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## Halifax, 17th May, 1870.

We have this year had a rerarkable springtime. The April suns and ehowers came, with no frost to be taken out of the ground; Mayflowers grew scarce during the first week of May, and farmers who were not idle had gall their seed sown in very good time. In thrs miädle of Mry, the thermometer was ranging throughoat the day at about $64^{\circ}$, gardeners who trusted to the usuai fogs and clonds of Nora Scatian skies had cicumbers and frame stuff burnt up,-yet the froit trees and bushes fortunately do not barst forth very much before their time, and motruat that they will this gemonix eccupe the sccident of an early froet.
For the arich, on Hemp in this number, we are indeuted to the kindreess of Henty Yeomans, Exac., a practical agriculturist and Vice Prenident of the Board of Agriculture, who is well known to mout of our readers on account of the active interent which he has taken in Agricultural imprequemeat in NoveSCotia for many yeurs.

The Bunch Grass article we commend to the attentiou of our readers. We have a lettor on the subject from Professor Balfour, of Edinburgh, which will appear next month.

A lady writes to us on the subject of skimming cream for batter. We print the note, aud beg of some of our experienced correspondents in the butter County of Cumberland, or elsewhere, to afford the desired information.

We desire in an especial manuer to bespeak the attention of our readeris to the articles now being published in our columps over the initials J. W.L. If we were at liberty to announco that they werofrom the accomplished pep of Colonel J. W. Laurie of Oakfield, we know that they would be carefully read and seriously thought over hy our farmera, as the suggestions and advice of one of their bent and most rospected friende, and one who knows well how to wmpare Engligh with Nova Scotinn farming, and who is zealona. Is doing tis part to show our farmers Fhat is needed to raise their frofescion
from the grovelling purguit which it has so long remained. Let us all reopllicat that while the pen may be grester than the sword, the ploughshare is not leas uacful than either.
"Salt for Swine" and "Tan for Potwtoes." are practical suggestions, exeily tried. L t some of our readers report their exprerience.
"A Haligoninn" gends us pnothor paper on English Horticulture The atithor himealf is expected back to the froticultural Gardens this Fall. Wo have sioker good accounts of his doings in Scotiand that his friends here will be delightod to see him back again, and maxy good ${ }^{1}$ wibbe ationd him.
Mr. Buatin's degerigtiong of the new varieties of Rotatoss will be reged with much interest at the present time.
Mr. Thoman has sent to us splendid rootis of Scintfoit, aboat 3 feet loing and with buṭhy heade of young alootefar if advanco of Badar Alaike clover. He has succeeded admiribly in Suintroin Cultare.

A notice of recent proceedings of tho Yarmouth County Society is crowded out of our present number.

## AGRICULTURAL LIFE IN NEW BRUNSWICK.

There is at present more agricultural life in New Brunswick than liss been evincel for many years back. The Now Brunswickers stem to have been aroused to a generous rivalry by the recent efforts of our Nova Scotian Agricultural Board, and the actione of the New Branswick authorities it of wo carnest and substautial a character that much permanent good must be the result: We rejoice to see the healthy spirit of improvement which is being manifested by our neighbours, as shown by recent numbers of the Co lonial Karmer, and trust thas the example will not be lost in beneficial affuence upon our Nuva Scotian farmers. The Board of Agriculture of New Brunswick have again discussed the question of a Stock Farm, and have laid it over, to make way for an importation of stock. The Executive Government have passed a Minute of Council agreeing to advise His Exceilency the Lieut. Governor to advance to the $130 a r d \$ 4000$, which, together with $\$ 1000$ in hands of the Board, $\$ 3000$ in Commercial Bank and $\$ 2000$ from Societies, is to be used for the Importation of Stock. By the judicious expenditure of $\$ 10,000$ an inportation ought to he made that shall prove a credit to the Province, and place the New Brunswick farmers in a very favorable position tor the permanent raising of thorough-bred stock themselves, instead of being dependent in the future upon foreigu importations.

The New Brunswick Board has likewise passed a Resolution forbidding the purchase by Agricuitural Societies, of animals that have not pedigrees in the English, American or Canadian Herd Books.

It has also been resolved to supplement the Secretary's Annual Report with original articles by individual Members of the Board. A special subject for treatment has been dealt out to each Member, as follows:-
"1. On General Farm Improvement. Mr. Fairweather.
"2. On Different Breeds of Thoroughbred Stock.-Mr. MMonagle.
"3. On Best Methods of applying Barn Yard Manure.-MIr. Peters.
4. Ort the Manufacture and Composting of Manure.-Mr. Beckwith.
©5. Best System of Drainage.-Mr. Davidson.
${ }^{4} 6$ Best and most Economical System of Root Culture.-Mr. Russell.
"7. Can Artificial Manures be used to advantage?-Mr. Harrison.
"8. Breeds of Sheep best adapted to New Brunswick.-Mr. Barker.
"9. On the Cultivation of"Fruit.-Mr. Inches.
"10. Will it pay to raise Wheat iu New Brunswick? Mr. Swim."

A great Agricultural Exhilition is to be held at Fredericton this Fill, and the incrensed railway facilities will give our farmers an opportunity of,attonding itrañ comparing notes.

## ON WEIGHING OATS.

Tro modes of filling the measure are in use in the trade; both, however, give nearly similar resulis. list. The mensure mott be placed firm, so that it will not move or even shake, whell the Oats are poured in. A large scoop holding a good. Tialf bushel must then bs aken; and from it the Oats must be pous $t$ in quickly, and then, the scoop being mmediately refilled, the remainder must i, e poured in quickly, and the "strike" applied at once. The success of the operation depends on the measure being placed on a firm basis and filled quickly. The Oats then have not time to run together and consolidate, the measure in consequence holds the least possible quautity. If the measure is shaky, or if through clumsiness or intentionally the scoop is allowed to knock against or even to lenn on the measure, the result will be that it will hold consi. derably more grain than it ought. A similar result will follow if a small scoop is used. The time taken to fill the measure will allow the grains to settle and consolidate; and again each successive scoopful, as it is poured in, will cause the grain below to consolidate. Or 2d, the measure being placed on $a$ firm basis, the Oats may be run rapidly into it from a sack. Care must be taken that the sack does not touch the measure. There is a great deal of knack in getting the Oats to run out freely. The wouth of the sack must be opered wide, and the sides shonld be well turned down, so that no interruption may occur in filling the messure. Fither of these modes will give the fair weight of the Oats. The strike used in the trade is rounded. It takes out rather more Oats than a fiat strike, and it should therefore always be used. The following are the results of some other modes of filling a bushel with Oats, the trade weight of which. as given by either of the above modes of filling, was 37 lb . Filled from a shovel held at the hip, the grains being allowed to flow or trickle in slowly, the measure held $40 \frac{1}{2} 1 \mathrm{~b}$.; or in other words the sample was made to appear to weigh $40 \frac{1}{2} \mathrm{lb}$. instead of 37 lb .; the true weight. Here both the height from which. the grains fell and the slowness of the operation combined together in cousing consolidation. Filled by placing the mouth of the sack on the rim of the measure and
allowing the Onts to rue in, the measure held $37 \frac{1}{2} \mathrm{lb}$., when the operation was neatly and quickly managed; but when jit was clumsily performed and the meatsure was ohaken and moved by the pressure of tha sack, it held nearly 39 lb . Filled by pushing the measure into the heap and turning it up, and filling up the deficiersy with the scoop, the measure held 38 lb . Filled quickly from a small scoop the measure held 88 lb . Filleil slowly from the same scoop it hrid $88 \frac{1}{2} \mathrm{lb}$. Different samples no doubt will give
somewhat varying results, according to somewhat varying results, according to the greater or less tendency which they may possess for consolidating; butt from these details the intending purchuser will readily see, that in order to get the arti-
cla he contracts and pays cle he contracts and pays for it is neccs-sary-that he should know how to mensure a bushel. In ad, ionthowever, to knowing how to do it, there is a good deal of kuack and practice required to fill the bushel properly; and the reader, if he tries the above experiments for himself, will probably at first fail to get the trie weight.-Horses and Stables.

## CULTURE AND PREPARATION OF HEMP.

I'rom the Albany "Cultivator," March, 1851.
The many parposes in life to which the products of the hemp plant may be made snbservient, constitute it one of the most useful of cultivated vegetahles, not to say an article of prime necessity. Hemp, however, is a plant the cultivation of which is not considered difficult in any moderately fertile soil, provided the grower govern his practice by a fer plain maxims.

The best condition of the ground for the reception of a hemp crop, is that pulverization of the soil, and that smoothing of the surface by ploughing and harrowing, whicb the grass or wheat farmer would esteem most suitable for cither of these crops. . The quantity of seed applied varies in practice from one and a half to two or more bushels per acre,an excess over the right quantity being considered safer than a short-coming, inasmuch as when too thick, the stouter plants will take the lead and overtop the ohers, which are thus smothered and killed. The time of sowing varies in Kentucky, ranging from the middle of April to the last-of May. Each individual must be governed in practice somewhat by his discretion, forming his judgment upon the condition of soil, ad. vance of the season, or the extent of his crop, which, if large enongh to require more than two weeks in the harvesting, would make it proper to have alternate. sowings, lest a part of the crop be injured by becoming over ripe.-the male plants dying and spotting: The hemp plant disregards spoting. The hemp piant
dinge frost, aud is
therefore seldom injured from that canse in early sowing-the only striking difference between early and late sown crops is that the chilly temperature of spriug produces a low plant, with thick, rough bark, whilst in the rapidly growing temperature of summer, the late crop shoots up to a greater height with a thiuner and softer bark. In good crops the yield in either case will be about the same, the time of ripening varying not more than one week even though the difference in sowing may luve equalled six wecks.

One maxim which experience rigidly requires the hemp grower to observe, is, never to commit his seed to land not in "good heart," a plrase which implies not only moderate fertility, but also a presence in the soil and an incorporation with it, at the time of sowing, of a fair proportion of vegetable matter, in order to ensure a proper degree of friability-a condition without which no tap-rooted plant can thrive. A neglect of this maxim is the most pregnant source of disappointment known in the listory of Hemp Culture, aud is generally followed by one or the other of two diseases, or rather casualities to the young crop, that is to say by "haking" or "firing," cither of which maladies generally has power to arrest entirely the growth of the plant, or to hold it in check until surface grasses and weeds overpower the crop. It may therefore be well to cousider in detail the mature and symptoms of both "baking" and "firing." The first results from a want of vegetable matter in the soil cultivated, as will readily be seen by attending to the symptoms. Tho vegetable mould or humas of a soil, is bat carbonaceous matter accumulated by slow combustion for centuries, which, although but slightly soluble in water at any one time, is contillully washing away under the action of the luws of deromposition, being reconverted into ats original gases, to fly off in air, or to be reabsorbed by plants. Any soil may, thercfore, by washing rains, bad tillage, and hard cropping, be deprived of most of its regetable mould; and such a soil may, after having been pulverised to the depth of six or ten inches, receive on its bosom the seeds of a hemp crop. Such a soil, so prepared, may moreover, yield a fair crop, provided the rains of the season full in light showers, and with great frequency, but such a succession of favorable circumstances seldom happens; and a far more usual occurrence is the coming of a heavy rain, during which the mass of loose earch becomes saturated, and the moment after water begins to accumulate ou the hard clay below, rising up towaris the surface. If, then, the pulverised soil is:defective in insoluble vegetable matter, well incorporated with the whole mass, to act as a sort of frame work in. keeping .annaier the particles of clay, the whole
soon runs together in a state of solidity, whilst the waier rising above it, cariies in solution carbonates and other salts, and lighter particles, which as the water subsides, leaves a mand-like coating upon tho embedded clay, reuding it impervious to water or air in a very high degree. This is called "baking," and those who have sometimes experienced its effects, in their ansiety to avoid it, not unfrequently pass into the opposite extreme, which is "firing" the plunts, by attempting to grow the liemp crop with too much vegetable matter present in the soil, or with vegetable matter not in a condition to nourish and sustain vegetable life.

The symptoms above ground, indicating the presence of this malady, are a suspension of growth, a los; of color and vigor in the plants, and a parching up of the margin of the lower leaves ; below ground the plants will be found to have only a tap-root the lower purt of which is sometimes decayed, whilst in other cases, sections of the root will be found perfectly rotten, with sound portions above and below such section, while at the same time the vegetable matter under the surface will generally be covered with a white mould. To avoid a catastrophe 80 pregnant with mischief, the farmer should know the nature of the disease in order to be qualified to judge of the fitness of any means of escape. 1 incline to adopt the theory of Liehig on this subject, which is at least, very plausible, if nct true. IIe thinks that in such a case, the covered vegetablo matter is undergoing putrefaction, a state of deca" in which it not ouly is unfit to feed vegetables, but has power to rob all bodies in contiguity, of oxygen, in order to carry on this decay, thas even destroying or "firing" the roots of l'ving plants. What readers his theory more plausible is, that a habit of early ploughing, which allows such matter full time to decay into a brittle mass will generally orercome this danger. By a parity of reasoning-if this fall ploughing shall have been neglected-the better practice in suck a soil would be to cross-plough occasionally in the course of the hempsowing period, not committing the seed until the jatest allowable moment.

The seed being good, the ground well prepared, and the crop having passed the dangers of "baking" and "firing" -that is, having attai ad a height of six to ten inches, scalcoly auything but a hail-storm can disappoint the grower's hopes of a crop, the harvesting of which will be his next concern. This operation consists in cutting, curing, binding and stacking the crop,-all, if possible, without rain; for it will be found that the lint by every process of preparation, is better when the plants are not allowed to grow dark by exposure to rain, dews and hot sun; whilst for completo suocess in' the white ,or in the, water rot, a fuir staple is indis-
pensable. Cutting is geuernlly performed by haud, using a straight knife of fine steel, some fifteen inches long which in operativg should dip with the horizon at about tie same angle as a mower's scythe. The handle attached is about two feet loug, making with the edgs of the knife an anglo of about 100 degrees. In about four days after the cutting, the plants, iu fair weather, are gathered and tied into bundles, and if possible on the same day put into stacks conusining the yield of two acres each, of a fair crop. Keep all the branches-cutting, binding, and atack-ing-as near together as curing or drying the plants will allow. This practice guards against the loss of lahor and injury to the crop sometimes experieuced when the plants are bound into bundles, and left standing over the field in small shocks. Henp thus left in shocks, sometimes get so wet as to require being spread again upon the field before stacking. It is the work of one active man to cut, bind and stack one acre in five days.
(To be continued.)

THE BUNCI GRASS OF BRITISH COLUMBIA (ELYAIUS CONDENS... TUS, PRESL).

Some time since we pointed out the difference letween this atd several other grasses of Western North America, to which the name of Bunch Grass has been applied, accompanied with quotatious, descriptive of its appearance and feeding qualities, from the writings of several who were thoroughly acquainted with its native growch and usefulness; prominent among whom was Colonel Moodie, R.E., who introducel the Tussac Griss from the Falkland Islands, and by whose assistance our much-vaiued correspondent, Mr. Robert Brown, who was then collector for the British Columbian Botanical Association of Edinburgh, was enabled, in 1863, to send home a supply. of its seeds, and thus first introduced it to Britain. To most of the members of this Association grass seeds, however, presented little or no attraction; and, with the exception of what fell to the shares of the Edinburgh Royal Botanic Gardens and I. Anderson Heury, Esq, of Woodend, together with a fer plants in our own collection, the Bunch Grass of British Columbia was so utterly neglected that it might have been lost to the country, notwithstanding that its merits, both as an early forage und an abundantly productive hay grass, are likely yet to secure for ita highly frominent plsce among the cultivated agricultural plants of Britain. With us the Elymus condensatus has gone on increasing annually in stature; and al. though grown in the yabt drysummer op rather poor 'unmanared soil, m plint wh $8 \mathrm{ft} \beta \mathrm{in}$. in height. Of this, several scod-
bearing as well as lenfy stoms were exhibited in the collection of Mr. R. T. Mickintash, at the last July Show of the Highland and Agricultural Society of Sootland; and others were shown by its introducer. Mr. Rnbert Brown, at the mooting of the Lasgo Field Natnralists' Society which was held last August at Elie, in Fife. This plant presented a thick, tender, leafy growth, of about 3 ft . in height in the last week of April, when it decidedly surpassed, in bulk of crop, the graid then growirg in the neighbouring faimed sewage-irrigated nieadows of Edinburgt. So that, as a highly productive, early cutting grass, it ranks far before any other known kind. A plentiful crop of ripe seeds was reaped from the feitile stems in the first week of Septemher, by which time soveral of a thick intermingled growth of leafy or barren atems had attained to about the same height as the seed bearing oues, while the others of these were of various intermediate heights. All the stema, as well as foliage, changed from a greenish to $a$ brown witherect-like colour by the second week of November.
The following analyses of both the seed-bearing aud leaty stems have been made by Professor Anderson, analytical chemist,for the Highland nud Agriculural Society of Scotland. who ecated in an accompanying note:-

Althóug̀ 'hee above analyses do not show bo high a autritive value as that of good ordinary. hay, this must not be doemed deprecatory of this Bunch Grass, being that both stmples were cut in October, Hully $g$ month after the seeds were ripened ; whereas grasses generally contrin most nutriment when cut immediátely aftert flowering:
In cultivating the British Culumbian Bunch Graf, we. woald recommend sowing it in drille or bod ${ }^{\prime}$, allowing it to grow there for frappplating it in well-cleaniol and drainéa lapd, at distayces of 12 to is Huches, appart Tho seedlings make but
 Hatirateomoci, Hoging or wooditg: Fill
therefore be requisite throughout the frst summer and sutumn after transplantation; hut afterwards the plants will be sufficiently strong to ovarpower mont kinds of weeds. And they will seemingly grow on in full viguur for a long series of
years. years.
Subsequent to our fore-mentionod notice of this Buncl Grass, we have received the following particulars regarding it in its native habitats. In a paper on the Flora of Alaska-formerly known as Russian-Americu-which appeared in the Smithsonian Report for 1867, the writor, Dr Rothrock, states that the ligh grounds in the vicinity of Fort St. James (lat $54^{\circ} 1^{\prime}$ N.) afford the Hunch Grabs (Elymus) of the packers. So nutritious is this, that, even when apparently dead and dry, stock will become fat on it, and remain so under hard work for long periods, if this be plentifully supplied. In a recent Californian newsyaper, a correspondent mentions that in the vicinity of Boise Basin, in Idsho Territory, "the Blue-top Bunch Grass" covers the hills, and is as good as hay, some even approaching, in its nutritive qualitities, to grain. There may, however, be some doubts whether one of the other Bunch Grasses formerly referred to, and not the Elymus condensatus, may be that here noticed. But the most recent reliable and important information regarding it is contained in the following letter to Mr. Robert Brown, of the British Columbian Botanical Expedition, from a friend who lived for many years in the Bunch Grass country :-

## "Lyneal, Ellesmere, ? 9th Sept., 1869. $\}$

"Dear Sir,-You ask my opinion of the Bunch Grass of the central plateau or table-lands of British ColumlinElymus condensatus, as I believe, you hotanists call it. After a five years' experience of that country, I can bear testimony to the nutritious and fattening properties of this grass, far surpassing, I believe, thuse of any other known herb. A ferr facts will abundanely illustrate this.
"In the early years of the colony, bePore oats or harley had been imported, this Bunch Grass was the only (as it is still the principal) food of he trains of mules and horses which, heavily laden with provisions and goods, followed the gold diggers into the mines, over the roughest possible trails: ib Have ridden handreds of miles on horses whose sole support was this Bunch Grass. Turned loose at sumset, when the camping-ground was reached, to foed, they were found uext morning an fresh and gay as ever. Indeed, on such a.journey, if not fiidden tho hard, they "would rather gain flesh than lose it...
iIn diy Essay on British Columbia, pqge 40; I have apoken of the marrelions ingreape of :utock in! that part of the
country, min increase, owing, I believe, mainly to the amount of vital energy imparted by this herb.
"Then. as you are aware, the droves of cattle which supplied beef to the mines of Cariboo, had been driven 600 miles from Oregon, yet they were in excellent condition on their arrival, owing to the excellent phaslurage, which refiestied them each night after the journey of the day.
"Finally, both horses and cattle usea to survive winters of great severity; 50 long as there was not too much now for them to paw aside, they could subsist on what tufls of Bunch Grass they could reach. It must have been hard times for them, but they manageả to survive.
"I am rejoiced to hear that the experiment of trying this grass near Edinburgh has succeeded so admirably; and I trust agricnlturists may be induced to try it on a larger scale, as I am convinced farmers and cattle-breeders would soon learn to appreciate its muscle-making and fattening properties-Beliove me, dear,
sir, yours very sir, yours very faithfully,
> R. C. Lundin Brown, Vicar of Lyneal, Salop."

A very distinct variety has been raised in the Edinburgh Royal Botanic Gardens, which may be named Elymus condersatus compantus, from its spikes or ears heing much shorter and broader than those of the original form; bearring, in fact, the same relation to the latter that the ears of the Triticum compactum, or Ducksbill inheat, does to those of the commor beardless wheats.-The Farmer.

## Communications.

## STOCK-RAISING AND FEEDING.

Sid,-It is with ull modesty that I bring my own experiences before the public through your Journal,-for I have only farmed for very few years-still I have in that time gove through every phase of farming, commencing with regular bush work, so that I cannot be said to speaki of what I know nothing-besides which, I wish to provoke outspeaking in my trother farmers.
It strikes me that we furners do 5 . stady our farms sufficiently in what we produce on them; we do not consider their capacity and locality as much as we should do. In Eugland, and I believe elsewhere; certain districte breed stockothers purchase the saimals when nearly full grown, and fatien them for the batcher. Here the main boast of every farmer is that he whinters so many head af cattle, young stóck, cows and beef oxen. Should we not be wiser to fallbint the bome cartom? . Surely our ríh simpoing antricts
like Windsor, Cornwallis. Truro, \&c.. mould act more wisely in purchasing aud fattening stock raised where hay is cheaper and less marketable. Let them even sell more hay dnd purchase grain or oil cake with the proceeds-and with the improved tmanure they would thereby ob-tain-a less quantity would raise better root crops than they now harvest.
Supposing the farmer has, however, settled in his own mind that stock-raising is his line, he should then decide whether heifers or steers will pay him best. I am convincer that he can obtain which ever sex he wishes. I quote from the Cultivator of Sept. 1351, a statement made by the Count de Tournay, a distinguished French gentleman anc farmer, in regard to the breeling of cattle. He mentions the methol by which the breeder call at pleasure produce bull or heiter calves. He continues, if the cow is nilked clean when she receives the bull, the produce will be $\dot{a}$ bull culf; bat if she takes the bull with a full udder, the produce will be $x$ heifer calf. He named a farmer in France who put seven cows milked dry, aud the produce was five bull calves-two other cows not producing any calf; and in several other instances under his observation the result had uniformly been the same.
I may add as my experience, that, for the last three yers, it has heen my stockman's invariable custom to put ny coms to bull immediately after his breakfast, he having but half-an-hour before finisher the milking. I have had a stendy run of bull calves-in fact I may say that since thet has been his custom, I have not had a heifer calf from a cow so served, and for which, until now, I was quite unable to account. My experience, Herefore, strongly corroborates the above extract, and Inake no doubt that your readers can, from their habit of cooking facts, confirm or contradict the theory so started. As to the breed of cattle, I slould unhesitatingly say that the Durham (gride, as the pure is a scarce and costly articie) is the most suitable stock for this country. We raise butter, it is true, for our home consumption, but it is mainly by heef that our farmers live. I have tried pure Aldèrieys ánd Durham with crosses of each; and of the Devoir. I find that in summer, in bush pastures, the Durham wnd grades forged well for food and thrive well- whilst the Alderney seemed afraid to go out of the beaten .track-literally, I may says, twaiting for their food to be brought to them ; and in winter, let my food be rich or poor, the Durhandiate initatisbly bega the thriftiest cattle in the barn,--they seem, too, to continue growing during the wiuter whilst the Alderneg's, eren in my warm stables, are drawn up (ail of a heap) in very cold weather. As milkers, the quantity is about the same; that of the Alderney is
a brighter color, but I lo not think the gield of butter is greater. In the dairy the pans in which the Alderney milk is set ehew out brilliantly from the others, the differentes being as that between a sovereign and a shilling. Visitors at the Provincial Exhibition of 1868 will recollect the bright golden.rolored butter that took first prize-it was made from Alderney milk; onlookers constandy remarked that it musi be oolored. The general experience, however, is that butter made from Alderney milk alone, beautifnl as it luoks when fresh, is so rich that when kept any tine it turns rancid and beeomes unfit for use. I fiyd, dy keeping oue Alderney to every threb other cows, that I improve the color and taste of $m y$ butter, and yet do not risk its keeping properties. Not wishing to trespass too much on your columns,

I remain, obediently yours,

$$
\text { May 4, } 1870 . \quad \text { J. W. L. }
$$

## SALT FOR SWINE.

While all other dumestic animals are regularly supplied with salt, the hog is generally neglected. He requires, however, to be as constantly supplied as the ox, the horse, or the sheep, and suffers as much from privation as either of thie above named animals do. His food is almost invariably given to him in a fresh and unseasoned state, and to this fact we may donbtless attribute many of the violent and fatal diseases to which he is subject, and which stagger all remedies, however promptly and skilfully administered. If the food be not regularly seasoned, there should be a trough or box in every sty, in which salt may be deposited regularly for the use of the aummals. Seasoning the food judiciously would be much the best way. As seasoning the food of the hog is mentioned above let it be understood that salt only is here alluded to, for if any person should try seasoning with pepper taey will make a great mistake; for as much pepper as will suffice tor a man's dinner will kill a hog.

> "N. E. F."

## tan for potatoes.

A sarmer of Troyes, having remarked that while the cholera was raging in that town, some years ago. the inhabitants of every house in the neighboarhood of tinyards escaped the disease, turned his observation to profit as to the cultivation of the potato. Previous to planting his pctatoes he takes a shovelful of tan, which hu throws into the hole. An entire field th 18 manured with tan produced a magnifict:nt crop, whilst an adjoining tract of latd, which had not undergone this preparation, had only yielded diseased roots.

It appeared that potatues, after being dug, and placed in a cellar containing tan, were equally preserved from disense.
"N. E. F."

## Dalkeitr, April, 1870.

After "raither a cauld winter," it must have been refreshing to the citizens of Londou, Edinboro', and Dublin, to have the "siring season" opened by a flower show. Notwithstanding that winter inclined to linger in the lap of spring, all the shows were a decided success, whether we take quantity or quality as our standard. The only drawbibick on former shows were the Hyacinths, and they were poor svery where. Azaleas, Rhododendrous, $\mathrm{ME}_{5}$ jonette, Roses, \&C., have beeh up to the raark, and in some cases have excelled formur efforts. But the things that have exciued most attention were the Cyclamens, plants that have hitherto dragged ont a mistruble existence in some out of the way corner of the greenliouse in the winter aud spring months, and during the summer exposed to all the elements. Some cultivators have taken it in hand, and by careful hybridising and good cutting, have made it a charming plant to decorate the greenhouse from November to March. The cultivation is quite simple, by sowing the seell, keeping them growing, they may be flowered in twelve monilhs from date of sowing. I know of few plants to equal them, either for dec ation or cut flowers, the foliage of the new varieties being very ornamental. It was very amusing to stand by a group of the plants in question and hear the adjectives and adverbs that were used in their praise, the ladies being particularly demonstrative, and they are allowed to be good judges; seldom will you find .them at fault in matter. requiring taste aud selection, and their parronage and support is freely given to shows here; in fact no show would be complete without their fair counteuances to adorn and grace the scene I have also scen the "Fair Daughters of Acadia" turn out well to the shows that have now become obsolete in Nora Scotia. 1 trust the grod folks of lovely Truro will read the Horticedturists, of the Province a lesson, and 6.9 er prizes for subjects pertaining to Horlicuture at their projected show. A County show is a move in the right direction, provided it will be opey to allfecmers and if arrangements could he made to hold the shown in different Cóunties by rotation, much good might be effecter. This is the plan adopted by zeveral societies here, and it works admirably. I trust the different ${ }^{\text {Junnty }}$ Boards will sea their way clear to g.ve it a trial, let them pull together, and I have no doubt that lovers of Agriculture and Horticuiture and all their attendant branches, will lend 8 'elping hand.
a Haligonian,

TIE NUMBER OF CATTLE, SHEEP, \&c.. SOLD OUT OF ANTIGONISI COUNTY DURING THE YEAR 1809.


Obsenvations.-Not having returns of former years for comparison, I asked the opinion of the dealers, which is as follows :-That during the last six or cight years a much less number of full-grown Cattle were offered for sale than formerly, and more young ones of inferior quality; that the quality of the Cattle has very considerably deteriorated; that the race of Sheen is very bad in every respect; that rery fev Pigs are found of a good and profitable breed; that the breed of Horses requires particular attention, as it has much fallen off,-and one is requirel more adapted to a farming district than the present one.

These Statistics were mostly obtained by means of sending to the parties named a form to fill up, through the Registrar of Deeds, A. D. Harmington, Esq., to whom I am greatly obliged for aid.

I beg leave to suggest how ensy it will be, by means of printed forms, for filling in details, to obtain Annual Returns from each County of the crops sown and raised, and the produce exported or sold, and how very useful such Returns will be.

Carlton, April 20, 1870.
Dear Sur,- Tho following short aketch of a fow of the most piominent dow varieties of Potato, may perhaps be interesting to tho readers of the Journal. I am much interested in the cultivation of this tuber, particularly with regard to the disease or rot. At an early dato I rill send you a short account of my late observations on this disease, hoping that it will induco the scientific men of our community to bring their knowledge to bear on it.
When the attention of all interested in agriculture, both in Europe and America, as so muc: turned to raising new var.eties of the Potato (Solanuan quberosum) from the seed or apple, I have thought that a few lines on the latest novelties might be acceptable, to which I add a shert account of what is thought of them in England, and a few words on the Rixton Pippin and Bovinia, two remarkable English rarieties.
The Early Rose was raised by Mr. Albert Bresee of Vermont, and brought into public notice in 1867. It is one of the most productive of the carly sorts. It is two weeks carlier than the Early Gooderich, and on good potato soils it is as free from disease as the Gooderich or Harrison. It attains to a large size, with very few small ones. It bears very light seeding, being very stocky. The colour of the skin is light red while the flesh is white, dry and well flavoured.

Western Chief is a good early variety but inclined to rot, as also is the Philbecn's early white. They are only valuable as very early varieties for carly use.

Willard Seedling, from the Early Gooderich, and named by Mr. Gooderich the Gleason Potato. It is a half early variety, most productive; of a rich rose colour spotred and splashed with white. It resembles the Gooderich in form and size, and is also inclined to be somewhat rough and scabby.

The Harrison, another of Mr. Gooderich's seedlings, and the most productive of them all. Has a fine, clear, white skin. Is remarkable for its size, shape, yield, and handsome appearance. A good winter poiato. The quality varies with the soil and season. It is remarkably free from disease.

The Gleason, another of Mr. Gooderich's seedlings. Skin thin. Flesh coloured. Pink eyes. Very productive. Quality excellent. A late Potatos

The Excelsior Potato.-Is remarkable as an excellent table variety, and retains its superior cooking qualities the year round. It is one of the most desirable kinds now extant. Very productive, sonetimes. yjelding donble of any other variety under similar treatmeut. There are few potatoes that combine so many good points. It is a seedling from the "State of Afaine Potato," raised by B. B.

Whiting of N. H. in 1861, and.was first introduced to the pubiic in 1867, and is regarded as one of the best aud most productive table potatees knuwn. It is white skinned and fleshed. Very mealy. Of medium size, nearly round. Eyes prominent, skin thin ald smooth. The tops are short, stalky and bushey.
Early Gooderich yields well and heavily. Is littlo inclined to rot. Quality varies with soil and cultivation. Heavy mauuring with strong manure ceuses it to deteriorate. Latterly it has shewn a tendency to a hard spine or core, making it difficult to cook.

Orono or Carter, a medium carly kind, of good size. White skin and flesh. Eyes quite deep sat. Dry and good flavour, but teuds to blight and rot.

Bresee's No. 2, or Prolific, introduced in 1868. Flattish round potato of large size and handsome, rather rough. Flesh white. Very productive, dry and mealy, and of good flavour. A winter varicty.

Bresee's No. 5.-Whis is nearly as carly as the Early Rose. $\Lambda$ flattish round potato, very white skin. Excellent in quality, but tends to rot badly. Only useful us an early potato.

Bresee's King of the Erarlies.-This famous potato is earlier than the Early Rose by about a week. Can be planted quite close, as it makes small tops. It is a roundish, flattish potato, with well defined eyes. In 1868 a single eye was sold for $\$$ n.

The Gardener's Chronicle (English) speaking of the new American varieties of potato, says, "We are fully satisfied with Bresee's secdlings, but in no respect astonished at them The Early Rose, Climax, and Bresee's Prolific are large, handsome roots, and remarkably prolific; but in quality they fall far below the standard of our English varieties, and are decidedly deficient of highly organized fecula, and therefore lacking in both flavour and nutritive properties, as compared with many established favourites.

Unquestionably the best putato of the year is the Rixton Pippin, sent to the experimental garden at Stoke Newington, by Mr. Pierpoint of Warrington. This is a handsome root, cropping heavily, quite elcgaut when on the table, and fine in texture and flavour as any connoisseur in potatoes could desirc. The late Mr. Patterson of Dundee, to whom the HighInnd and Agricultural Society awarded the gold medal last year for 2 report on propagating new varieties of potatoes, has originated a remarkable variety, the Bovinia or catile feeder potato, which is the most valuable and extraordinary of all his productions. It was vaised from seed in 1864. It contains a large amount of farinaceous matter. The enormous quantity of 21 tons per acre can be raised on land where finger and toe destroys the turnip crop; also on land where mangold
cannot be grown profitably. With extra culture 40 tons per acre have been grown, many of the tubers weighing from four to six pounds. It is the heaviest cropping potato known, is remurkable for keeping in good condition for twelve months, and is excellent for table use. In the Haddington market March 18th, Mrs. Patterson attended with a sample to introduce the Bovinia to East Lothian,-some of the potatoes $\cdot$ weighing 9 lbs. She was liberally patronized by the farmers of the district, who seem to have appreciated the merits of the variety. It is recommended as well-adnpted to feed cattle, and is stated to be much less precarious than the turnip crop, while its feeding qualities are far superior.

Yours, \&c.,
W. Bustin.

Sir,-I noticed in one of your numbers you said milk should be skimmed betore it turned sour. Will you kindly tell mo if this rule should be followed in the heat of summer, when milk sometimes sours in much less than 24 hours. An answer to this in your May number would much oblige,

An Inexperienged Dairy Woman.

## Reports of Agri. Societies.

## MIDDLE RIVER AGRICULTURAL SOCIETY.

The Directors feel gratefil to the Board for the strenuous efforts put forth by them for the advancement of ayriculture generally, but more particularly for the liberal bounty annually allowed this Society, thus enabling our farmers to embark in matters which otherwise would be beyond their ability. The directors have mucli pleasure in stating to the Hon. Board of Agriculture the results likely to be derived from the animals purchased by the Secretary of the Society at the Exhibition held at Halifax, in October, 1868. The increase from the two rams purchared at the exhibition, is of incalculable benefit to the Society. The Alderney bull purchased at the same time, came too late to have seen any of his increase, but from his appearance and adaptation to this climate, he cannot fail to give general satisfaction. The Society have this year imported from the well known establishment of Messrs A. P. Richardson \& Co. of Worcester, Mass., a number one Burkeye mowing machine, which turned out far above their expectations. The use of this machine is of great importance to farmers, both in the saving of labour and time, and likely in a few years a good many more will find their way to this locality. The Society have also imported a large quantity of red cloyer and garden seeds from Halifax, which yielded wonderful results, thereby aronsing our farmers to new energy. Before concluding this report, the directors feelethankful to The All Disposer of events for His bountiful providence in bestowing upon this locality plenty of food to sustain man and beast during the ensuing scason.
Hay-Tuis crop turned out well on deep
loamy soils, but in sondy soile the yield was about the usunl average.
Wheal-This crop was somewhat affected by the fly and rust, anddid not come up to the average of last year.
Oats-This crop far exceeds that of last year both in straw and grain.
Barley-This crop boing a good average crop, excecels that of last year both in quantity and quality.
Buclwohcat-This crop has been entirely destroyed on most of the low land farms owing to a heavy frost on the first of August, but what was sown on the upland, has yieldcal well.
Polatoes-This crop was in many instances cut down by tho carly froat in August, thereby retarding the growth of the crop very materially, but on the whole turned out a paying crop.

Green Crops-Turnips, cabbages, and carrots turned out wonderiul zesults where particular attention had been paid to the culture of the crop.

John McLennan, Sec'y.

## ADVERTLSEMEENTS \&

## DETON BULL WANTED!

Ang person having a lיURE DEYON BULL, not under 2 vear old, tor sale, will please communicate particufare stating lowest price, to the "Secsetary of the Union Agricultural Soglety" of Yarmouth."

JOHN CRAWLEY JR., Sec'y.

## AN TNOREASE OF RIOH

MILELAND EUVTIER bu produced in every case where the

## ARABIAN SPICE

is used. Horses run donn and in low condition
are soon brought round. Ragged, beggarly looking Sheep are of thed with a fleece of valuable wool in an astonnshing short space of time. The squeeling Pig soon becomes fat and happy when fed on food sensoned with the Arabian Spice.
The ARABIAN SPICE is warmanted to surpass anything yet introduced for poulty.
Sold in tips $37 \%$ cents and sI cach.
Wholesali from WOOLLICH'S English Pharmacy, Upper Water Street, Halifax.

## A Thorough-bred Durham Bull Wanted.

ANY Socictro or individual having a thoroughbred Short Horn Bull to dispose of may find a parchaser by sending pedigree and price to James A. Cox, Brooklyn, West Cornwallis. March, 1870 .

## HENRY A. DREER,

Seedsman \& Florist,

## 714 CEIBETNUT GTREXT,

PHILADELPHIA, PA.
Fresh and Genuine Vegetable Seeds, Choice Flower Seeds, Bulbjus Roots, Green-House Planta, Roses, de. April, 1870.

## FOR SALE.

WHITE AYLESBUUGG DUGK EGGS, from Pure Stock, for hatching. Apply at Box 116 Yost Office, Halifax. April, 1870.

## FOR SALE.

A FINE (year old) HOUDAN COCK, from imported birds Apply Box 116, Post Ofice Halifax. Aprii, 1870.

## C. 1. ALLEN \& CO. <br> Importers and Denlers in

## Japan Liliee, Dutch Rollow, Hybrid

 Gincliolus and Filowor BeedeOf all kind-Wholesale and Retall. Deecriptive Catalogues sent free to all applicants. Addres, Co. L. ALLEN $\&$ CO.
Corner Columbia and Dowghty Sireel.
April, 1870.
Brooklyn, Nep York.

## LOVELL's

## Dominion \& Provincial Directorieg.

 To be Publishat in Oclober, 1870.NOTICE.- Learning that my name has been unwarrantably used In connection with Directories now beling canvaksul in the Provinces, and entirely dilatlact from my worke, and that in other cames it has been stateri that
iny Directories havo been aliandoned, I would regtest my Directorles havo been shandoned, I would request
thoso desirling to give a preference to my works to sece those desiring to glve a preference to my works to see
that petons representisg themtelven tas acting for me are that perons representing themtelven a acting for me are furninhod with eathfactory crederitals.
Montreal, March 10,1870 . JOHN LOVEILL, Fublisher.

## 

IT is Intended to make these DIRECTORIES the mont completo and correct over ispued on thifecontinent. They are not being prepared by correapondence, but by Agents, for the requifita information. I luave now engaged on the work in the several Prozlaces Porty men and Twenty horses. These sro engaged malniy on the towns and villagen of the Rallway and Steamboat Routes, Important places on tho lines belng held tilt the completion of the former, to admit of correction to latust date.
Inntidpate Inaing, in Oetober mext, the CANADIAN DOMINION DIRECTORY and 8IX PROVINCIAL DIRECTORIE8, which Till prove ${ }^{\text {Ind }}$ correct thd full Indox to the DOMINION OF CANADA, NEWFOUND. LAND, and PHINCR EDWARD ISLAND, and a combined Gazetteer, Dlrectory ind Hand Book of the ilx Provinces.

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Great Iritainand Ireland do.
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do.
SUBSCRIPTION TO PROVINCLAL DIRECTORIEB: Province of Ontario Directory, 1870-71.
Province of Quebec Directory, 1870-71.
.. 5400 Prvince of Nova Scoti Directory, 1870-7

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No money to be paid until each book is delivered.
Rates of ADVEIRTISING will be made known on ap-
pllation to pllation to

Montreal, March 16, 1870 JOHN LOVELL Aublisher.
ApHI, 1870

## GREGORY's

Annual Catalogue of Choice Garden and Flower Seeds.
HAVINC in former years introduced to the public the Hubbard Squash, American Turban Squash, Marblehead Maminoth Cabbage, Mexican Sweet Corn, Brown's New Dwarf Marrowfat Peas, Boston Curled Letruce; and other new and raluable vegetables, with the return of another season I am again prepared to supply the public with Vegetable and Hlower Seeds of the purest quality. My Annual Catalogue, containing a list not ouly of all novelties, but also of the standard vegetables of the garden (over one hundred of which are of mr own growing) and this seacon for the first time a carefuily selected list of flower seeds, will be forwarded gritis to all. Sent without request to my customers of last season. All seed purchased of me $I$ vocrrmat to be fresh and true to name, and that it shall reach the purchoser. Should it fall in either of these respects I will flll the order over without additional charge.
Feb. 1870.
JAMES J. H. GREGORY,
Mrarblehend, Jfas.

## Eggs for Hinthims frome purc Bred Stock.

VIZ.: Dark Irahma, Light Brahma, Houdan, La Fleche, and many other choice kinds, can bo obtained by addressing, pestage paid, Box 110, Postafice, Halifar.

## 1870. <br> NEW SEEDSI TRUE SER Catalogmes on application.

Trotimomiaz-From Niddle Kiver Agr Society, to Mr. A. Saundern, Seedsman, 16 . Street, Hialinax, N. 8.
"The Seeis I had from you for the Middt Agricultural Society, have, I am happy proved beyond my expectation, and a nev will be ordered for next season. I am requed render you the thanks of our Society for pmmpt attention to their business."
(Signed, JOHN MCLENNAN, Sec'y. Yiddale River Agriculural, Socié

Ifecorint

## AEmicustessal * Cicarden si

 of all tile $\boldsymbol{T}$ variatice. The New Seed Pot, es: Ramsdell's N Oats; Russian Hemp; Higa Flax dic.orsorders respectfully solicited, and pro attended to.
Narch, 1870.

## alfred saundera

(Late Secretary Royal Jerney Agricultural and zi tural Soclety. Formerly of the Royal Botect Ciardeus, Kew, London),
EDIDSMACIN. 168 Argylo 8t., opponit.J. Northup ${ }^{5}$ ! HALIEAX, N.S.
CALLS particular attention to his newly imp stock of Alayke and other Clovers, Grans $S$ Mangles, Swede and other Tumipy, Pees, $\mathrm{B}^{2}$ Vegetable and Flower Seeds, comprising al. most esteemed varjeties in cultivation, which prepared to sell at the lowest remunerative pe Agricultural Societies liberally dealt rith, all orders promply executed. Descriptive $C$ logues on application.

## AGRICULTURAL BOME MII

THIS MILL is now in full operation, and 1 quantities of Bones are offered for sale.
The Mill is under supervision of the Board Agriculture of Novs Scotia, and all Bones sold the establishment are genuinc.

## rRICIS.

Half jnch Bone............ $\$ 24.00$ per ton.
Finely-ground Bone......... $30.00{ }^{4}$ Delivered free of charge, on beard the Cars Richmond Depot.
Purchasers will save trouble by sending the own bags, which, together with orders, may be 1 at Starford's Leather Store, 28 Water Street.

JAMES STANFORD.
Halifax, N.S., Juнe, 1868.

## FOR SALE.

A CHESTER WHITE BOAR, of ruperior stoc full-blood, two years old in May, purhased fro the "Maxwelltawn Agricultural Society, fro imported stock. Parties wishing to purchase h better make application before the 10th day Aprl!. Upset Yiice, $\$ 30$.
Barney's River, Pictou Co.,
Feby. 25ith, 1870.
March, 1870.
The Journal of Agricuttun -is published monthly by-
A. \& W. MACMINEAY,

No. 10, Givanville Street
HALIFAX, NOVA SCOTIA.
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