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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.

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Agriculture.

AGRICULTURAL EXHIBITIONS.

Some of the American agricultural papers are now improving the occasion, in prospect of the early opening of the Exhibition season, by impressing upon their readers, the importance of "Agricultural Exhibitions" and "Fairs." When we say, American agricultural papers, we more particularly allude to the *Country Gentleman*, *Maine Farmer*, *New England Farmer*, all three influential, widely circulated and read and instructive journals, and to whose columns we are often indebted for reasonable and interesting matter.

It is not a needless task that the editors of such papers undertake, to run up in the farmers who come under their influence, an interest in such exhibitions, for there is no denying that there are among the farming class some members who do not take any interest in them, but who declare that for their own part they do not see that they do the least good. But there always has been and always will be, as long as human nature goes on in its present prevailing unregenerate state, those who will laugh, snarl, snarl and growl at anything that looks like progress, anything that makes an attempt to improve the condition of things in any way. There really are people who seem to take a delight in ignoring all improvements, in retarding, as much as lies in their power, by ungenious and ill-natured words or deeds, any movement that has for its object the bettering of any class or object. Such people are the true obstructives, and it must be said that their power is strong—for evil. The opposition to any new idea or movement must proceed in the fairly well informed and cultivated from an overpowering self-esteem, and a selfish desire to keep the advantages they enjoy within as small a circle as possible, or from a narrow and mean jealousy that the new idea or movement has originated with others than themselves, or from a cynical scorn of anything noble, useful or good, or from sheer stupidity, or heavy ignorance in which there is a strong tinge of malignity and envy. The large, true, progressive mind is ever open to new ideas, ever welcome movements of progress in which it sees something that will turn to the general good, and despises nothing or nobody, for it knows that something useful may be learned from the most unlikely sources. When Sir Walter Scott traveled, in the good old days of coaching, when people met with strange adventures sometimes, (the same story has been told of other great men in England and America,) he did not shut himself in the exclusive pride of his own imagination and intellect, but entered freely into conversation with his fellow passengers, and he said, that even the humblest was able to tell him something that he did not know before. The spirit of Sir Walter should actuate all farmers, and they should be open to receive instruction from all.

A correspondent of the *Country Gentleman* last week had some very appropriate remarks on the subject of agricultural fairs, and claims that they have been of incalculable benefit to agriculture, stimulating the ambition of farmers and suggesting improvement. No man, with his eyes in his head, can attend a fair, and not see some direction in which his stock, crops, and tools can be improved. No matter, if in the whole he is the most progressive farmer in the country (provided he is not at the same time the most conceited), he will find others who in some points excel him. This is the spirit in which farmers should attend fairs. They should go not merely to exhibit their own stock and products, but carefully to study the exhibits of their peers and competitors. Fairs properly managed are grand schools in which the art of agriculture is taught by the most approved method—object lessons. The careful inspection of Durhams, Ayrshires, and Jerseys will give one a better knowledge of these breeds of cattle than the perusal of a dozen herd books. The idea of a Fair as an educational institution is not sufficiently appreciated either by the managers or exhibitors. The former are wont to give too much consideration to pecuniary results, and the latter to premiums. These things are not to be wholly ignored, but fairs were never intended to be speculative institutions, or as a medium for the distribution of prizes.

New Zealand offers a bounty of £10 a ton for the first 500 tons of sugar beets that may be raised in that country. It is easy enough to raise the beets, but not so easy to make the sugar from them.

A NEW VARIETY OF WHEAT.—"The Diamond wheat" is a new variety recently imported, and it is claimed to be the finest wheat in the United States, and that it has been successfully cultivated wherever tried. We have been shown a few specimen grains by Jas. Tibbits, Esq., of this city, each grain close on one half inch in length, the kernel is large and compact, of a bright straw color and extremely hard. "The Diamond" is grown as a fall and spring grain, and it is used with equal success. Samples will be shown in the Provincial Exhibition in October.

MACHINE FOR FEEDING POULTRY.

The artificial hatching and rearing of poultry, ostriches and other birds has already become a science, and a profitable and important branch of business, and the further treatment of ducks and capons for market has created a demand for machinery for artificial feeding and fattening. The most important machine of this class consists of a circular cage of wood about 4.57 metres (15 feet) in diameter and 6.10 metres (20 feet) high, and containing 210 coops or nests for ducks and chickens, the cage being all on the outside. A chick three months old is put in each nest, and by means of a band of skin or rubber fastened to a light chain is secured so that it cannot escape. In these nests the chicks, pigeons, ducks, turkeys, quail or other birds are kept till they are ready for market, each bird being artificially fed three times a day. The birds can move about and sit down but cannot walk or fly, and this enforced rest causes them to fatten quickly. A chick having been placed in each nest, the apparatus for feeding is loaded with a mixture of barley meal, Indian meal, milk and water, and is brought up to the cage. Each bird has been carefully examined, and the amount of food will comfortably digest is marked plainly on the front of its nest. The operator takes the chick by the neck and by a gentle pressure compels it to open its mouth. A rubber tube is inserted in its mouth and by means of pressure on a pedal, the semi-fluid food is forced into the creature's throat. A gauge on the machine records the quantity of food given to each bird, and by watching this indicator just the right amount can be supplied. Ducks are at the same time given a drink of water, the other fowls not requiring water at any time. The cage containing the birds is mounted on rollers, and when one bird is fed the cage is moved round and the next bird is brought opposite the feeding machine. When the cage has been turned round once the feeding apparatus is placed on an elevator, and the machine and the operator are raised to the next row. In this manner every chick is in turn fed, the operation requiring about one minute for each bird. Another form of cage is made with only two rows of nests, one over the other, and with the nests disposed in lines. This apparatus does not move and the operator carries the feeding machine, by means of a truck, from bird to bird. The feeding machine may be a simple pump that can be moved by a treadle, or it may have a reservoir in which a constant pressure may be maintained by means of weights. In this case, the supply of food given to each bird is controlled by a stop-cock. Contrasted with the barbarous methods of artificially feeding poultry that have been practiced for some thousands of years in some parts of Europe, this method of machine-feeding has the advantage of neatness, dispatch, and the entire absence of cruelty to the birds. Duck can be fattened in perfect safety and entire comfort by this method in fifteen days, and chickens in twenty days, and the loss from disease and accidents rarely exceeds two per cent. The fowls thus treated are uniformly healthy, and the quantity of the dressed meat is excellent. Artificial incubators, artificial mothers, and this appliance are exhibited at the Paris Exposition. The incubators are all founded on the familiar plan of making a large reservoir of hot water and placing the eggs in a circular box in the middle. The American incubators are, in some respect, superior to the French machines, as a permanent fire is maintained, regulated by automatic governors. The artificial mothers or "hydrometers" shown at Paris, do not differ materially from those used in this country, and are all based on the same general plan of using a large mass of hot water as a means of obtaining the necessary warmth.

THE PROMISE OF THE APPLE HARVEST.

There is one cheerful feature to the harvest-time of the present season which has not greeted us for years—and that is the beauty and hope of the apple orchards which generally, throughout our State are promising a goodly yield. Those only can realize how great a help to good living are an abundant store of choice apples, who have been deprived of them for years—as families in Maine—and this year they welcome the sight of trees loaded with choice fruit, with something of the feelings with which they beheld them in the days when life seems to round off the harvest of Maine with a sort of luxurious flavor, that sends a glow of content and good cheer all through the heart. What visions of baked apples, and apple sauce (the old-fashioned cider kind) and apple pies, dance before the mind as one contemplates it; what suggestive it has—bringing up the sparkling times of the old style paring bees, and of winter evening fire side stories before the open fire place, with a generous dish of splendid apples on the stand, and good cheer all around! What times those were, indeed; and verily we are to have them over again as of old this very season! The crop of apples will be abundant for all purposes. Life is still young and fresh, and there will be many merry-makings at paring bees these glorious fall evenings—and, old as we are, we should yet enjoy them as well as when a boy, if—well, no matter! The old stories will be told by happy fire sides, and there will be lots of the choicest sorts to put into the cellar for winter use, besides a few barrels to send to market—something but few farmers have had for many years past. Oh! the pleasures of the rosy, golden apple harvest; the joy and comfort which it brings; the satisfaction it contributes to good living in the farmer's family! And we are to have all these in good measure—for which we may be devoutly thankful!—*Maine Farmer.*

HOW TO USE BONES.—Don't let old bones lie around in the barnyard and fence corners. They should be preserved, as they contain phosphoric acid, one of the most valuable ingredients in manure. Put a layer of wood ashes in the bottom of a cask and then add a layer of bones, then add another layer of ashes and so on until the cask is filled. Keep the mixture wet, and in a few months the potash in the ashes will have so combined with the phosphoric acid in the bones as to give you a most valuable fertilizer.—*Mass Ploughman.*

SHEEP-KILLING DOGS.

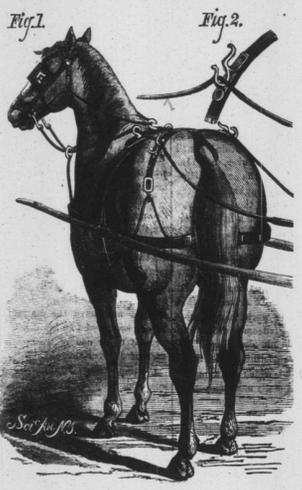
Mr. D. C. Richmond, of Ohio, relates in an article at large without credit—the results of observation and experience of sheep-killing dogs, from which he was quite a sufferer during twenty-five years. They slaughter their victims by tearing open the large veins of the neck and sucking the blood, they never can be broken of this trick. A single dog will sometimes kill sheep, but generally there are two—often a large and a small dog. A sheep-killing dog will teach others. The first time a dog kills a sheep he will suck the blood, and then eat some and be satisfied. He will soon learn to kill several, sucking the blood until he is full, eating no flesh the first night. Any dog that will chase sheep when out alone, will sooner or later kill them. A green dog will sometimes kill a sheep in the daytime, but this seldom happens. Nearly all the sheep-killing dogs are about in the night; they are very cunning about it, often going long distances from home when there are plenty of sheep close by. As a preventive measure bells are good; not small ones, but three good-sized bells for each hundred sheep. If, in spite of this precaution, a sheep is killed, say nothing. Skin it and let the carcass lay in the same place. The first night after killing, the dogs will not come, but the second night they be on hand. Cut four or five gashes in the shoulder of the dead sheep, put a small amount of first-class strychnine in the gashes, and the next morning you will be sure to have dead dogs. Mr. R. has sometimes killed four dogs in one night. He adds that "it is well to keep the mouth shut," and concludes with mention of a curious incident: "One morning I found a small yearling killed, with a small round hole eaten out of his fore shoulder. It puzzled me. I knew it was not a common dog. I told my neighbors to shut up their dogs. The second night after killing I put in the strychnine, and the next morning I had the largest red fox I ever saw."

HARVESTING MACHINERY.

On the subject of self-binding reapers, Mr. James Howard of Bedford, writing to the *London Times* says:—"That American inventors should have been first in the field was only the natural course of events. In the sparsely-populated corn-growing districts of the Western States, the difficulty of obtaining hands to tie up the corn after being cut down by machines has been severely felt, and hence the necessity of a machine to bind up the crop has long been a want of the most pressing kind. In England no such want has been experienced, and therefore inventors and manufacturers have had little or no inducement to produce such a machine. Indeed, at the present time, some of the most enterprising English farmers hold to the opinion that, with our humid climate many of the crops are better not bound until the sheaves have been exposed to the sun and wind, and therefore the binding machine is not regarded by them with any great interest. Others, again, contend that now we have efficient automatic machines to cut down our crops, plenty of labourers can be found for the binding. If, however, a saving of a moderate estimate, these machines will doubtless become general, and the men, moreover, will take to them. Reports have recently reached this country of a formidable movement among the labourers in America against agricultural machinery, and which is said to be spreading. It appears they have destroyed numbers of self-binding reapers and other machines in Indiana and Ohio, and have also resorted to the use of threatening letters. The present generation of English agricultural labourers have acquired a thorough dislike to hard work, and take kindly to any machine which relieves them from excessive labour.

CULTURE AND HUMOR IN WESTERN FARM LIFE.

Quite often, in the course of my rambles, I have found Western farm houses furnished in exquisite taste from library to kitchen. Chairs, tables, carpets, curtains and pictures, in many of our country homes, have been chosen with a correctness of judgement rarely evinced by a large class of most excellent city folk. In the matter of books, a farmer of the better class generally selects with great care and with a view to solid mental food. But a taste for light fiction, poetry, music, and painting is not wanting. It is surprising, indeed, to find how generally the works of the leading British and American poets and novelists are read among the rural classes of the West. The younger American poet—as well known, by their writings, West and East. Even Hawthorne, whom to read and appreciate is high evidence of literary taste and intelligence, has found very many of his sincerest admirers inside the homes of the "Hoosier" and the "Buckeye." Not long since, while sojourning for a fortnight or so on the shore of one of our western lakes, I had the pleasure of spending several evenings at a farm house where, as a member of the family for the time I was allowed to hear one of George Eliot's novels read aloud by the farmer's daughter. Everywhere in the West the literary journals, both weekly and monthly, are subscribed for by farmers, for the pleasure and instruction of their families, while many of them take a daily paper. But, despite all that can be said to the contrary, the *gentlemanly*, which has by some been rendered into English and made to mean "rusty oss" still largely acts itself in our rural regions,—a genus of the copperas brooches, gin-gin-cake-loving ilk, to whom we owe the racy, soil-favored smack of original humor, peculiar to the Ohio and Mississippi river valleys. Farm life in the West seems to have developed broad, comic humorous ways of speech, and it cannot be denied that much of this humor, coarse though it is, possesses the inimitable charm of outright home manufacture. Through certain of local Western journals, the world has of late caught very distinct glimpses of it. But I am sure that the best Western humor has never yet been reduced to type. It is scattered about in rural neighborhoods, and most of it is finally lost by being carelessly thrown aside as "old." Most of what has been given to the world, in books and monthly magazines, as Western humor, has been first put through a refining process of doubtful doctering, by which something more than a modicum of the home flavor has been allowed to exhale. It has been enunciated as a rule that the more ignorant class of Western farmers discovers a far quicker and finer sense of humor than does the somewhat educated and refined class. So soon as a smattering of books and newspapers gets into a clod, the sharp salt of the earth seems to go out, and there comes self-consciousness and a straining after natural effects.—*Scribner for Sept.*



TAYLOR & MACKEY'S REIN HOLDER.

This useful little device, which is shown so clearly in the engraving as to require little description, is the invention of Messrs. J. M. Taylor and John Mackey of this city.

This rein holder consists of two double hooks, one of which is attached to each of the hip straps. These hooks are placed about ten inches apart, and are equally distant from the back strap. The upper part of each hook is made quite open, so that the reins will readily drop into them when they are relaxed, and thus prevent them from becoming entangled with other portions of the harness, or getting brushed down by the horse's tail. The opening of the lower hook is smaller than that of the upper hook, so that when the reins are placed in the lower hooks by a dexterous movement of the hand, they will be retained securely. The reins are removed from the lower hooks by drawing them taut and at the same time moving them upward and outward. This invention has been recently patented in the United States and Canada. For further particulars address the inventors.

FAILURE OF SPRING WHEAT.

The following article on the failure of the spring wheat, from the weekly *Montreal Witness*, will, we think, repay perusal. Though the crop of fall wheat the present season has been unusually good, there has been extensive failure of the spring wheat. In some localities the failure has been only partial, in others well nigh total. Cases have come to our knowledge in which whole fields have been reaped only to make it practicable to plough the land, both grain and straw being practically worthless. Preparations are being made by many farmers to sow the same ground with fall wheat. Whether this is a better policy is a question that can be better decided after looking at the causes of failure. Possibly they may be of such a nature as to suggest the cultivation of some other crop. How, then, is the unsatisfactory character of the spring wheat harvest to be accounted for? There are several circumstances that have contributed to the result now noted, to each of which brief mention may very properly be given: 1. Poverty of the soil; over-cropping with wheat and other grain has induced this. Wheat, to succeed well, requires fertile land and good culture. With these it bids defiance to influences which, under other circumstances, cause it to succumb. It is worthy of thoughtful attention how many of the ills that agriculture is heir to, have their origin in an improvised soil and inadequate tillage. We know of highly cultivated farms on which spring wheat has done well the present season; while, close by, on adjacent farms that were in low condition, there has been failure. Indeed so far as our observation has gone, there is a fair crop even this year on well-tilled land. We do not affirm this to have been uniformly the case, but our impression is that it has been the rule, or at any rate there has been such a proportion of average good crops on fertile soil properly worked, to justify mention of poor land as one of the causes of disappointment and loss.

WHERE TO SELL GOOD BUTTER.

The *Rural New Yorker* says: In talking with a person who had been a grocer, we heard the following remark in answer to the question "Why do you not make more difference in the price of butter taken in from the farmers?" "We cannot do it. It will not work. Nothing will offend a woman quicker than to tell her that her butter is not first class. If we tell her the butter is poor, she will tell where she sells her produce. To keep her trade, I must buy her butter. So, it is customary to pay about the same price for all grades of butter offered in small lots. We make on the best lots and lose on the poorest. We come out about even, satisfy all parties and get the custom of those who sell butter which is good or poor." The better way for those who make the best butter, is to find some regular customers and supply them from week to week throughout the year. In this way, the producer gets better prices and avoids the close shave of middlemen.

ACREAGE REQUIRED FOR A COW.

How much land is required for the support of a cow? This question depends for an answer, so much on the circumstances of the soil, as not to admit of a very definite answer. Mr. Schull, of Little Falls, N. Y., estimates that the land in pasturage and hay, requisite for the support of a cow, is three acres; and this is the estimate of Mr. Carrington, for moderately good farms in England. In Belgium ten acres of land support two cows, one heifer and one yearling or calf.

the heads of nourishing juices, their ascent being prevented by the injury done to the stalk-joints. Hence the heads turn yellow prematurely, and were found, to a great extent, without kernels in them. The weakened joints broke readily with the high winds, and this accounts for the large proportion of broken stems noticed by many in their wheat fields the present year. Besides the insects already named, the midge has done some mischief, though perhaps not on a very wide scale. Without doubt, the wire worm has been the worst of the insect foes with which the spring wheat crop has had to contend this year.

In view of the formidable obstacles to its success which have been enumerated it is little wonder that spring wheat has turned out so badly. What to do about it is the next consideration. Our prescription, like many kinds of medicine, will doubtless be "bad to take," but it may nevertheless cure the patient. It is, in brief, to quit growing spring wheat, and fall too, for a time. The small yields of spring wheat for many years past have been very discouraging. Ten and twelve bushels to the acre did not pay the farmer, and these puny figures have "told the tale" for too many of our wheat-growers. We should be inclined to try it down as a rule to grow no wheat on land that cannot be reasonably expected to yield twenty bushels per acre. As a general thing, too great a proportion of wheat is grown on Canadian farms. There is still the lingering idea that wheat is the grand cash crop. Time was when this was true, but it is not the case now. Beef, mutton, pork, butter, eggs, potatoes, and fruit, are all cash crops. Let us grow less grain and more grass, more turkeys and carrots, more stock, and more dairy products. The race will not turn bread if all Canadian farmers whose lands are impoverished cease to grow wheat for a time. Our newly-settled districts will raise it. It will be grown on highly-cultivated farms, which, though not so numerous as could be wished, are increasing in number. It is a worthy ambition to desire to grow the king of grains, but we must sometimes "stoop to conquer!" If we take to stock-raising and other products for a while, we shall by and by be able to raise respectable crops of wheat.

A hint was given at the outset that it might be well to consider the propriety of sowing land to fall wheat where spring wheat had failed, in the light of the causes of that failure. Our advice is "don't." There is reason to fear the Hessian fly will be troublesome this fall, and it is probable we are only at the beginning of our troubles with the joint-worm. This insect makes its abode in the straw of the previous crop, and is pretty sure to come forth next spring in redoubled force. In fact, it is thought by competent judges that the only way to make a clean sweep of the joint-worm is to burn up the straw. The liability to future insect attack, added to the considerations already enumerated, makes out, in our judgement, a pretty conclusive argument in favor of a change of crop.

WHITE CLOVER IN PASTURES.

Every pasture should contain some white clover. It will afford more food at certain times of the year than any kind of grass or clover. It will flourish in damp soils, or those that are very poor. It will do very well in a partial shade, as a grove or orchard, but to make the highest excellence it should be sown where it will have the advantage of sunlight. It is easy to secure patches of white clover in a pasture, by scattering seed in early spring, on bare places, and brushing it in. One pound of seed is sufficient to start white clover in a hundred places in a pasture. The disposition of this clover is to spread by means of the branches that run along the surface of the ground, and take root. Having secured a sod of four square, it will soon extend so as to cover first a yard, then a rod.—*Eschwege.*

RUSSIAN CHEESE.

An article of diet of almost universal consumption among the poorer classes in Russia is the variety of homemade cheese known as *Tvorog*, of which more than seven million pounds are sold annually in St. Petersburg alone. Its mode of preparation is very simple. Sour skim milk is placed over night in a warm oven, and poured the next day upon a sieve, where it is allowed to remain till all the whey has run off. The curd is then packed lightly in a wadded vessel and covered with a lid made to fit exactly within it. On this heavy weights are placed, so as to keep up a constant pressure on the mass of curd, and the space between the lid and the top of the vessel is filled with cold water, which is frequently renewed. *Tvorog* cheese is, in fact, nothing more than hard pressed curd. In the northwestern and southern governments of the Empire it is often made of sheep's milk, and in Bessarabia a superior quality made from the whole milk is prepared, which possesses far better keeping properties than the ordinary sort, and which is exported in considerable quantities to Wallachia, Moldavia, and even to Austria.—*American Dairyman.*