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Agriculture. THE PREMIUM LIST.

We return again, this week, to the subject of the Provincial Exhibition, as one that ought to be kept constantly before the public until it becomes an accomplished fact. An official reminder has been given this week by printing of the Premium List, which will be widely distributed throughout the Province. It will not be out of place here to mention some facts, from the Rules and Regulations, that ought to be borne in mind by intending exhibitors. It is especially necessary that they should remember, in order that hurry and confusion may be avoided—that entries (made on printed forms obtainable from the Secretary of Agriculture, and the Secretaries of the several Agricultural Societies) should be made as soon as possible—not later than the 15th of September; entries not sent in at that date will be received conditionally until the Saturday before the Exhibition—which will positively be the last day of receiving. Machinery and other heavy articles should be on the grounds a week before, and lighter articles the Saturday before the Exhibition opens. Intending exhibitors should bear in mind, that animals, Provincial bred or imported must be the property of a resident of the Province, and if imported must have been the property of the exhibitor for at least three months. The English, American or Canadian stud books, and the English, American, Canadian and New Brunswick Herd Books are the standard authority or evidence of purity of blood. Exhibitors of pure bred stock will be required to register the pedigree of the animals in the Provincial herd book if not entered already in one of the Herd Books. All articles exhibited, to be eligible for a money prize, must be the growth, product, or manufacture of New Brunswick; articles not coming under that category may, if worthy, receive honorable mention. All articles of farm produce must be grown in 1878, and any person guilty of deception or misrepresentation in this particular will forfeit any premium he might otherwise be entitled to.

A glance over the Premium List shows that a pretty comprehensive exhibition of the stock, products and manufactures of the Province is provided for. 701 "articles" are enumerated, and the Judges will have power to give discretionary prizes to articles "not enumerated," if they think them worthy of such award. About 1700 prizes ranging from \$20 to \$1 are offered. The Premium List is divided into 20 heads—viz. Live stock (including horses, cattle, sheep, swine), Poultry, Agricultural implements, &c., Carriages, Sleighs, Manufactures, Leather Goods, Cabinet and other Manufactures principally of Wood, other Manufactures, Farm Produce, Horticulture, Fruits, Bees, Honey, and Wax, Dairy Produce, Flour, Meal, Fish, Domestic Manufactures, Ladies' Fancy Work, Minerals, Flowers, Paintings and Photographs. Two premiums will be given for ploughing. The premiums will be paid on the last day (Friday) of the Exhibition to the taker in person or to his order, or forfeited if not claimed within three months.

MANNER OF APPLYING LIQUID MANURE IN HOLLAND.—In Holland, liquid manure is applied to fruit trees in the following manner: An iron shod stake of about three inches in diameter, with a piece of wood nailed on one side, to place the foot on, is used to make a circle of holes just under the ends of the branches, about eight inches or two feet apart, and from twelve to fifteen inches deep, and the liquid manure is poured into them. Then the holes are filled up again so that the liquid is not evaporated, or the earth baked hard by the heat of the sun. In wet weather, the liquid manure is applied alone, but in dry weather it is diluted with an equal quantity of water. The application is made about once a week, commencing at the time when the fruit is well set and ending when it shows the first symptoms of maturity. Liquid manure may be applied to grape vines, garden vegetables, etc., in the same way.—Rural.

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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A FAMOUS SCOTCH BREEDER.

The London World in a late issue, gave a graphic account of a visit to Mr. M'Combie of Tillyfour, of whom there are few agriculturists who have not heard. M'Combie is as famous for his "Black Polls" as the Collins-bates and the older Booths for their Short-horns. The World says:— From Aberdeen, with its dull granite streets and the whistling of a sea wind—Aberdeen, at which the northward-bound traveller says farewell to anything like speedy locomotion—is an hour's journey, span out wearily by a crawling pace and random stoppages, to Kintore Junction. Here the solemn-paced North train lands one on the platform to the unimpassioned note of a red-nosed porter, 'Paas-sen-jairs fur Auld change kare-ages.' It is not Alford, however, which happens to be our destination, but the next station to it, Whitehouse; and by the time our rusty old engine, with many gruntings and growlings, has carried us over a country bleak and bare in spring dreariness, the Scottish cold has eaten through ulster and wrap to the very bones. In the carriage in which we happen to be, a couple of red-faced, loud-voiced farmers have been talking for the last half-hour of 'sweet nowt and gay coys,' till our Southern brains have grown dizzy under the ponderous Doric, and we begin to realize that we are in the home of the Polls. It is Whitehouse, and here is Jamie Glass and his big wagonette waiting us. Mr. M'Combie, the tenant-farmer, as he persists in ranking himself in spite of his landlordship, has always despised liveries and trappings, and Jamie Glass' honest soul has been vexed with neither. The horses, too, are no showy park steppers, but strong-boned blacks without much beauty about them, who whisk the heavy carriage up the steep hills and valleys of Tolly as if it were a doll's phanton, and who, Jamie says, are as confidently as we whip ourselves beside him, can do their mile in 2:30; 'at least the pony can' pointing to the off-side, 'and the horse is nee muckle abin.'

As we sweep up the short step avenue Tillyfour raises itself above us amongst its quaint old elms, which the crows make murmurous with a prodigious cawing, bold and stiff against the dark mountains on the south. It is a big, bonnie, but now not unbecomingly looking house. Mr. M'Combie is a gentleman of the old school, and believes in old-fashioned hospitality. With his snow-white beard and hair fluttering in the wind, he meets us at his door with hearty welcome and genial face. The interior of Tillyfour is not more pretentious than its exterior. In the plain oblong hall are a score or so handsome Royals, a few illustrated mementoes of show-yard triumphs, and half a dozen old swords of the '15 and '45; for the "Grazier King" has, despite himself, Highland ancestors in sufficient number, and of sufficient antiquity to put to shame many a new-gilt coronet. Preceded by our host, we enter the dining-room, a spacious chamber, hung from floor to ceiling with paintings of bygone champions. Here over the massive side-board is the International Poissy Champion; besides him stands the only alien in the room, a handsome, grey-haired, round-winded, and diviner of the old Elgin Stakes, for Mr. M'Combie, in his youth, loved a horse and a dog and a pun as heartily as any; over the mantelshelf "Black Prince" is the place of honor, looms majestically down on us, on his right his own huge black head, brown his visors and on his left "Charlotte," a grand-queen of the Tillyfour herd, fixes her wrinkled old head to the wall. All round are pictures of famous polls, black and glossy in paint and gilt; and in the fawn, and one or two more, we notice the firm touch of the now famous "Bassie." It is thus and here that Mr. M'Combie takes his meals, surrounded by his famous blacks each picture telling him its tale of cups and feat, toil and triumph. His cups and medals have yet to be seen, and we proceed up-stairs to the drawing-room, where they are laid out for inspection.

On the stairs are more bovine heads, drawn from Europe, America, and Africa, by Mr. Combie's nephews. Here is a large South American buffalo's horns mingling with those of an American elk, and finding a genial home amongst the polls. The drawing-room is large and many-windowed. It is empty now, but in summer time curious visitors of all ranks and countries leave it seldom silent. Ranged upon a strong table are cups and medals galore; they are usually transported below and set forth in due order for the inspection of visitors, but here they look in their confusion a Golconda of silver and gold. About twenty pages of Mr. Combie's interesting "Cattle and Cattle-breeders" are devoted to the bare enumerations of the prizes he has gained in local, national, and international showyards, and this is the chamber in which the chief of them are massed as on a silver-shop's counter. In the centre Prince Albert's prize d'onneur of the Poissy Show, massive and beautifully designed, around some thirty other cups and pieces of plate, and over two hundred gold and silver medals. Here, too, are mementoes of Her Majesty's visit in 1872, in two magnificent portraits of herself and Prince Albert subsequently sent from Windsor. Mr. Combie tells us that the Queen, having surveyed the stock and herd, and taken a cup of tea just where we are sitting, requested to be shown the great head downstairs, at which we are looking and which she had seen in the full bloom of his triumph during his Windsor visit. It is evident the flavor of "Black Prince's year" lingers,

HOW RICH LAND SHOULD BE

This is a common question, and it means much more than is usually supposed. The answer is clear: Land should be just rich enough to grow the best crops. What is over this is a loss in the interest and in the material properties that escape, as nitrogen, the best of them, will. There may therefore be too much fertility. But some crops require more than others, like corn, the grasses, and forage crops in general. Not so with the grains, which may be too stout, so as to lodge, or grow, as they are apt to, more straw in proportion than berry. Yet the grains (wheat in particular) will bear considerable enrichment—much more than they get. After learning, by test, what kind of manure the land wants—and the manure of the farm usually answers the purpose—the application becomes only a matter of quantity, and the gauge may be maintained by a proper rotation, using, if enough can be made (which can with proper management,) only farmyard manure, and what the farm furnishes in sod, green crops, &c. It thus becomes an easy matter to push the crops as desired. The question arises, to what extent they shall be pushed, and not leave too large a surplus in the land. As I said before, just enough to grow the best crops, as land may be too rich or too poor to realize profits. This always leaves a portion in the soil, enough to give the necessary balance and texture. This is not a very large amount. For instance, a poor soil that barely pays expenses, given a good coat of manure, properly applied, so that the top ground where the roots are gets the benefit of it, will pay all expenses, including the manure, with something over besides, depending on how cheap the manure was obtained, while the land has still some left of the application, which is the commencement of improvement, making, with the same amount of manure in the second crop, a better yield, with still further improvement in the land. Here is profit from the crop, and increased value of the land. At this rate, it does not take many years to bring up the land to a high state of fertility. But is this advisable? Evidently not, as it leaves too much unused enrichment in the soil. The course is to use manure enough to grow the most profitable crops, and no more. This is economy. It still keeps the soil in a good mechanical condition, with small waste of the nitrate, the crop taking up what is needed, leaving to the soil its share, kept up, not exceeded, by what excess in application is demanded to supply the waste. In this way less manure and more benefit will result.

It is a fine way of farming, bringing up the land with comparatively little outlay, and at the same time realizing large yields with increased profit through the economical use of the manure. The poorest land thus becomes an object of interest. It is the true means of renovating our New England farms, with their admirable markets for all kinds of produce, and adapted to mixed husbandry. With the advantage derived from keeping manure at the surface, so as to get its full benefit before it disappears in the depth of the soil, and get it at once, realizing thus an additional saving, with a corresponding reduction in the expense (amount) of manure and the labor in handling it; a new era in farming has dawned which is slowly but surely revolutionizing the old wasteful method of burying beyond resurrection. It now only needs care in saving and properly applying. But much—indeed all—is depending upon the manner in which this is done. To put the manure in heaps, and leave it there for a time, is a twofold loss—a loss of labor and the strength of the manure—and if left for a long time, the loss of manure will be great, and its strength will be unevenly distributed, some places, where the heaps were, getting too much, the rest not enough. Let it be remembered that it is manure, the coarse material of the farm, on which the profit of the farm depends, and that it accordingly requires careful management, so as to avoid waste, not only in the stable and around the barn (using absorbents and protection,) but on the field, in the application and the amount given.

WHAT FIVE SHEEP WILL DO.—Five sheep will enrich one acre of old, worn-out mowing land in three years so that it will produce one and one-half tons of hay per year for several years by a slight sprinkle of seed each year sown in early spring. Five sheep will produce manure in winter to the value of \$10 by giving them suitable bedding. Five sheep will get their living through the summer on one acre of ground; the pasturing of the same would be \$3. Five sheep will raise five lambs, worth \$15. Five sheep will shear twenty-five pounds of wool worth \$6.

TAKE CARE OF THE EGGS.—For hatching purposes, for inattention in this respect may destroy the vitality of many valuable eggs. Too often choice eggs are laid away in a bowl or dish, in a damp closet, and eggs are added until some hen wants to set, when enough eggs are taken out to furnish the hen with her complement. No care is taken to tell how old eggs are, and often eggs many days old are set. To avoid trouble in this respect, as soon as the eggs are gathered, with a pencil, mark 4 10, or whatever date it is. If you are collecting eggs from several varieties, in addition to putting the dates on the eggs, mark W. L. for White Leghorn, L. B. for Brown Leghorn, L. B. for Light Brama, and so on until you have them properly marked, and by doing this you prevent any possibility of mixing the eggs, and avoid any error in shipping them, while you can keep them all in one convenient box or basket. Dating them when they are gathered is a safeguard against setting stale eggs. A shallow box or basket is the thing in which to keep eggs intended for setting; put a layer of cotton in the bottom; put the eggs on this, and then set them away in a moderately cool dark place, avoiding unnecessary handling. By this means the eggs will retain their vitality for quite a while, and give general satisfaction.—American Poultry Journal and Record.

HARVESTING GRAIN.

Men differ as to the best and proper time to cut wheat. Many say it would stand until the grain is quite hard, and then be cut and put into the barn almost immediately after. Others cut earlier, and often put it into the barn or sack before it has had time to cure. I have no doubt, if the wheat is intended for seed, though the sample will be quite rough and will not look so nice, it is better to let it get quite hard previous to cutting; but for grinding, and to make sure of a fine sample for sale, this is a mistake. When secured in this hard state, and through being so long exposed to the sun before cutting, it is impossible for the miller to separate the brand from the flour so thoroughly; consequently the flour is coarse and brown. Also, when cut so late, if there is much to handle, considerable will be lost before the whole is secured.

For several reasons it is desirable to cut while in a soft state. If the berry is past the milky state, and when like soft dough, it is as good a time as can be. I cut my wheat large wheat raisers to cut it very green. The color is brighter, the berry more plump, the quality nicer, the straw softer and tougher—not so liable to break up when threshed—all of which is very desirable. It is a settled question that more and better flour can be made from this wheat. Of course, to cut in this green or soft state, more time is required to cure before hauling. Many object to this on account of rains, and anxious to barn the grain immediately after cutting. We know it is not pleasant to have rain day after day on wheat if not properly set up in shock.

My custom is to cut when in the doughy state, make good sized bundles, set them two up—six bands up, right and two to well, making eight altogether; let them stand till the wheat is hard enough to grind. The wheat will not be injured by moderate rains, and the heads not being much exposed to the sun will not be injured by drying too quickly. I am in no hurry to haul the wheat if other work is pressing. I have found all through 35 years' experience that it is best to cut early and give sufficient field room. Most of the musty wheat is caused by being put together too soon after cutting, even if the wheat and straw seem quite dry. Too many of our farmers raise green weeds with their crops, and these, getting mixed up with the wheat, cause it to heat and mould in the mow or stack.—Ohio Farmer.

KILLING WITCH-GRASS.

Witch grass is the chronic plague of many farmers. There is a popular impression that it is impossible to eradicate witch grass by any practicable means; and hence although it makes good hay, the cost of its presence in hoed land makes it a burden. However, witch-grass is no exception amongst plants in view of the general possibility of killing them easily, only it takes a little longer to kill witch-grass than some other forms of vegetable growth. Any plant can be effectually destroyed by persistently removing its leaves. The reason is simple. Leaves are the lungs of plants. The lungs removed, no animal form of life can exist; the leaves separated from plants, the main structures die as an unavoidable consequence.

Farmers realize trouble with witch-grass through a misapprehension of its nature. The "roots" of the plant, so apparently hard to kill, are not roots at all. They are only underground stalks, full of buds, and capable of sending up leaves to the surface, while they draw nourishment from the ground by means of their fine, fibrous roots. The practice of simply stirring the ground among crops and shifting the positions of the underground stalks accomplishes but little or nothing; many times the prospects of the plant are no doubt improved by the operation.

The way to kill witch-grass is to chop of the leaves of the plant just under the top of the ground, letting the "roots" remain in the soil. If this is done thoroughly a few times, the plant will die without fail. It cannot live without breathing, and it cannot breathe with its leaves removed. We have seen a patch of witch-grass so thick that you hardly distinguish the crop growing with it, almost entirely killed out by two hoeings, just by taking pains to chop off the leaves each time. To hoe well, one needs to take along into the field a knowledge of the life of plants. Light and early hoeing will kill most weeds, if they are brushed back and left exposed to the sun on the top of the ground passed over. If earth is put around the crop, take it from the soil impracticable injure the hoof and it is said to be more durable. It also improves the movement of horses.

DOES FARMING PAY.

I was much pleased to read the article in this week's issue of the Ploughman, May 18th, "Does Farming Pay?" The truths contained therein are sufficient to quiet all growlers, (if I may use that word), who have from time to time expressed the opinion that farming does not pay. Ever learning but never coming to a knowledge of the truth is certainly applicable to agriculture, and proves true the assertion that farming is one of the greatest trades to be learned. And just here let me say that the better education a man may be possessed of, coupled with sound judgement, the more likely will he be to succeed in farming, as most likely would he in any other calling. There must be no guess work in farming now-a-days. Because I planted two or four acres of potatoes and when I marketed them they were cheap, and I marked them the next season plant none. As your correspondent says; many of our learned agriculturists are doing much to diffuse information and giving to the farmer of to-day the benefit of their experiences, and thus preventing the young-farmer from going astray. That there may be instances where a farmer may be "lod astray" by books, yet there is so much useful information and practical knowledge given in some of the recent publications (Flint's works and others we might mention), that we cannot afford to farm without them. Often, one article, or receipt, or inquiry by a correspondent in a farmer's weekly paper, has more than paid a year's subscription for the paper, showing the benefit we are deriving from the hard-earned knowledge of our practical agriculturists. Farming will pay, with a farmer who brings good common sense and sound judgement to the economy that stops the spigot, and lets out the bung, who has a large deposit to draw from (not a money bank deposit but a manure bank), who is wide awake, always eager to learn the latest improvements relating to his business, and adopt such as means will allow, be contented to work a little harder than his hired man, and rest assured he will succeed.—Dirigo Rural.

CURING CLOVER HAY.—You seldom see clover hay, no matter how you put it up, with only the moisture or juice of the plant. It is water that spoils it. It is better to let the sun dry out the dew while the clover is standing than to try to do it by storing. Now, my plan is to start the mower at two or three o'clock in the afternoon, after all water evaporated, and the heat of the day is past. Rain or dew will make clover hay black if it is cured before it (the rain or dew) falls upon it. By cutting in the afternoon of the day the clover does not cure enough to damage, and as dew is only on the top of the hay it soon dries off. Clover don't want much sun; if it gets too much the leaves rattle off, and you have stems. By ten o'clock set the rake, and by two or three o'clock set the men to putting it up into cocks. Don't let it stand two or three days, but turn it out the next day if the weather is good, and haul it in. It only wants to remain in the cock long enough to get hot, and when it is opened and aired it is ready to be housed. Apply a little salt while unloading, say sow as you would grain, about twice over the stack or mow, while the load is being taken off. Don't get worried if it heats some after it is put away; it will come out bright and sweet in the spring. Stock prefer well-cured clover hay to the best gilt edged timothy, and it ought to be the best judge in such matters. Poor clover is the worst of feed. The great secret in making clover hay is to keep it free from moisture except its own—while mould don't damage it much.

It is an excellent plan to mulch young fruit trees when they are first set out. In their removal from the nursery a great many of the roots are severed and when the trees are finally located where they are to remain they are in a very different condition from what they were before being taken up. They need all the help they can receive in order to enable them to start quickly and make a vigorous growth. Careful setting will do much for them, but in addition to this the ground over the roots should be kept covered, with straw or coarse hay, so that it may be constantly cool and moist. It costs but very little to do this, but it will pay as well as some operations which are a great deal more expensive.—Dirigo Rural.

In England a horse-shoe made of cow-hide—three thicknesses placed together—is being adopted as greatly superior to iron or steel, as it will not injure the hoof and is said to be more durable. It also improves the movement of horses.

THE VALUE OF GOATS.

Having travelled a great deal in foreign countries and seen the excellent use foreigners, but especially the Arabs, make of goats as milk producers I may just remark that I think it would conduce to the happiness as well as health of many a poor family if a "goat" were kept; for, besides the value of the milk, a higher point, it seems to me, would be gained. In the first place the children of the family would from early infancy learn that animals reciprocate the affection bestowed on them, and thus gentleness and care, coupled with a love of the creatures God has given to be under man, would be induced. In the second place, every one who has noticed little children rush from school, must have remarked that the play which amuses for an hour soon palls, and mischief ensues. Now if the little ones of the family had to care for, clean, water, or milk the goats, and to search for leaves or dried grass for their food or bedding, there would be the first seeds sown of that industry which in after life might lead to grand aptitude for making much out of little; their adapt results. Here is where foreign nations beat us. Their ability to make use of trifles, as a means to an end; their assiduity, and moreover the intensity with which even the commonest work is undertaken, if it should conduce to the comfort or wealth of the household. In all this they teach our slow, independent—nay, I may as well add it—negligent, Anglo-Saxon race a useful lesson. *Reverencia a nos montanos*, or rather to our friend of goats, I have long tried to induce cottagers to keep these useful little animals. A good goat would supply the family with milk after having brought up its young pair for a month. If male kids, one at a time, could be killed and eaten, when stewed with potatoes, bread, and onions, three days' good and palatable food can be made from one kid of two months old. Then there is the hide, always worth 9d. to 1s., and then the milk for eight months or more.—Lady Emily Pigot.

SETTING MILK FOR CREAM.—The farmer is doubtless much perplexed by the various methods suggested by writers, for setting milk in the best way for producing cream. The Cooley system advocates a deep and narrow can, with water tight lid, sunk in water and kept at a temperature of below 50°, by the use of ice. The Hardin plan proposes a can 20 inches in depth set in water to the rim, and kept at a temperature of 50°. The Wilkinson system, is the old plan of shallow cans. Each of these systems, has its own advantages. The deep setting, when the required temperature can be maintained, will produce the best and purest articles of butter, as the impurities of the atmosphere will not be imparted to the butter; and in the shallowing setting. When this temperature cannot be maintained, the cream will not rise in the deep cans, before the milk sours. Hence it will be seen, that for ordinary usage, the shallow can is best adapted for the farmer; but absolute cleanliness should be observed in the dairy, so as to produce a quality of butter that will retain its sweetness.

Perhaps some of your readers may not know how it is that fresh, nice turkey can be found on the bill of fare all through this hot summer weather, when live turkeys are only in condition to market in the fall and early winter. Here the mystery is explained. In the rear of the hotel may be seen an immense ice house, and adjoining it a large apartment separated from it by double galvanized iron walls. In December this room is filled with some tons of Turkeys, nicely dressed and then frozen solid. The walls are then filled with salt and ice which reduces the temperature down 10° below freezing, and by adding new supplies of salt and ice about twice a week, the birds are kept as nicely, and come out as fresh, as the day they went in to their cool chamber. Such is the result of science and art properly combined.—Cor. of New England Farmer.

WHEN TO CUT WHEAT.—The best time to cut wheat is when it is just passing out of the stiff dough, or when the kernel is plump yet soft enough to mash with the hand; but when so cut it must not lay many hours in the hot sun to cure, but should be bound immediately and set up in shocks very soon after. If wheat stands on the haulm until "dead ripe," it will make less and inferior flour, because the bran will "cut up" in grinding, thus giving the flour a darker shade. The shaft should be made of medium size, and should be laid by the binder either to right or left as need be, so that four or five swathes are thrown together, which will save much time in shocking.—Journal of Agriculture.

GARDEN HINTS FOR THE SEASON.—The first thing you do, attend to the old strawberry bed, if you want a crop next season. Spade up the ground between the rows, and work it up in the rows with a fork and spade, scattering among the vines a liberal quantity of well-rotted compost—nothing is better than hen manure. It does no harm to mow the tops of them right off. Sow seed of many annuals if you want a nice show of flowers next fall and winter. Don't fail to get in the turnips this month. If you have a piece of sod land you wish to put into small fruit next spring, plow it as soon as you can, and by spring the sod will be well rotted. Keep the new growth of raspberries and blackberries well tipped back. If you have no strawberry bed, plant one out as soon as you can. Take your plants, dig the hole, and as the roots are placed in, pour the hole half full of water, and draw in the earth quickly, and shade the plants for a day or two with newspapers or green leaves. They will give you one-third to one-half a crop next season, if started in this or next month. Give the fruit trees a good coat of whitewash; it prevents blight. Sow the lawn with a good coat of plaster; it retains moisture, and is a great help to the grass. Cucumbers for pickling may be started this month. Put a stick in hills of melons and cucumbers, and the like, saturated with gas tar to keep bugs away.—Fruit Recorder.

The Bishop of Manchester lately made a speech at the Co-operative Congress in England, recommending co-operative farming. He gave an account of a co-operative farm near Assington, which he visited in 1867, after it had been in operation for thirty-seven years. It was started by John Gurdon, the Squire of the village, in 1830. He rented to fifteen men sixty acres at \$9 per acre per annum, and lent them \$2,000 for tools, stock, manure, &c. In 1867 they had long previously paid the loan; had increased their shareholders from fifteen to twenty, and the amount of hired land from sixty to one hundred and thirty acres, for which they paid \$1,000 a year. The farm was managed by a committee of four, chosen by ballot, a portion going out every year. The Bishop found the land in admirable order, and the animals and poultry in excellent condition. In 1854 Mr. Gurdon, finding the experiment very successful, started thirty chosen men on a second co-operative farm, each contributing \$17.50. He also loaned them \$2,000. They began with seventy acres, but by 1867 were hiring 212 acres at a rent of \$1,625 a year, and had \$9,000 worth of stock, besides having paid off the \$2,000 loan and supported their families. The Bishop thought that a class of co-operative agriculturists would be in the commonwealth, and the Earl of Ripon, in a subsequent speech, said that he had also visited the farms and fully agreed with him.

Col. Taggart, of Northumberland, Pa., provides food and exercise for fowls at the same time. In his poultry yard are several beds about thirty feet square each, in which the Colonel buries ash, several bushes to the bed. The grains, begin, of course, at once to swell and germinate and the fowls have free access, scratching and eating the tender sprouts to their hearts content. While the fowls are thus busy on one bed, a new one is prepared, which is in readiness for them by the time it is required. The idea is a good one. The excrement of domestic poultry are the most highly concentrated of any on the farm, and are computed as being half the worth of guano. The ingredients are nearly the same as the urate, or the dried urine of animals, since the urine of fowls is voided in a solid form with the other matters ejected from the bowels. The value, as a manure, depends upon the food that is consumed. If food on meat blood and fish, the dung might be equal to guano as a fertilizer; if on vegetable food, the manure is less valuable.

HAYING WEATHER.—There are two kinds of "poor weather" for hay making, one, where it rains all the time for several days in succession. In such weather, no one expects to make hay. The other, is when the sunshine and showers alternate several times during the day. This is the very poorest kind of hay weather, and lucky that man who, during such weather, can see far enough ahead to let his hay alone, for the more he works upon it the poorer it grows.

When commencing your agricultural life, remember that industry, economy and integrity will ensure success and form the best capital that can be employed.

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