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THE COLONIAL FARMER,

DEVOTED TO THE AGRICULTURAL INTERESTS OF NOVA-SCOTIA, NEW-BRUNSWICK, AND PRINCE EDWARD'S ISLAND.

VOL. 2. HALIFAX, N. S., FEBRUARY 1, 1843. NO. 15.

THE COLONIAL FARMER.

HALIFAX, N. S., FEBRUARY 1, 1843.

The past season was very favourable to the growth of Grain and potatoes; of which there has been more than an average crop throughout the Province. The frequent light rains in the early part of the Summer were favourable to the Grain and Grass crops. This was succeeded by a spell of hot dry weather, which commenced so early on the Gulf shore, that the hay there proved a very light crop, but in almost all the remainder of the Province the hay was above an average; the drought commencing later, and proving rather favourable to the grain and potatoes, which rarely open well in hot weather.

From several causes the price of country produce have this year been very low. Some years back the coldness of the season occasioned a scarcity of provision in the neighbouring States. The natural consequence, with that people, was, to cause greater exertion on the part of the farmers, which, aided by a favourable change in the weather has produced a glut of the necessaries of life, which are now sold at very low prices. It would be impossible to keep up a high price of anything here, that sells very low here, as most people must be sensible who have travelled much on the shores of this Province Another cause of this depression is found in the failure of the lumber business. The persons employed in Shipbuilding, and getting out Timber, used to purchase the surplus produce of the Farmers near them. It has in consequence of the failure of this business become necessary for many to seek a new market, which is not now easily found. Halifax and Newfoundland markets have been glutted, especially with half fatted grass beef, much of which has been retailed, by the quarter, at three coppers a pound and less, as it is not fit to cure for exportation although it will do to cure with molasses or coarse salt and very little salt, for to use through the cool season; but were it thoroughly salted it would be so robbed of its juices that it would be hardly eatable.

Many on the Gulf Shore, alarmed by the scantiness of their hay have disposed of considerable part of their Cattle for a very low price indeed. As there is without doubt a sufficient quantity of hay in the Province to winter all the cattle, it is certainly desirable that there were some way of disposing of Cattle without killing them when half fattened, or not fattened at all. If there were like Fairs like those in the old country where they who have an surplus of hay could purchase cattle to winter, and they who have large crops of potatoes or Swedish Turnips, could procure half-fattened cattle which they could make fit for barrelling, it would be an advantage to all parties.

When our surplus produce falls much below the price we expected, we have the satisfaction of thinking, that our loss must be a great benefit to the multitude of poor whom distress is constantly driving from Europe to America. They can at their first arrival earn but little, working at new employments which they never had learned, but a little will support them when food is as plentiful as it is at present. That Providence which overrules all our doings, often compels those who have more than enough, to assist the distressed, whether they will or not.

There is another subject that well deserves our attention;—the great advantage we possess in living on our own lands. Were we a Province of Tenants at a money rent; it would be virtually doubled by the present prices, and we should be really distressed. Let us therefore resolutely oppose the two enemies who have so often driven industrious people off their lands;—the habits of spending more than we earn, and the mania of speculation. Let us observe a strict economy, and persevering industry. Let any slight reverse have its proper effect, of rousing us to greater exertion, rather than producing childish complaints. We have much to be thankful for. They who are acquainted with the history of past times, and with the present condition of the nations of the earth, know, that at this moment there are very few, and that in all recorded times gone by, there have been very few, who enjoyed in an equal degree with ourselves, the blessings of Liberty, Peace, a protecting Government, freedom from heavy Imposts and taxes, and a healthy climate, with the prospect of leaving our children in a country where they will have no difficulty in supporting themselves by their industry.

The great Farmer Poet of antiquity represents Jupiter disapproving the torpid condition of man in the "Golden Age" when all his wants were supplied without any exertion on his part; and therefore introducing evils into the earth, to arouse the energy of his mind, and make him exert his resolution and ingenuity to overcome them. There is wisdom in this allegory. A certain portion of difficulty is often useful, by rousing us, and making us shake off the laziness of our minds. When we consider the hardships to which the ancestors of many of us, the first settlerss of New England were exposed, their great losses of life and property in their perpetual war with the Indians, (for in the Narraganset war alone, the tenth part of the men fell, and the tenth part of their towns were burnt,) and that they still persevered, and succeeded in settling the country, and laying the foundation of a great nation, we must feel ashamed of the idea of being disheartened by any difficulty that we have met with.

Clover seed is separated from the husks by threshing, frequently sifting the seed from the chaff to prevent it from being broken by the flail. It is a tedious operation, and for this reason when large quantities are raised, machinery is generally used to clean it. When produce is low the farmer should always raise his own seed, which he will have no occasion to separate from the chaff, as when the heads are in pieces it grows as well, and is as easily sowed as if the seed were separated from the husk. Never attempt to raise seed from the first growth, but mow it when two thirds grown;—

the after-growth will then be loaded with seed. Some instead of mowing seed Clover draw a Box over it with short teeth closely set in front, which tear off and collect the heads. The small early clover is hardy but too early for Timothy; the large Northern Clover on new woodland sometimes stands for several years, but on rich ploughland it often produces but one full crop.

Clover seed remains a long time without vegetating in ground which is not suitable for it. We have seen a wet mossy spruce swamp drained, which after the lapse of two or three years was fenced and topdressed with coal ashes and rubbish from the back yards in town, (it was not broke up.) During the course of the Summer a young growth of Red Clover appeared, and the next year and for several succeeding years it yielded from 1½ to 2 tons per acre of hay, of which three fourths was red clover. No seed had been sowed, nor was there any in the manure, but Cattle had been accustomed to be often in the swamp which was near their stable.

Most old leys which have been long mowed will, if topdressed in the Spring with ashes, appear to be clover fields after the first of year; but if dressed with stable manure other grasses will prevail.

Very large Clover should always be mowed, if the weather permits, as soon as a few flowers are open; it will then often require four days to make it, and will lie very close and compact in the mow. Upon this hay thrifty cattle will fatten, and milk cows will do well; but if it stands till the flowers have turned brown the stems will be no better than straw and neither Horse or Cow will willingly eat them.

The feet and the back sinews of horses are sometimes injured by keeping the horse in a stable that has a very sloping floor. Any person who stands still for ten minutes on a board which raises the toes considerably higher than the heels, will be sensible of the strain which it throws upon the legs. Where a floor of earth is used, it causes considerable work, requiring to be often replaced; but it will be found a great preventive of complaints in horses feet, and the labour of bringing fresh earth will be paid for by the manure produced by that which is taken away.

The following is the list of Officers of the Cornwallis Agricultural Society for 1843:

S. C. Hall, *President.*
A C. Sterritt, *1st Vice President.*
C. Dickey, *2nd Vice President.*
C. C. Hamilton, *Secretary and Treasurer.*
G. E. Bromley, *Assistant Secretary and Treasurer.*

REPORT

OF THE BOARD OF MANAGEMENT OF THE RIVER JOHN DISTRICT AGRICULTURAL SOCIETY, FOR THE YEAR 1843.

Although the science of Agriculture must be admitted to be of paramount utility in every country, and particularly to where manufactures have not been established to any extent, it is to be regretted that the deficiency of system, added to old attachments, however erroneous, and a want of concentrated efforts, have hitherto prevented the proper development of the resources of our country The encouragement, however, now afforded by the Legislature, and the competition excited by the establishment of local Agricultural Societies, will, it is to be hoped, be the foundation of a better system, and, short as the period has been since the formation of the River John Society, we are happy to state that the good effects of it are already apparent. Our first efforts were, naturally directed to the improvement of the breed of cattle and sheep in our settlement, and accordingly in the month of June 1841, a Bull was purchased in Cumberland, of the pure Durham breed, at an expence of £15 3s. The progeny of this animal shows a decided superiority over the former stock of the settlement, and a judicious awarding of premiums having excited the owners of the young stock to rear and retain them, the improvement promises to be permanent. In October 1841 we also imported from P. E. Island, at a cost exceeding ten pounds, four ram shearlings, one a pure South Down, and the others of various crosses of the Leicester, Lincoln, and South Down blood. From the late period of the season at which they arrived, and their having perhaps received some detriment by a passage by water which happened to be somewhat protracted, the number of those who received any advantage from their services in the past season was but limited, but in every case, particularly as regard the South Down, where they have been used, their offspring is decidedly superior to the native breeds. We would here beg leave to observe that, as the raising of wool, suitable to domestic manufacture must be an object of great utility in Nova Scotia, the South Down breed promises to produce an article more suitable for our woolen cloths, especially if they are to subjected to the operation of the fulling mill, than the longwooled Leicesters or Lincolns, which seem more fitted for worsted goods, and we would recommend a perseverance in rearing the South Downs which also possess the advantage of superior hardiness.

Our operations for the present year have been principally confined to the offering premiums upon Agricultural produce, and manufactures, as is more particularly detailed in the annexed account, and such offers have in many cases been productive of considerable care, and as regards the settlement at large, of the raising of a much greater quantity of Agricultural produce than the average of former years can show. As regards the quantity and quality of the crops we have found the potatoes generally very abundant and of excellent quality, the Wheat and Oats a fair average crop in quantity, but the latter deficient in weight and substance. Turnips have not hitherto been cultivated to any great extent, although the offering of premiums has, in some cases, caused them to be tried and judiciously attended to, and where such care has been bestowed upon the Swedish turnips it has uniformly proved successful, while the white turnips have almost totally fallen victims to the fly. The staple article of hay is, unfortunately, that in which the greatest deficiency exists, and doubtless from the greater heat and dryness of the summer, it will hardly amount to two thirds of an average crop.

As this part of the Province has hitherto depended too much upon ship-building and lumbering, our farmers have always looked to those quarters for a market for their surplus produce, the failure of the timber business has naturally been followed by great depression in the prices of Agricultural products, and consequent embarassment, nor have any efforts been hitherto made to open a foreign market to much extent. A commencement was however made this year by exporting to Newfoundland about 40 head of cattle and 200 sheep, but the price there not being remunerating the traffic was not pursued, and the remaining stock, which, in other years, would have found a ready sale among the lumberers, has either been driven to Halifax or still remains on hand. The article of butter also is one one of considerable value to this community, and the quantity exported this year to Newfoundland, St. Pierre, P. E. Island, or transported by land and water to Halifax does not fall short of fifteen tons.

Although the embarassments above alluded to are discouraging we have no idea of yielding to them; on the contrary, they should

form a more powerful inducement to persevere in our onward course, from which, we are morally certain, permanent prosperity will eventually arise; and it shall be no fault of ours, if our society does not, in the ensuing year exhibit renewed exertion and increased improvement. We omitted to allude, in its proper place, to the fact of having last Spring purchased a quantity of timothy seed, an article which this settlement has always been obliged hitherto to procure from other quarters, but, by a judicious sale and distribution of our supply, we will be henceforth enabled not alone to raise enough for our own use, but to have a surplus quantity to dispose of elsewhere.

By an outlay of part of the Provincial aid, we have also laid the foundation of an Agricultural Library, and we would most earnestly recommend it may be enlarged and continued, and that our farmers will endeavour to reap, from judicious books, that knowledge of the improvements in the science and management in the Mother Country, and other advanced quarters, which their own experience cannot supply.

The awarding of premiums upon ploughing, which took place in both the years 1841 and 1842, has also been productive of competition and improvement, and it may be mentioned as an evidence of increased zeal and conviction of the advantages of Agriculture, that the quantity of land broken up and prepared for the reception of crops this Fall is at least double what it has been any preceding year.

In conclusion we would recommend to the Society in the ensuing year a particular attention to the improvement of swine, a subject which has not hitherto received the attention due to its importance. And in vacating our office, we have the satisfaction of transmitting the affairs of our Institution to our successors in a state of progressive, and, we trust, permanent improvement, and only requiring moderate attention and combined action, without which nothing effectual can be done, to ensure final success.

River John, 21st December, 1842.

The following are the Office Bearers of the Society for the present year:

President—Kenneth McLean, Esq.

Vice President—James C. Nash.

Secretary and Treasurer—Lawrence J. Den.

Committee—Robert Patterson, (V. P. 1941), George Perin, Esq. (V. P. 1842), Malcom Sillars, John Mochler, Charles Sutherland, Thomas McKenzie, William Gammon.

From the American Agriculturist.

TOUR IN ENGLAND.

ENGLISH HORSES.—Notwithstanding what has been said about the degeneracy of the horses of England, the best informed we met abroad, think that on the whole, they are still improving. The forced mushroom growth they now give their racers, and above all, the early age at which they are brought on to the turf, are, however, exceedingly prejudicial to their strength and endurance, if not to their speed, and if persisted in, must ultimately, if it has not already, materially injure the breed in these most desirable qualities. There are, however, some exceptions to the above observations. Harkaway, for example, is a real phenomenon, and is thought to be equal to any thing England ever bred. He is a horse of remarkable speed and of prodigious power and substance, standing within an inch of 17 hands, of great bone and muscle, and is considered among turfmen, as the very perfection of form for a racer. According to the official report, he won the Goodwood cup at five years old, carrying 130 lb, performing the distance 2¾ miles in 4 m. 58 s., but according to another report, it was done in 4 m. 27 s., which would have been at the rate of a mile in 1 m. 37 s., but English time is very loosely kept, and but little to be depended on, unless reported by our own countrymen. There is no doubt but Harkaway is as good and fast a horse as Firetail, Eclipse, or Flying Childers ever was; although it is said of the latter, that he run a mile in one minute, and of the former that he performed the same distance in 1 m 4 sec. But this time is not authenticated, and is, withal, so incredible, that it should be rejected as totally unworthy of record in the calendars of veritable racing.

We could not but admire the beauty of form and great size of the English colts. Most of them stood 15 hands high when brought out at two and a half years old; and some of them were full 16 hands; and as a celebrated jockey remarked to us, "it was really wonderful what the young things would do," and this sententious expression of the shrewd jockey, seems to be the whole gist of the thing, its sport and excitement. But to us it was a painful sight to see animals reared with such care and expense, one half of them broken down in training, and the larger share of the other half in early racing, and then cast like worthless weeds away—whereas, had they been kept till five years old before being brought out, they might have proved of some value, at least, as saddle horses, and for light cavalry. In one particular, however, we will give the Englishcredit over the Americans, they usually make but one run, and to be called upon four, five, and as it sometimes happens with us, even six heats, would be considered here, as we wish it universally was everywhere else, as the very height of cruelty, and an indictable offence. But this is a painful subject to dwell upon, and little interesting to the agriculturist; we will therefore pass it over, merely premising that owing to the manner in which English horses are now bred, it seems to be generally thought, at least on the western side of the Atlantic, they would prove no match for our racers in deep mud and over hard gravelly courses at four mile heats.*

The hunters of England are now nearly thorough-bred, are strong made, clean limbed animals, stouter and more compact than the racer usually is, and reminded us of our finest high-bred carriage-horses, such as the more dashy cits prefer for a display in Broadway, or upon the Third avenue.

Carriage horses differ but little from those among us, save that they are usually larger, 16 hands being the general height, and we have occasionally seen them in most superb shape in the London parks, full 17 hands high. The stage coaches, omnibusses, cabs, &c., are recruited from the broken down hunters and condemned carriage horses, and are of course wofully cursed with grease, corns, founders, spavins, broken wind, and the whole catalogue of horse diseases, so much so, as to make one's heart ache at times to ride after them; and the cabs, especially, in the *apparent age* and condition of their horses, would occasionally bring Mr. Pickwick's ride to the Golden Cross to memory.

"How old is that horse, my friend?" inquired Mr. Pickwick, rubbing his nose with the shilling he had reserved for the fare.

"Forty-two," replied the driver, eyeing him askant.

"And how long do you keep him out at a time?" inquired Mr. Pickwick, searching for further information.

"Two or three veeks," replied the man.

"Weeks!" said Mr. Pickwick, in astonishment—and out came the note-book again.

"He lives at Pentonwill, when he's at home," observed the driver, cooly; but we seldom takes him home, on account of his weakness."

"On account of his weakness!" reiterated the perplexed Mr. Pickwick.

"He always falls down, when he's took out o' the cab," continued the driver, "but when he's in it, we bears [reins] him up werry tight, and takes him in werry short, so he cant werry well fall down, and we've got a pair o' precious large wheels on, so when he *does* move, they runs after him, and he must go on—he can't help it."

Even the very gentlemanly and intelligent coachman, who otherwise make themselves so agreeable on the road, have a cruel art, with their long lashes, of striking the ears of their jaded horses

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* Some object to this conclusion as too hasty, and say, for example, that Lady Elizabeth at five years old, carried 133 lbs. ran four miles at the Doncaster course, in 1833, in 7m. 35 sec. time almost as good as that of Fashion's late unequalled race in America of same age, and carrying only 111 lbs. But we are confident, on the fine elastic turf of the courses of England, that a horse can carry more weight with greater ease than over the hard and more unelastic courses in America, but as a discussion of this subject is more proper for a Turf Register than this paper, we shall forbear entering further upon it.

till they bleed, when they flag under other punishment, and are fearful to fall behind the set time of completing their stage.

As for trotters and a fast enduring compact roadster, we hope no one will consider us prejudiced when we say, that we think England is inferior to America east of the Alleganies. We easily beat the best English horses on their own ground, with what would be considered now as third rate trotters with us. They attribute this superiority merely to better training and riding; but according to our limited observations, we found a great difference in the *animals*, for a few of our friends had American horses here with which we could make the comparison, and they struck us as being for their size, better boned, more muscular, powerful, and compact. In fact we cannot better express ourselves, than by saying, if the power of an English 16 hand horse, with a refinement of bone, were compressed to the size of 15 hands, this would then be the American with his enlarged strength, and a better and quicker action. There is no doubt but our drier climate and silicious soil, tend greatly to the hardening and refinement of bone, and formation of superior muscle with less flabby flesh in all horses bred east of the mountains.

The Galloways of England are much like our snug little horses of the north, but we found nothing here which we thought equal to the French Canadian, or like our Narraganset pacers, or those of Indian breed and celebrity. Nor have we anything so small and pretty in return, as the Dartmoor, Welsh, and Shetland ponies now so well known among us by recent importations.

The large cart horse is used here more than any other kind for agricultural purposes, and is especially necessary in London and other old towns, to conduct the heavy loads of the brewer and coalman, in ponderous carts and waggons through the narrow crooked streets, harnessed in single file. These animals are very large, generally 16½ to 17 hands high and sometimes 18 hands. Some of them are good walkers, and being very powerful, are not without merit; but they are great consumers, and have too much flabby flesh to suit our taste. The long coarse hair on their legs from the knee joint down, is very objectionable, and when worked in a heavy soil, it gathers a great mass of clay to each leg, which adds several pounds weight to their feet, and makes one think of a condemned criminel working with a chain and ball attached to him for punishment. This long hair also makes them subject to the grease, as we were informed, a very unpleasant disease of the feet.

Superior stallions of this breed, however, command not unfrequently a large price, and have sometimes sold as high as £1,000. Those we saw in Sussex we thought the finest and best of this breed. They had very little of the objectional long hair upon the legs, and were more compact generally and active than those we met in other parts of England; they probably had a cross of the old Suffolk Punch in them, which had the reputation in its day of being a very superior farmer's horse.

We saw some specimen of the Clydesdale in the North of England which pleased us much, but in the discussions of Farmer's Clubs here, we notice occasionally a vote passed for the introduction of Norman Stallions from France, to improve their agricultural breed, and we found upon the whole, that there was a more general wish prevailing to lighten the weight of their implements, and procure a more active race of horses to work them. If they do so, with proper attention to the breed, we have no doubt they will get fifty per cent. more work done on the farm, at the same cost of feed and attention which is now bestowed on the generally slow moving and unwieldly cart horses.

We think in the large Pennsylvania waggon horse, we have a quite equal, if not superior for our purposes, to the English cart horse. Their origin was doubtless the same, namely, Flanders; and they have undergone a refinement in our climate, and a development and increase of muscle, which we think has added to their value. This is a most excellent breed for the city dray, and indeed all heavy work upon the road and farm. We wish we could see premiums given in Pennsylvania and elsewhere for their improvement, for we have occasionally met individual specimens in that state which we thought quite perfect, and well calculated to impress their form and powers upon a numerous offspring. It is selecting the best of a race of animals, and continually breeding from them, that has placed England so much in advance of the generality of nations in this particular, and which has added so much also to her wealth, power and fame.

Generally speaking, we found English stables quite too warm, and have no doubt that this, together with unnatural fast driving over hard McAdam roads, are the fruitful causes of the long list of diseases, especially in the feet, to which horses here seem particularly subject. The horse is treated with too much tenderness on the one hand, and even cruelty on the other, and their whole system of nicking, docking, check reins, blinders to the bridle, curb, and other harness paraphernalia, which we have inherited and carried to America with us, are greatly to be deprecated. In these respects we might learn many a good lesson of barbarous Russie and other nations. We mean to bring these usages and some proposed reforms to the notice of our readers hereafter.

BREEDING.—PARTURITION.

The characteristics of the different breeds of British cattle, their peculiar excellencies and the peculiar defects of each, and their comparative value, as adapted to different climates and soil and pasture, have been already considered, a few remarks on *the principles* of breeding were reserved for this chapter.

That which lies at the foundation of the improvement of every stock, or the successful management of it, is the fact,—the common, but too much neglected axiom, that "*like produces like.*" This is the governing law in every portion of animated nature. There is not a deviation from it in the vegetable world, and the exceptions are few and far between among the lower classes of animals. When in the higher species the principle may not seem at all times to hold good, it is because another power, the intellectual—the imaginative—somewhat controls the mere organic one, or in a great many instances, the organic principle is still in full activity, for the lost resemblance to generations gone by is pleasingly and strongly revived. The principle that "like produces like," was that which gave birth to the valuable, but too short-lived, new Leicester breed; it was the principle to which England is indebted for the short-horns, that are now establishing their superiority in every district of the kingdom. Every cow and heifer of the Shakspeare blood could be recognized at first sight as having descended from Mr. Fowler's stock; and the admirer of the short-horns can trace in the best cattle of present day the undoubted lineaments of Favourite.

This principle extends to form, constitution, qualities, predisposition to, and exemption from disease, and to every thing that can render an animal valuable or worthless. It equally applies to the dam and to the sire. It is the foundation of scientific and successful breeding.†

Let it be supposed, that the cattle of a certain farmer have some excellent qualities about them; but there is a defect which considerably deteriorates from their value, and which he is anxious to remove. He remembers that "like produces like," and he looks about for a bull that possesses the excellence which he wishes to engraft on his own breed. He tries the experiment, and, to his astonishment, it is a perfect failure. His stock, so far from improving, having deteriorated.

The cause of this every-day occurrence was, that he did not fairly estimate the extent of the principle from which he expected so much. This new bull had the good point that was wanting in his old stock; but he too was deficient somewhere else, and, there-

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* The simple observation, that domestic animals possess a tendency to reduce animals of a quality similar to their own, was the ground-work of Bakewell's proceedings. It was equally obvious to others as to him, but to him first applied to the useful purpose to which it has since been rendered subservient. Having made this observation, he inferred, that by bringing together males and females possessing the same valuable properties, he should insure their presence in their offspring, probably in an increased degree, by being inherited from both parents; and he concluded, that by persisting in breeding from animals the produce of such selections, always keeping in view the properties that constituted their value, he should at length establish a breed of cattle of which those properties would form the distinguishing or necessary characteristic. By this process it was that in his time, with respect to his long-horns, and subsequently with regard to other breeds of cattle, the term *blood* came to be distinctively applied. When reference could be made to a number of ancestors of distinguished excellence, the term *blood* was admitted.—*The Rev. H Berry's admirable Prize Essay on Breeding.*

† There are a few strange exceptions to this, showing the power of imagination even over so dull a beast as the cow. Her progeny is often much affected by circumstances that happen during the time of conception, or rather during the period she is in season. Mr Boswell says, "One of the most intelligent breeders I ever met with in Scotland, Mr. Mustard, of Angus, told me a singular fact with regard to what I have now stated. One of his cows chanced to come in season, while pasturing on a field which was bounded by that of one of his neighbours, out of which an ox jumped, and went with the cow, while she was brought home to the bull. The ox was white, with black spots, and horned. Mr. Mustard had not a horned beast in his possession, nor one with any white on it. Nevertheless, the produce of the following spring was a black and white calf with horns.—*Quarterly Journal of Agriculture*, vol. Essays. p. 28.

, although his cattle had in some degree improved by him in way, that was more than counterbalanced by the inheritance of defects. Here is the secret of every failure—the grand princi- of breeding. The new-comer, while he possesses that which desideratum in the old stock, should likewise possess every quality that they had previously exhibited—then, and then , will there be improvement without alloy. What can a far- expect if he sends a worthless cow to the best-bred bull—or, the other hand, if his cows although they may have many good ities, are served by a bull that perhaps he has scarcely seen, or points he has not studied, and whose only recommendations that he is close at hand and may be had for little money.

The question as to the comparative influence of the sire and the is a difficult one to decide. That farmer will not err, who ies the grand principle of breeding equally to both of them. e present system must importance, and that very justly is uted to the male. He is the more valuable animal, and ipally more valuable on account of the more numerous pro- that is to proceed from him, and thus his greater general in- ce; and therefore superior care is bestowed on the first selec- of him for rearing. The farmer studies the bull-calf closely, sures himself that he possesses, in a more than usual degree, haracteristic excellencies of the breed. When this care as to possession of such combination of good points has extended the sire to the son through several successive generations, it be readily supposed that he will possess them in a higher de- than the female can. They will be made, as it were, a part portion of his constitution, and he will acquire the power of certainly, and to a greater extent, communicating them to offspring.

this way the influence of the sire may, in well-bred animals, nsidered as superior to that of the female, but here is always , and must not be forgotten. In Arabia, where the mare is bject of chief attention, and her good qualities are carefully ard, and systematically bred in her, the influence of the females dedly preponderates; and, on the same principle, that of the ly bred cow will preponderate over that of the half-bred bull excellencies are an hereditary and essential part of her, and likely to be communicated to her offspring than those which been lately and accidentally acquired by the bull with no gree, or with many a blot in it. Custom and convenience, ever, induce the generality of breeders to look most to the le.*

At the outset of his career, the farmer should have a clear and mined conception of the object that he wishes to accomplish. should consider the nature of his farm; its abundance or de- cy of pasturage; the character of the soil; the seasons of the when he will have plenty or deficiency of food; the locality his farm; the market to which he has access, and the produce ch will there be disposed of with the greatest profit, and these s will at once point to him the kind of beast which he should olicitous to obtain. The man of wealth and patriotism may more extensive views, and nobly look to the general improve- t of British cattle; but the farmer with his limited means, and the claims that press upon him, regards his cattle as a valua- portion of his own little property, and on which every thing ld appear to be in natural keeping, and be turned to the best vantage.

The best beast for him is that which suits his farm the best; and, in a view to this, he studies, or ought to study, the points and ilities of his own cattle, and those of his neighbours. The y-man will regard the quantity of milk—the quality—the time the cow continues in milk—its value for the production of ter or cheese—the character of the breed for quietness—or as good nurses—the predisposition to red water, garget, or drop- after calving—the natural tendency to turn every thing to nu- ent—the easiness with which she is fattened, when given up as ilker, and the proportion of food requisite to keep her in full , or fatten her when y. The grazier will consider the kind of beast which his land will bear—the kind of meat most in de- mand in his neighbourhood—the early maturity—the quickness of fattening at any age—the quality of the meat—the parts in which the flesh and fat are principally laid—and, more than all, the hardi- hood and the adaptation of constitution to the climate and soil.

In order to obtain these valuable properties, the farmer will make himself perfectly master of the character and qualities of his own stock. He will trace the connexion of certain good qualities and certain bad ones, with an almost invariable peculiarity of shape and structure; and at length he will arrive at a clear conception, not so much of beauty of form (although that is a pleasing object to contemplate) as of that outline and proportion of parts with which *utility* is oftenest combined. Then carefully viewing his stock, he will consider where they approach to, and how far they wander from, this utility of form; and he will be anxious to pre- serve or to increase the one, and to supply the deficiency of the other.* He will endeavour to select from his own stock those animals that excel in the most valuable points, and particularly those which possess the greatest number of these points: and he will unhesitatingly condemn every beast that betrays manifest de- ficiency in any one important point. He will not, however, too long confine himself to his own stock, unless it is a very numerous one. The breeding from close affinities—the breeding *in and in*— has many advantages to a certain extent. It may be pursued un- til the excellent form and qualities of the breed is developed and established. It was the source whence sprung the cattle and the sheep of Bakew[illegible], and the superior cattle of Colling; and to it must also be traced the speedy degeneracy—the absolute disap- pearance of the new Leicester cattle, and, in the hands of many an agriculturist, the impairment of constitution and decreased value of the new Leicester sheep and the short-horned beasts. It has, therefore, become a kind of principle with the agriculturist to effect some change in his stock every second or third year, and that change is most conveniently effected by introducing a new bull. This bull should be, as nearly as possible, of the same sort; coming from a similar pasturage and climate; but possessing no relationship—or, at most, a very distant one—to the stock to which he is introduced. He should bring with him every good point which the breeder has laboured hard to produce in his stock, and, if possible, some improvement, and especially where the old stock may have been somewhat deficient; and most certainly should he have no manifest defect of form; and that most essential of all qualifications, a hardy constitution, should not be wanting.

There is one circumstance, however, which the breeder occasion- ally forgets, but which is of as much importance to the permanent value of his stock as any careful selection of animals can be—and that is, good keep. It was judiciously remarked by the author of the "Agricultural Report of Staffordshire," that "all good stock must be bred with attention and well fed. It is necessary that these two essentials in this species of improvement should always accompany each other; for without good resources of keeping, it would be vain to attempt to support a capital stock." This is true with regard to the original stock; it is yet more evident when ani- mals are absurdly brought from a better to a poorer soil. The original stock will deteriorate if neglected and half-starved; and the improved breed will lose ground even more rapidly, and to a far greater extent.

The full consideration, however, of the subject of breeding be- longs to the work on "British Husbandry," and there full justice will be done to it; but the few hints that have here been dropped

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Mr. Adam Ferguson, of Woodhill, to whom the Highland of Society of land, and the Scottish agriculturists generally, are so much indebted, has ating anecdote on this point. "I recollect, several years ago, at a dis- ished breeder's in Northumberland, meeting with a shrewd Scottish bor- r, (indeed, if the report be true, the original and identical Dinmont,) who, admiring with a considerable spice of national pique, a very short- ed bull, demanded anxiously to see the dam. The cow being accordingly duced, and having undergone a regular survey, Dandy vociferated with acteristic pith, "I think naething of your bull now, wi' sic a caumb."— *Quarterly Journal of Agriculture*, vol. 1, p. 34.

* Upon the principle that 'like produces like,' he (Bakewell) started, and the advantages which crowned his exertions may be thus stated: an increased perfection of general symmetry, by which is to be understood not only a form attractive to the eye of taste, but one in which the judgment acknowledged a considerable preponderance of the valuable parts of the carcass over those of less value; an increased tendency to lay on flesh of a superior quality under all circumstances of feeding, and, of course, a superior article for the use of the consumer, produced by a decreased consumption of vegetable or other food.

A person would often be puzzled: he would find different individuals pos- sessing different perfections in different degrees—one, good flesh, and a ten- dency to fatten, with a bad form—another, with fine form, but bad flesh, and little disposition to acquire fat:—what rule should he lay down, by the obser- vance of which good might be generally produced, and as little evil as possible effected?—UTILITY. The truly good form is that which secures constitution, health, and vigour—a disposition to lay on flesh, and with the greatest possi- ble reduction of offal. Having obtained this, other things are of a minor, although perhaps of considerable importance.—*The Rev. H. Berry's Prize Essay.*

with reference to the fundamental principles on which the improvement of cattle must be founded will not, perhaps, be deemed irrelevant.*

From the Islander.

CENTRAL P. E. I. AGRICULTURAL SOCIETY.

The Annual General Meeting of this Society was, pursuant to advertisement, held on Wednesday evening last, in the Court House, Charlottetown. The assemblage of practical agriculturists was numerous and respectable, almost, it is said, beyond precedent in this island. The Chair was taken by His Excellency the Lieutenant Governor, the Patron of the Society, a little before 7 o'clock, p. m., and shortly after His Excellency opened the meeting by a short but appropriate speech, to which his style, tone, and manner gave a most pleasing and happy effect. His Excellency commenced by expressing the pleasure he experienced in presiding on such an occasion, adverting to the number of respectable agriculturists present, who, by their presence there, and the general interest taken by them in the proceedings of the Society, seemed, with himself, to feel the conviction that by no other means than a steady, persevering attention to agriculture by the chief portion of its population, could this Island be elevated to that high position in prosperity and opulence, to which he and they earnestly desired it should attain. His Excellency then alluded to his profession—that of a sailor—and his never having until his arrival in this Colony, had an opportunity of directing his attention to the ploughing of the soil. He said, that now, however, influenced by the consideration of its vast importance to this Colony, he had turned his attention to agricultural business. He said he had imported various manures from England, and was now testing their efficacy by experiments; he was also experimenting, as respects different kinds of food and modes of treatment, in the feeding and fattening of cattle. The result of his different experiments would, in due season, His Excellency observed, be communicated to the Secretary of the Society, and by the Secretary would be presented to the public. His experiments, His Excellency, in conclusion, good humouredly observed, might possibly, be very ridiculous; but, he reminded the meeting, that should their results tend to any improvement in the practice and concerns of agriculture, the benefits would accrue to our agriculturists generally; whereas, should they fail, the disappointment and loss would fall only upon him, as, in either case, the outlay would be entirely his own.

The opening speech of His Excellency was received with the most respectful evidences of approbation—silent and eager attention on the part of all during its delivery, and the applause of it on its conclusion.

Mr P Macgowan, the Secretary, then came forward, and read a Report of the operations of the Society for the past year. The Report, which is long and comprehensive, was, seemingly listened to with much attention and interest.

The adoption by the Meeting of the Report which had just been read, was then moved by the Hon. Joseph Pope. In doing so he spoke at some length, and greatly to the purpose. He congratulated the Society and the agricultural population of the Colony in general, on the countenance and encouragement given to their proceedings by Her Majesty's representative presiding on such an occasion. He spoke in confirmation of His Excellency's views of the vast importance of a general attention to agriculture, as the only sure means of advancing the prosperity and wealth of the Colony. He represented the great and general good which had been done to the Island by the Central Agricultural Society. He contrasted the present agricultural state of the Colony—in which he can compete, he said, either as it respects the quality of our grain or of our meat, with any portion of the British dominions—with its condition five and twenty years ago, when he first landed in the Island—when a farmer might frequently be seen entering the town with a carcass of veal, or sometimes two, under his arm, so miserably small and poor were the animals then brought to market.

George Cole, Esq., M. P. P., in seconding the motion of the Hon. J Pope, also made some interesting observations to the meeting. In the first place he pointed out the benefits resulting from top-dressing of meadows, saying that, in his own practice, he had tried all sorts of manures, and found all to answer equally well. He then adverted to the new market opened to us by the new tariff, and pointed out the necessity there existed of farmers more effectually cleaning their grain, if they had any thought of exporting it for sale in British market. Mr. Cole, in concluding, regretted the abandonment of the practice of awarding premiums by the Society. One good of so much importance, he said had resulted from the practice—the enabling of agriculturist to procure good seed grain—that the consideration of that alone might be a sufficient inducement to the resumption of it.*

The Report, as read, was then adopted. When we can procure a copy of it, we shall be happy to lay it before our readers.

After the Report had been thus disposed of, Mr. Lewellen commenced his Address. We were obliged to leave the Court House soon after he began, and therefore, from personal observation can say little upon this subject. We have no doubt, however, that in his Address, Mr. Lewellen ably sustained the reputation which he has long enjoyed in this Colony for general talents and information, and, particularly for his skill and superior judgment in the science of Agriculture. We should also feel much grateful in being enabled to publish Mr. Lewellen's Address, as well as the Report.

Before we left the meeting the following donations to the Society had been announced:—£10 from his Excellency; a collection of farm and garden seeds, from her ladyship the Dowager Countess of Westmoreland; Hon. Charles Young's donation of £1; £1 from the Hon. William Swabey, and £2 from Mr. Grubb.

Through favour of the Secretary, Mr. P. Macgowan, we are enabled to give the following Resolutions of the Society, passed at their late meeting.

Upon motion of the Hon. Joseph Pope, seconded by George Coles, Esq.—

Resolved, That the Report of the Committee now read, be adopted and published.

Upon motion of Captain Swabey, seconded by the Hon. Attorney General—

Resolved, That the thanks of this meeting are eminently due to His Excellency Sir Henry Vere Huntley, the worthy patron of the Central Agricultural Society, for having condescended to take the Chair on this occasion—for the liberality of His Excellency's donation of Ten Pounds, in aid of the Funds of the Society, and for the indefatigable exertions which His Excellency continues to evince in promoting the cause of Agriculture in this Colony.

* The following extract from "the Rev. Mr. Berry's Prize Essay" contains the sum and substance of the principles of breeding:—

"A person selecting a stock from which to breed, notwithstanding he has set up for himself a standard of perfection, will obtain them with qualifications of different descriptions, and in different degrees. In breeding from such he will exercise his judgment, and decide what are indispensable or desirable qualities, and will cross with animals with a view to establish them. His proceeding will be of the 'give and take' kind. He will submit to the introduction of a trifling defect, in order that he may profit by a great excellence; and between excellencies, perhaps somewhat incompatable, he will decide on which is the greatest, and give it the preference.

"To a person commencing improvement, the best advice is to get as good a *bull* as he can; and if he be a good one of his kind, to use him indiscriminately with all his cows; and when by this proceeding, which ought to be persisted in, his stock has, with an occasional change of bull, become sufficiently stamped with desirable excellencies, h' selection of males should then be made, to eradicate defects which he thinks it desirable to get rid of.

"He will not fail to keep in view the necessity of *good blood* in the bulls resoried to, for that will give the only *assurance* that they will transmit their own valuable properties to their offspring; but he must not depend on this alone, or he will soon run the risk of degeneracy.

"In animals evincing an extraordinary degree of perfectien, and where the constitution is decidedly good, and there is no prominent defect, a little close breding may be allowed—as the son with the mother, to whom he is only half-blood—or the brother with the sister. But this must not be injudiciously adopted or carried too far, for although it may increase and confirm valuable properties, it will also increase and confirm defects; and no breeder need be long in discovering that in an improved state animals have a greater tendency to defect than to perfertion. Close breeding, from affinities impairs the constitution, and affects the procreative owers, andtherefore a strong cross is occasionally necessary."

Upon motion of William Macneil, Esq. seconded by James Hazzard, Esq.

Resolved, That the following gentlemen do form the Committee for the ensuing year:

Hon. John S. Macdonald, President.

Francis Longworth, ten. Esq. Vice President.

Committee—William Douse, Charles Stewart, Henry Longworth, Charles Hazzard, Alexander Laird, George Beer, senr., Thomas Owen, Dr. Macgregor, James Mutch.

Upon motion of William Douse, Esq. seconded by Edward Palmer, Esq

Resolved, That the thanks of this meeting be given to J. L. Prellen, Esq. for the ability and research which he has displayed in preparing the able Address delivered by him this evening—and the Secretary be authorized to have a number of copies thereof printed.

Upon motion of Dr. Macgregor, seconded by the Hon. George Wimple—

Resolved, That the thanks of this meeting be given to the Officers of the Society for their attention to the affairs of the Institution during the past year.

Upon motion of Henry Palmer, Esq. seconded by John Longworth, Esq.

Resolved, That the thanks of this meeting be given to her Ladyship the Dowager Countess of Westmoreland, for her handsome donation, consisting of an excellent collection of farm and garden seeds.

Upon motion of Francis Longworth, Esq. seconded by the Hon. Joseph Pope—

Resolved, That the Committee be instructed by this meeting to apply to the Legislature at the ensuing Session, for an Act to Incorporate the Central Society.

Upon motion of Thomas Owen, Esq. seconded by William Bridger, Esq.

Resolved, That this meeting highly gratified with the increasing liberality manifested towards the advancement of the Farming interest, feel it their pleasing duty to offer their cordial thanks to those individuals who have this year voluntarily contributed to the funds of this Society.

From the New York Central Farmer.

WHAT SHALL BE DONE TO IMPROVE OUR AGRICULTURE.

What has been done in England, has been the result of careful experiment, pursued for a series of years—science, combined with practical knowledge, has there produced the results, which to many of our farmers, is a matter of perfect astonishment. A short acquaintance with them is—Book Farming—who believes it—who ever heard before that such crops as we read of, have been raised? Intent to pursue the course of their fathers—they continue on, their crops diminishing from year to year, as the land is exhausted and when they can no longer sustain themselves, migrate to some other country and then begin upon the virgin soil, and pursue the same course, which, if not arrested, will in time produce like results.

What shall then be done? We answer,—in the first place, let there broad cast over the land, intelligence—calculated to arouse the farmer—to awaken within him a desire to equal his brethren across the water. To accomplish this—we must incorporate with our system of education, agriculture, as a branch of study. Why should not this be done? Can any good reason be assigned why those who compose the great majority of this nation, should not receive some attention paid to the education of their children, preparing them sensibly and properly to occupy the stations they are destined to fill in our land?

If our sons are designed for the learned professions, as they are called—their education must be shaped in the particular profession which they are designed. If mercantile life is to be pursued, with all its risks and hazards—they must be prepared for that. If the mechanical branch is to be pursued, their attention is directed to such branches of study as will fit them for their employment. But if the boy is destined for the farm—no peculiar care is manifested in his education. A few winters passed at school—and his education is completed—and he enters upon manhood, with a scanty supply of information adapted to his station in life—and if he finally overcomes all these disadvantages, as he frequently does, it is by severe application at a season of life, when it is vastly more difficult to obtain the knowledge he needs, than it would have been at an earlier period of life.

We know that there is a great prejudice existing against learned farmers. We advocate no system, but one which has practical agriculture connected with it. Let our schools have instructers who are capable not only, but who shall be required to adapt their instruction to this end. Let science be made to lend her aid in accomplishing the object. What immense good has resulted from the application of chemistry to agriculture—and ought not our children to be so instructed, that they can avail themselves of the benefit of science, while at the same time, they are instructed in every branch that relates to the cultivation of the soil—judicious use of manures, a correct analysis of soils, a proper adaptation and judicious rotation of crops.

Is there any difficulty in accomplishing this? We answer none that is serious. Already has a school been established, and a farm connected with it near the city of Philadelphia, from which, ere long, we doubt not, will come forth young men, with minds well stored with science,—not with soft hands, of which farmers are so much afraid—but with hands hardened at the plough, and in the field—while they will be prepared judiciously to avail themselves of all the improvements which can be gathered from other countries and our own, in the cultivation of their farms—in the selection, improvement and management of their stock.

From the American Agriculturist.

TO THE FARMERS WHO OBTAIN MANURE FROM THE CITY OF NEW YORK.

In my last I brought to your notice two fertilizing materials heretofore thrown away in our city. I shall proceed in this and future essays, to bring forward all others that may come under my inspection.

There was one error in my last which I now rectify. In referring to charcoal dust I am made to say, that "it can be bought at two shillings per barrel, and that a friend had bought sixty barrels at that price!" It should have been one shilling per barrel. This is the dust left in the bottoms of the vessel after selling the large coal.

I shall now bring to your notice the article of soap lees, i. e. the lees thrown away by our soap boilers. This material is one of the most valuable fertilizers the farmer or gardner can collect, with the exception of ammonia. When soap is made with caustic potash lye, and then hardened with the soda of salt, the liquor run off will contain muriate of potash, with a small portion of free potash. If this liquor contained no other ingredient, the best application would be to add 2 gallons of it to 20 gallons of water, and let it fall on the land by the same process that our streets are watered. There is, however, another material combined with it, which makes it the interest of the consumer to put it into a compost heap with charcoal. There is in every hundred weight of fat used by the soap boiler, two or three pounds of thin filmy skin, which do not enter into the soap; and this being dissolved in the lye, passes off with it, and when decomposed in a manure heap, will furnish a large supply of ammonia. To prevent its evaporation when formed, the presence of charcoal or plaster will be necessary.

When soap is made with barilla, the residuum will contain muriate of soda, carbonate of soda, and some caustic soda; together with the animal matter as mentioned above.

The value of this material can be accurately estimated by those using it, when I inform them, that five gallons of the lye contains in solution more than two pounds of potash, when made with potash lye, and hardened with salt: or of soda, when barilla is used. This is as much alkali as would be contained in three barrels of soapers' ashes.

A gentleman near Hartford, Conn., has used soapers' lees as a manure, and speaks of its prohuctive powers, as far exceeding his most sanguine expectation.

The next material I shall call your attention to, is the blood now thrown away at our slaughter houses. This material is one of the most valuable of the fertilizers, and should be placed in a manure heap, with a large portion of charcoal, or plaster, to absorb the ammonia formed during its decomposition. An addition of caustic lime would greatly facilitate the process. It is a compound material, consists of three salts of soda, and extractive mat-

ter. One of the salts of soda is a phosphate, which indicates its peculiar applicability to the potatoe, as this plant contains more phosphate of lime than any other culinary vegetable. It also contains considerable prussiate, which readily passes into ammonia when decomposed by fermentation. Some few years since dried blood was employed as the animal matter in making prussiate of potash.

I shall now direct your attention to the liquor thrown away by our gas houses. I can speak of this material experimentally, having sold thousands of pounds of single and double F ammonia made from it. To those farmers and gardners who live at a distance from New York, I would recommend to mix with this liquor a large quantity of ground plaster, stirring well several times, and then covering down until the plaster has all settled to the bottom. The plaster in this case will absorb the ammonia, and the precipitate may be conveyed away at a small expense. A much smaller quantity of charcoal would answer than of plaster, but in this instance the application would be far more troublesome and tedious. Those who live near can cart it away in casks, and place it in their compost heaps, adding charcoal, as before directed for ammoniacal applications. Land already containing charcoal may be watered with this liquor, by mixing it with eight times its measure of water, but if put on in its full strength, the vegetation then in the soil will be destroyed by it. This effect is, I believe, called by our farmers burning. I presume, if a man were to be stuffed with food, however nutritious in moderate applications, until he were filled to the mouth, he would die under the operation, just so it is with vegetation, when over-fed with alimentary food.

I would suggest to one or more of our enterprising gardeners to place some of the empryeumatic tar, collected in making gas, and of that produced in distilling pyroligneous acid, into a compost heap, adding to it charcoal and quick lime, and try its fertilizing powers.

I shall proceed to call your attention to the coal ashes, and the soot, now thrown away in our cities.

There can be no farmer so ignorant as not to know that soot is an exceedingly valuable fertilizer. To my knowledge it has been collected in England, and sold to the farmer for more than sixty years. One hundred weight of it is considered equivalent to a single cart load of barn yard manure, yet our Long Island farmers have permitted the immense quantity supplied by sweepers in New York and Brooklyn to be thrown away. Now supposing we have seventy-five thousand chimnies in New York and Brooklyn, each chimney swept twice a year, and each sweeping to afford twenty pounds of soot, there will then be thrown away fifteen hundred tons of soot per annum This would be amply sufficient to enrich annually three thousand acres of land.

Soot, by analysis of Braconnet, is found to contain fourteen distinct materials, all of them good fertilizers. Rather more than thirty per cent is similar to a material made from sawdust and potash; about twenty per cent is animalised matter, soluble in water; fourteen per cent. is carbonate of lime; more than ten per cent. is acetate and sulphate of lime, and about five per cent. acetate of potash.

Our farmers will perceive, from the above analyses, that every one hundred pounds of soot contains more than seventeen pounds of potash, or more than three hundred and forty pounds in every ton Thus we prove, that if all the soot thrown away in New York and Brooklyn could be applied to our Long Island farms, they would obtain a supply of potash alone equal to five hundred an ten thousand pounds annually, equivalent to twelve hundred barrels, and this only equal to one third of the fertilizing properties of soot!! Let me ask our intelligent farmers if they will continue to permit so valuable a material to be thrown away?

The ashes of coal is a valuable material for pasture land, more particularly when the sod lies on clay, or when it becomes mossy In applying ashes to such land I have seen it produce surprising effects, but I have never had any experience of its application to arable land. I should consider, however, *a priori*, that it could not fail to be highly beneficial to heavy soils.

Wm. Partridge.

White Carrots—as a Field Crop.—We notice in the New England Farmer, that a gentleman near Boston, has raised the past season more than twenty two tons per acre of this variety of carrots. They are larger than the Orange Carrot, and protrude above ground so as to be as easily gathered as the beet. We judge from the description given, that this is a very valuable root and worthy the attention of farmers.

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