheaper and better pork than we at home; or to the fact that we, as a rael, have an inferior stock of swine? The last has more, or as much to do with it, as the first. The fact is, that we have grown the old, coarse-haird, nondscript, long-nosed hog, and have kept him so mean that the business *don't* pay. If swine-raising will pay anywhere, it ought and does in New England, where land is cheap, and where the dairy is the principal farming interest, the refuse product of which pays well, when fed to swine. But we must change our way of keeping swine to make them pay. Instead of keeping them on board floors and in close pens (I mean, now, the farmer with plenty of land), let them run, through the summer, in some old pasture or wood-lot, well fenced in, so that they need not be a curse to your neighbour. It is astonishing how much a hog will get to live on in some good run and how well he will thrive, if he is fed well once a day. Such hogs, when put up to fat in the fall, thrive better and make brtter meat then when kept in close pens. But we want a good kind to have it pay. What kind?

There is no better grass hog, or hog to fatten, than the Berkshire. They keep easily, lay on fat rapidly, and when crossed with our "native" stock, the cross invariable results in a good animal to fatten.

Two or three breeding sows on any farm will pay better than any cow. Those people who live near manufacturing villages can usually sell the pigs, when weaned, at from $3 to $5 each, to mechanics who have small houses and a garden. The "gentleman who pays the rent" is a necessary adjunct to those who live in such places, as the refuse of the family keeps him, a little meal fats him, and his success insures a good supply of necessary articles for family use, at small expense. But, says one, I have have no such market for pigs. Very good; when weaned, feed them from skim milk, let them run and pick; and, when they are six months old, put up and feed, if need be, with a little broughten stuff, until they will dress off 150 lbs., when butcher, and take to your nearest town, and see how quickly she will be taken up.

Another reason why we ought to keep more swine in New England is, we need the manure. One full-grown hog, when kept up and well fed, will make more manure than a cow, and a kind which is worth more than any that can be made on the farm. A few hogs, if well supplied with absorbents, will make enough "complete fertilizer" to dig a large sized corn field, and thus save you your money which you would otherwise pay for a commercial fertilizer, to insure you the the same result. But why Berkshires, says one, to breed from? We don't want a large "pork" hog, with fat four inches thick, here. We can't afford to raise such a hog. Our market calls for a small, meaty hog, with meat laid in inch strips of fat; and such a hog the Berkshire is admitted to be. We can't raise mess pork at a profit; but hams and bacon are always in demand, and any *good* farmer, if he can't get good prices for his fresh pork, can cure them in such a way that their is profit in it; this I know. There are other good breeds of hogs, undoubtedly; but I know of none who do so well in our pastures (and this is a point) as the Berkshires. This is admitted to be a fact.

If there was one good thoroughbred Berkshire boar in every vicinity of a dozen farmers, he would add immensely to the value of the pigs bred there and it would be found that his progeny would fatten much easier than a mongrel breed. Now is a good time to buy thoroughbred swine, as the low price of pork has thrown many on the market at reduced prices. It would be money in many a farmer's pocket if he would avail himself of the opportunity to buy a pair of such pigs.—*Correspondent of Scientific Farmer.*

LIMA BEANS.—As the bean is a rapid grower, it should have ordinary garden soil not over rich; as it contains much nitrogen, it should not be planted until it is quite warm and dry, else the seed will decay. When planting the beans in a hill, be careful to press them into the soil, with the eye down, and then cover with a sandy loom, which does not crust over when dry. Carefully observe when the sprouting plant tries to lift the dirt, and aid it by breaking the ground. Allow only three or four vines to a hill and when four feet high pinch them off, and never permit them to grow longer than that. This will cause the growth of lateral branches and double the number of pods. The cook says, pick them when the pod is well filled and the beans of full size; when they are in the best condition they are a pale green, lined with white. Boil them in soft water slightly salted, until tender; then drain and while hot stir in a teaspoonful of butter until it is melted; then serve in a covered dish; and if you have a friend to dine with you, he will ever mention those "Limas" as an incident in his history, and neither he nor you will allow a season to go without raising a crop of this best of all beans.—*Christian Union.*

The spring of 1878 has no parallel in the past twenty years. It is remarkable for the facilities it has given to press forward farm work; for the advanced stages of growth in pastures, wheat fields, and spring sowed grain, as well as in the foilage and bloom of trees; for the steady genial weather that has given the spring such a marked character; and for the fact that it follows a winter singularly free from extremes of weather. There may have been other springs as favorable to farm crops, but not within the memory of the oldest inhabitant has this valley witnessed another spring so delightful in its general character, and withal so full of promise to the husbandman. On many farms cattle have had full grazing since the middle of April, with no chilling storms to drive them to shelter.

Pastures are a full month earlier in ordinary seasons. The full effect of this is not seen until account is taken of the provender saved for the next winter. any a farmer finds in his barn several tons of hay and stores of coarse grains which he expected to exhaust before the full bite of grass should come. Now they constitute a surplus to be drawn upon in the future. They are so much of direct gain—of added wealth.

Then there is the great saving effected by the extended time to perform the spring work, giving opportunity to do it within the means at hand and to do it well and early, thus insuring, so far as the labors of the farmer may insure, profitable returns for labor expended.—*Husbandman.*

THE GRANGE AS A SOCIAL ORGANIZATION.—The granges of the organization known as Patrons of Husbandry have done some of their best work in this direction. It is doubtful whether in New England they have been of great use in any other respect, but some of the most prominet members of the order have felt from the first that this was not their true work, that it was more importent that the bonds of fraternity should be cemented among the agricultural poulation, than that a few dollars a year should be made in the disposal of farm products or saved in the purchase of agricultural implements and groceries. We suspect there has been too much machinery about the grange to make its benefits general, but a more serious drawback has been in the indifference of the farmer to the opportunities which the brotherhood offer.—*New England Homestead.*

AYRSHIRES *VS.* SHORTHORNS IN THE DAIRY.

At a recent meeting of the New York Dairy Association Mr. M'Adam read a paper giving the results of his experience of shorthorns and Ayrshires in the dairy. He said he began dairying in 1843, in Scotland, and followed it till 1869; that in 1864 he milked 240 cows; that he had studied the two breeds carefully on the farm and at fairs; that he had known many large milkers among the shorthorns. He thinks the preference given by the best Scotch dairy men to the Ayrshire over the shorthorn, where either could be easily obtained, ought to go a good way in deciding the question between the two; that a few great milkers are not evidence of the general quality of a breed, but rather the average produced by large numbers. In 1863 he purchased the milk from a neighbouring shorthorn herd, and mixed it with that of an Aryshire herd, and found that the mixed milk was poorer than that of his own herd had been before. He made a comparative test the next season (1846), and, for the month of June, found the following result:—

Ayrshires—64 cows—65,380 lbs. of milk; cheese, 6424 lbs.—ratio, 10·17; daily average of milk, per cow, 33 lbs.; cheese, 3½ lbs.

Shorthorns—64 cows—52,680 lbs. of milk; cheese, 4797 lbs.—ratio, 10·98; daily average of milk, per cow, 27 lbs.; cheese, 2 7-15 lbs.

He says both herds were pastured in adjoining fields, on land of similar quality. Both herds were esteemed first-class of their respective breeds. He says, for some years he was instructor in cheese making, and made cheese in 100 different places, and had opportunities of examining a great number of herds; took notes of the yield of various dairies, and the general results were in favor of Aryshires. He thinks that land which will maintain nine shorthorns, will keep ten. Ayrshires, and that the latter will yield more and richer milk, and are hardier and more prolific. For a period of 25 years, the average yield of his own diary was 500 lbs. of cheese per cow. The great points of an Ayrshire cow are her udder and teats. The udder must reach well forward, and be firmly attached up to the body, not coming out behind, or hanging loosely down; the quarters alike in size, and the teats set on widely and equally apart, neat, and not very large, square at top, like a cork, not hanging together like a bunch of parsnips under a loose, flabby bag.

CARE OF HOUSE PLANTS.—Give them a sunny window, in a moderate warm room; an excess of dry heat is to most species more injurious than a cool atmosphere. Some kinds, as the camellia, azalea, oranges, oleanders, pelargoniums, etc., greatly prefer the latter. Moisture on the foliage is very gratefully received, but dampness in excess at the roots is sure death at no late day. Never water a little at a time and often, after the manner of fattening swine, but withhold water until the soil shows plainly that it is dry, then apply it thoroughly. When the air is mild, and the sun shines, raise the sash, and give the plants a foretaste of the coming spring; it is worth more than all the nursing and extra care you can possibly bestow upon them in their prison. Occasionally stir the soil in the pots and sponge off the foliage, or place the plants in a suitable apartment and give them a good syringing. Moisture will effectually rout the red spider, a minute insect detected by the pale speckled appearance of the leaves; smoking with tobacco kills the plant lice, a numerous, rapidly developed, little animal that preys upon the young foliage and tender shoots. Scale insects are a bother to some classes of plants, and the only way to get rid of their presence is to scrub them off with soap and water, using a small brush. Some people seem to have a mania for repotting their specimens, under the impression that the roots never have sufficient room; always wait until the roots form a mass in the pot, and then shift into a size only very little larger. Above all, remember that a few well-growu plants are much more attractive than a large number stunted by neglect.

Probably one of the cheapest and most efficient remedies for the codling moth is to pasture the orchard with sheep or hogs. Let them be sufficiently numerous and hungry to eat every apple falls within a short time after it has dropped. To reap the full benefit from this course it should be grazed continuously year after year. To practice it occasionaly, for one year only, will not answer. We do not command this as all that should be done to stop the ravages of this pest, yet it is the readiest, cheapest, and most effective remedy that many farmers can employ.