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## (Tl) $\mathfrak{G m a d i a n}$ Agriculturist,

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## A FEW PRACTICAL REMARES ON THE AGRICULTU-

 RAL OPERATIONS OF SPRING.The busy and joyous season of Spring, with its increasing warmth and bright sunshine, giving a renorating impulse to the quiescent powers of the Vegetable Kingdom, and imparting new vigor to a countless number of animate existences, has again arrived; and largely does it draw upon the resources, both of the head and hands, of the cultivators of the soil. Spring may be regarded as the infancy of the ayricultural year; and the golden fruits of Autumn will be materially influenced, both in re-
gard to quantity and quality, by the degree of intelligence and industry which the farmer brings to bear upon his important occupation at the present time. All that we propose in the present article is to drop a few practical and seasonable lints
The winter that has now dnawn to a close has been distinguished in Upper Canada by the general absence of severity, clouded shies, frequent and sudden changes of temperature aid a damp atmosphere: characteristics strongly reminding one of "Old Country" winters. Live Stock of every description has done well, when proper attention has been paid; a condition we are sory to observe is too frequently neglected. In this part of the Province the lay crop of last year was abundant, but in several of the Eastern districts it was extremely scanty, owing to the excessive drought that prevailed over a very large area of the British Provinces and the Eastern States. The farmers in those sections must therefore experience- great difficulty in keeping. up the condition of their live stock,particularly as root crops must have been similarly affected with that of hay.
Now the only way of modifying the effects arising from the extremes which are frequently
experienced in the seasons in this climate, is by steadily pursuing a system of thorough and libsral cullivation. Root crops, as turnips, mangel wurzel, carrots and parsnips, may be said with the strictest truth to be the farmer's sheet anchor. In Spring particularly, when the temperature increases and the ordinary food of cattle usually runs short, what an advantage it is to have a supply of surculent roots. Howinvaluable are such kinds of food for milch cows and breeding stock of every description; premising of course that they are given judiciously, with a proper admixture of hay and strav.Carrots are excellent for horses, particularly in spring, tending to purify the blood, and promoting a gencrally healthy state of the animal; and the same observation holds good as respects roots for young stock of every kind.

It is of the last importance that the soil be thoroughly prepared for the reception of the seed. Much of the failure of all kinds of crops during the dry, hot weather which characterises the summers of this climate might be obviated, by deep cultivatior and judicious manuring. It is a well ascertained fact that during the drought of summer, the most deeply cultivated soils are (other circumstances being equal) precisely those which sustain the heallhiest vegetation; the moisture in the earth having an opportunity of ascending within the reach of the roots of plants by the force of what is called capillary attraction. The first object, therefore, with the farmer in Spring is to obtain a deep and fine seed bed. Land ploughed in the fall -a practice generally to be recommended-will frequently require ploughing again in the Sprmg, as the particles of heavy soils are apt to adhere and consolidate by the action of heavy rains. A powerful Cultivator, when ground has been ploughed in the fall, might be used with advantage in Spring, and save a second ploughing.

Those who pay proper attention to the drainage of their land, either by furrowing, ditching or under-ground draining will experience the benefit of that important and necessary practice by having the soil both drier and warmer, and more readily brought into a fit state for early sowing. The advantage will also be obvious in the final result, in crops of greater quantity and of superior quality. We are not the advocates in all circumstances of earrly sowing; the state of the soil, and its elevation above. the levei of our great lakes must be considered, or the severe Spring frosts incident to the higher elevations will be sure to destroy the tender vegetation.As a general rule we should seek to improve the natural climate of the country by clearing, drain-
ing and superior cultivation; under these circumstances early sowing may be resorted to with safety and profit, and the growing season prolonged, which in this clinate, especially in the case of cereals, is a matter of very great importance. Between the periods of sowing and reaping the interval is frequently too short to admit the full maturity of a plump and heavg grain.
The farmer cannot be too careful in selecting the seed of the various crops he cultivates. This common sense precaution, however, is most lamentably neglected; and to this circumstanco alone may be fairly attributed a large share of the scantiness and inferiority of many of our crops We say to our readers then, sow no other but clean, well grown and thoroughly ripened seed; such seed may give you some trouble to obtain, and will cost a little more than inferior seed with a mixture of weeds, but you may depend that it will be extra care and expense well bestowed and incurred.

We may just-advert in conclusion to the importance of sufficiently covering all kinás of small seeds with fine carth. Although thers are no doubt large quantities of worthless seeds palmed upon the public either by dishonest or careless dealers, yet we feel bound in candor to say that the fault of failure does not always lie with the dealer, but that it is frequently committed by the farnier himself. All small seeds, particularly such as turnips, clover, \&e., require both a fine tillh and sufficient corering, in order that they may vegetate. But how frequently does the farmer neglect these conditions, and then unreasonably, and often unjustly, blames the seedsman for.selling him old and worthless seed! We strongly recommend our readers never to sow the smaller kinds of seeds without first testing their vitality, which is easily done by putting a small quantity in some moistenced earth and exposing it to is warm temperature. Being satisfied that the seed is good, you have only to comply with those necessary conditions, which nature has imposed as essential to vegetation and healthy developement. Warmth, moisture, exelusion from light, but not from air, are those principal conditions. Of all modes of depositing the secd of most of our grain crops, drilling appears to be the safest and the best; and as our farms get cleared of stumps and stones, the use of the drill will no doubt become better understood and appreciated.
A concluding word or two in reference to Clover, a:plant of the greatest value as food for Stock, and for renovating the soil. That farmer, who instead of exhausting his land by a constant repetition of grain crops, seeds down alternately
with clover and other grasses, and applies economically the manure which is made upon his farm, will never have to complain, as thousands now do, of a constantly diminishing scale of produce. But in order to have the full benefit of this uscful plant a larger guantity of seed must be sown than as usually practised. The great object, with the clover plant in particular, should be to cover the ground entirely, thereby preventing the powerful action of the sun's rays on bare surfaces between the plants during tha drought of spring and summer. The use of a heavy roller is recommended, and the application of manure, (plaster in most soils produces a powerful effect,) will generally be found successful in producing abundance both for hay and pasturage.

We earnestly entreat the attention of our readers, and of members of the legislature and the press in particular, to the subject matter of the following communication. As we have repeatedly expressed our opinions in this journal on the questions of Agricultural Education and the means of improving the farming practices of the country, we shall leave Mr Fergusson's letter to spenk for itself. We fully concur with the viewa of the writer as to the great capabilities of this country, and the advantages which it offers to honest and persevering industry. We feel quite confident that if the plans proposed were judiciously and faithfully carried out, the Agriculture and other resources of the country would soon exhibit a marked improvement;-capital and a more desirable kind of emigration would be attracted to our shores; a spirit of enterprise and self-reliance would be more generally called forth, and we should thus become prepared for taking and sustaining as a people our proper position-iwhich would be far from the lowest in the scale-in the general competition of the world. The time for earnest action has now arrived, and we trust that the subjoined appeal to the intelligence and patriotism of the country, from one whose experience and social position alike entitle his views to a respectful consideration, will be the means of directing the public mind ta the best practicable methods of elevating the position of our farmers, and of advancing the oldest and most mportant of all arts,--the cultivation of the soil.

## AGRICUJZURAL EDUCATKON.

To, the Editor of the Canadian Agriculturist. Dear. Sir-i.
I make no apology for soliciting a corner of
your Journal for this communiestion, aware as I am that the subject has long engaged your attention, and however inadequate my attempt may be, when compared with the importance of the subject, it may serve perhaps to attract the. attention of your readers.

The establishment of Agricultural Collegess and Schools has prevailed for many years both in Eumpe and-in the United States, as you are well aware, with a varied measure of successSuch Institutions hovever, have so often proved failures, that I candidly avow, in times past a considerable portior of lresitation on my part in: recommending their adoption in Canada. Of late, it has become lnown to me that opinions. much at variance with my own, are entertained by various individuals, for whose judgment I feel the highest respect, and I therefore most willingly sacrifiee my doubts to their more cheering anticipations. I think there can be no doubt upon this, that if an enlightened system of cducation, shall fall to the lot of the Agricultural class, in any part of the worid, no men are cither more likely to profit by and to appreciate the blessing than Canadian Yeoman, or are better entitled to erjoy every possible means, of qualifying them to fill respectably, the position which they are destined to occupy in this land. It may perhaps be said that it comes too late for the present generation; be it so; but sure I am, that the present generation, will for that very reason, estimate more highly the boon for their children. The independence and happiness of rural life, (as it may readily be found, if honestly sought for) by all who adopt it, in this noble Province, has been an assertion often enough sncesed at, or denied; butI am free to declare, that after years of experience and enquiry, my conviction remains umatered and undiminished; that in no portion of this world, has a kind Providencc offerede more substantial materials of rational enjoyment, than in cultizating and improving the forest reclaimed fields of Canada. That numbers undoubtedly have failed to realize such views, detracts little from their soundness and truth; for who that has given but a slight portion of attention to human natures can remain blind to the wanten abuse of God's choicest gifts to His: thankless ereatures. I shall not, horvever, indullge in diffuse encomiums upon the lot of Canadian farmers, let it suffice. to press upon them the remembrance, that whether they may use it or abuse it, a most abundant portion of human happiness, has been placed within their reach: Let them be sober; industrious, and aboveall, religious, and they may rest assured, that ihe cares of life will lie. comparatively light upon their homesh

But now, alas, comes a doleful whine. Crnadian farmers are ruined and undone. Protection is at an end This is neither time nor place for diecussing the merits or demerits of Free 'Irade or of lirec Navigation. Nor would much be gained by such discussions. Whether palatable or the reverse, we may rest tolerably aisured, that these, have become fixed points, and there is little doubt that each revolving year will more and mure develope their wisdom and antrantage.

As regards th: Farmer, there can be no reasonable cause of alarm. Besides many indirect adrantages, he will positively become a riche: and more independent man in the receiptofonclatlf, or two-thirds of the price, which he used (t) reclun ujpon reccis ing for his wheat, provided ne can put him in the way of doubling his. prodice per aere wihout any hazardous outlay, or cetravagant expenditure.

A well regulated, intellectual Agricultural Education will go far in effiecting this, and the peesent product of wheat in Canada, considerable as it is, will prove a mere trifle, compared with the capabilities of her climate and soil.

Next comes the grave question, how are such alrantages to be sccured, granting their acquisition to be desirable? Fortunately Canada enjoys peculiar facilities for their attainmentIn the great Provincial University about to open, a Chair of Agriculture will assuredly form a part, and will probably be more or less blended with the kindred studies of Botany, Agricultural Chemistry, Natural History, Mathematics, $\& c$. It is belicved that a convenient area of ground may be easily attached for illustratixe and experimental purposes, and would prove a valuable accessary in education. A Library and. iduscum devoted to Agricultural and kindred wijects wouid soon lend their aid, and a Veterinary School, framed upon the admirable model of that fuunded by the Highland Society of Scotland, some of whose Licentiates are already cotablished amongst us, would soon diffuse intelligent and educated men of their profession throughout our land.

Neither is this all Government possesses a portion of excellent land; almost within the eity of Lingston, forming part of that lot, upon which stands the Provincial Penitentiary. This land, with a splendid perennial spring, is at present lying utterly neglected and anproductive. It would not be difficult to engraft ungon this, one of those Agricuitural Schoois, where the sons of farmers or others, might acquire practical instruction in the most approved system of husbandry, while at the same time the ordinary branches of education would be duly attendedito-
and a sound foundation would be laid, if parties should so incline, for prosecuting their studies in the Provi: vial University. 16 is not to be overlooked cither, in such an Institution that the personal labor of the pupils would very materially diminish the expense of board and cducation. A ready market for produce would be always found in supplying the ${ }^{2}$ 'enitentiary, from whence also a copious supply of valuable mauure would be readily obtained.

Something, however, seems still required to put this machincry in motion. I would suggest that a Board of a few practical men, shouid be established in Toronto, acting of course, gratuitously. To this Board I would give sufficier.t powers to organize and arrange all needful measures, connected with Agricultural improrement and adrancement. It is impossible for a moment to doubt the hearly approbation and patronage of the noble Representative of our Gracious Queen, when we remember the steady fricndship which that individual has shown for the farmer's welfare, since he assumed the Government of Canada. Lord Elgin knows the farmers' value, and he will never overlook theirinterests. It would be premature to enter upon. the varied duties of such a Board, and it is more than time for me to apologize for so lengthy a communication. There ean be no doubt that the Boaid, if properly constructed is caloulated to do great grood. One palpable and most raluable result would be the anmual collection and publication of the Agricultural Statistics of Canada, in an authentic and extended form. I will only add, that if the suggestion should be favorably entertained, the less time that is lost, the better.

> I remain, dear Sir,

Adam Fergesson.

## TIE APEIS FAMILY.

The insects comprised within this group are two well known to reed any minute description: We observed' last summer in one of the best laid out gardens that we have seen in Canada, some beautiful Rose bushes whose leaves were literally. destroyed by these insects. In England they sometimes prove destructive to whole planta-: tions of Hops, by absorbing the vegetable juices, and covering the leaves with their sweet and shining excrements, known as honey-dew.Beans are liable to their attacks-the "blackfy," as it is calted,-mand the blight in Apples is occasioned by them.
Their mode of reproduction is very peculiar ${ }_{x}$ and desorving of special consideration. In the
autumn they are ovparous, and deposit their eggs, otherwise their race would be destroyed by the severity of winter. The genial warmeth of spring developes their eggs, and what is very curious, the next generation of insects become viviparous, and during summer bring forth their young alive. Their powers of reproduction are inconceivably great. Reaumer, the celebrated French naturalist, paid very minute attention to their economy, and observed one insect, in a single day, become the parent of twenty; and these again would give existence to fresh swarms in a fen days. Anotlec French naturalist isodated the female iusects as soon as they wore born, and jet he obtained nine gencrations of perfect insects, without contact with the male, the latter not being produced until autumn.

The amazing fecundity of these insects would be absolutely destructive to a large class of phants, had nut nature in her wise arrangements appointed numorous cuenies to operate as checks. The little shining insect, known to children as the "lady-bird," is among the most powerful of them, and should, therefore, never be destroyed. Lady-birds will devour Aphides by millions. In gardens infested by these unwelcome guests, cleansing the plants with tobacco water will have a good effect; but attacks on a large scale in the field, no remedy of this sort is practicable, and nature must be left to work hor own cure.

## Supitit of the Agrialtaral Wress.

## AGRICUETURE IN NEW BRUNSWICK.

By the courtesy of James Caie, Esqq, Secretary of the Noithumberland Agricultural Society, New Bruuswick, we have been favored Weth the Report of that Association for 1849-50. It is an interesting document, showing that the Agricultural capabilities of the Province are much greater that is generally imagined. The following extract contains truths of universal interest and application.
"Before resiguing those offices of trust to which your partiality promoted them, the retiring Bourd of Directors would be allowed to-congratulate this Socicty, and the country at lerge, upon the abundant Harvest with which it has pleased a kiad Providence to reward the labors of the husbandman. Sure, such inanifestations of the loving kindness of the Greator, while they call forth the griatitude of the creature, should never fail to stimulatehim to greater diligence. in all time to come, diligenee not merely of a pluysicul, but of a miental character: It is not enough that, encouraged by last year's success, we inchase:our offorts this year, in the way of
ploughing, harrowing, and stumping our lands, - something more than this is necessary, if we wish to prosper as Farmers. We must endervor to keep pace with the march of improvement going on in the world around us, fre to loiter behind is to let slip our chance of succea.: We must thercfore increase our mental offorts, that we may acquire, among other things at least, a rudimental knowledge of those Sciences without whose aid our suceess as Farmers is more the effect of good luck than of good management. To assert that this statement is not true, or, in other words, to assert that a man understands his business as a farmer, who is ignorant of the substances that censtitute his soil, and of those with which he would enrich it, is neither more nor less than to assert that an individual unacquainted with the art of mixing colors, yet slubling himself a painter, would be capable of producing as striking a likeness of us, as a Raphacl or a Lawrence; or that a man ignorant of the science of Chemistry, and the art of compounding medicines, yet styling himself a physician, would be as likely to remove a malady, or cure a disease, as a Sir Astley Cooper or Siir Benjamin Brodie.
"Nor is this all. Farmers should be diligent in the acquisition of experimental knowledge.All the practical and useful arts are founded upon facts: Agriculture is pre-eminently so. All trie science, in Agriculture, is the process of induction; that is , it consists of inferences drawn from well authenticated facts. Theories in this case, however plausible, are of no real valuc, wnless the application of them lead.to some practical rule or result. Now, it may not require a large farm, or a great capital, or a vast amount of intellect, to make experiments, from which the greatest bencfits may flow; many grestions still involved in uncertainty, relating to crops, seeds, manures, modes of planting and cultivation; of harvesting, saving manure, \&e., \&c.. are just as likely to be solved, in.a farm often acres, as in one of a hundred. What indeed, is crery operation of the intelligent Farmer, but an experiment? In preparing, manuring, aad sowing his folds, he may be said to be making on experiment; and.if such farmers would carefully note every step in the process of cultivation, and the progress of vegetable growth, the facts thus collected, aight prove not only beneficial to themselves, and the districts in which they live, but they might elicit truths-without the -aid \&f Science-caleulated to throw light upon subjects still involved in obscurity."

VALUE OF LAND IN NQRTMERN ENUROPE.
From Mr: Jacob's official report we glcin tiat
following facts:-In West Prussia, an estate of medium soil, containing 4,200 acres, sold for $£ 3,000$ sterling. Another estate with excellent dwelling house and farm buildings, consistirg of 2,800 acres of highly fortile land sold for $£ 5,400$. These may be taken as an average of the highest and lowest value of land in the maratime province of Prussia. Total cost of labor on 2900 acres is pott tit $£ 155$. A. hired laboror roceives about $f_{5} 510$ s. per annum in money, with a portion of the very coarsest kind of food. Land rents at 1s. per acre. Best Merino sheep worth ubout 6s. Cows from 30 s . to 60 s :, a few 75 s . per head. Wheat is grown chicily for export, and is conveycd on rafts down the river; these rafts are 75 feet long and 20 broad, rudely put together, and carry from 120 to 180 qrs. The wheat is thrown on mats, and frequently left uncovered for weeks, exposed to the weather. If rain falls 'it soon causes the wheat to grow, and the vessel assumes the appearance of a floating meadow. The shooting of the fibres soon forms a thick mat, and prevents the rain from penetrating more than an inch or two deep, and the bulk is protected.

In Poland, land and labor is extremely low. Cows of the common breed worth 27 s . to 30 s . per head. Some of the best breeds will fetch from $£ 3$ to $\mathfrak{e x}$. Shecp from 3s. to 5 s. each. Merinos are rare, worth about 7 s . to 9 s each. Implements are of the lowest description, the cattle are attached by ropes-no leather used; ploughs ill constructed-with little iton about them; harrows, teeth and all are of w. d .

In an elaborate article on the froe trade poTicy in Blackwood's Maguzine for January, it is stated that grood wheat may be bought in these Countries from 16s. to 25 s . per quarter, and the cost of transit to England, nithough variable according to situation and other circumstances, is not upon the average great, from 5 s . to 8 s . or 9 s . per qr. The writer seems to think that the average price of wheat in England must come much below the present. If so it will be impossible to export either from Canada or the States.Can wheat be grown upon an average in Canada, so as to yicld a.moderate profit under 4 s . currency a bushel? We think not.

## THE NEW IRISH COLIEGES.

We learn that Agriculture, both iif its theory and practice, will form a prominent feature of these institutions. It is to be hoped that religious bigotry and politioal hate will not be aldowed to interfere with the working of so wise and beneficial a measure. The Lord Lieutenant has signifified that $£ 1400$ are to be expended in the erection of farm buildings annexed to the

Professorship of Agriculture established by Hor Majesty:in the College at Cork.

## ILOUGHING BX STEXK.

The Banffshire Journal states that a patens for a steam plough has been taken out by the inventor, Mr. James Usher, of the firm of Usher \& Co., of Edinbargh, and the machine will shortly be before the public. The machine is constructed to plough six furrows at once, thua doing the work and saving the expense of six double horse plouglis. The great weight of tho machine, which is cstimated at three tons, may be thought an objection; but this is in a great degree obviated by the use of a large roller, which is so placed in the centre as to balance the machine, and prevent the wheels sinking.The cost of the entire apparatus is estimated at £300.
agracultural college and farm in tif btata OF NEW YORK.
Through the polite attention of B. P. Johnson, i Esq., the indefatigable Secretary of the New York State Agricultural Society, we have been favored with a copy of the Report of the Special Cummittee of the New York Legislature, on the above subject, and a draft of the Bill which they presented. The Bill provides for the appointment of 15 Trusteves for the management of the College, and authorizes the Comptroller to borrow on the credit of the State, the sum of $\$ 100,000$ for the purchase of the land and crection of buildings, \&c. This is the way our neighbors go ahead; how much longer must we tall about it before we begin to follow their example? Our readers will find an interesting letter from the Ifun. Adam Fergusson in another column relating to this subject.

We extract the following passages from the Committee's Repurt, and commend them to the notice of̂ our Legislators:-
"The great subject entrusted to the caro of the committeo, has for several years past excited a deep intorost throughout the outire State. Twice the distinguished citizen who now fills the Executive chair, has pressed it upon the consideration of the Legislature; various boards of supervisors, agricultural societies and privato citizens have called upon us to act in the premises.The committee on agriculture in the Assembly of last year, submitted to the Frouse aninteresting report upon ihe subject, which will be found in their documents.The able board of commissioners last year appointed by the Governor, have matured and reported a plan for an agricultural college and exporimental farm, and the samo is now upon our files. Public opinion still moves on in the same direction and with accumulatod power. It would be but a waste of the time of this committoo and wearying to the patience of this House, again to go over the ground embraced in those raports. The most ample justice is therein dono to the importance of
tho objoct contomplated, the prosont stato and past history of similar:institutions, the branches of knowledge to bo taught, and the exponso and gevoral outtine of tho institution.
It seems necossary for this committeo now, only to prosont a fow briof considerations, which soom called for by tho nature of tho bill which they ask loave to introdnco.
Tho committeo wifl eniiro unanimity assont to the corroctness of the conclusions arrived at.by tho said commissionors, that such an institution as has thus been callod for by so wido sproad a public opinion, sl:ould be established, and that the samo should be founded by tho Stato. Tho necessity for its oxistenco is found in two vory important facts, the first is, that two-thirds of the ontiro population of tho State is engaged in agriculture, it is the great occupation of our citizens and the primary source of our wealth, and must so continuo through all futuro time. Whatover adds to the value or tho dignity of labor, tends to tho elevation in comfort end respectability of the great body of the people. A very slight increaso throughout the State of tho productions of the oarth, will aunuelly return to the people more than the-entire amount which will bo expendod.on the proposed institution, should that sum even oxceed any contemplated bounds.
The second ground for its necessity is found in the most rcmurkalle fact, that whilo a vory largo majority of the inhabitathts of the Union are engaged in agriculturo, whilo it is everywhero regarded with regpect and held in the highest favor, thero is not upon the continont a solitary institation whero a thorough scientific and practical knowledge of agriculture can be obtained. Millions have boen expended in founding unstitutions to toach law, medicine, theology, and the highor departmonts of science and literaturo; and oven the blind, the insane, and the deaf and dumb have not been overlooked and forgutten. But that great science 'which lies at the foundation of all others, and is paramount in importance to thom ill, has boen loft to strugglo along as bost it might, guided by the flickering light of an uncertain experience, and unaided by the fostoring care of the government which it sustains. The results of moilernimprovements, and the progress made in the present century, in the scionce of agriculture, demand at the hands of the State the must favorablo consideration of this subject, and that this great tosideratum shonld be supplied withont further dolay. The great farming interests of this Stato have too long been ovorlooked and forgotten, or sacrificed to the intorests of more artful or more clamorous bodios. But now when thoir wants are understoood, and their roquests are duly presonted to our consideration, they are too reasonable to bo longer postponed."

## STANDARD FOR SAXONY SHEEP.

## by THOMAS REED.

At a meeting of wool growers at the state fair of Now York, it was agreod that the judges of Sasony should publish a description of what they considered a complote specimon of Saxony sheep, for the benefit of young wool growers. The other judges desired that I would give a written description to Mr. Peters, the oditor of the Wool Groucr, to which I at length agreed.

Perfection should be the aim of all; and as the Saxony sheep have been brought to the highost state of perfection, as producers of fine wool, it is my desies to make the description so plain that a young wool grower who observes these rules, in buying or selecting for breeding, will soon have a good flock.

First consos the description of a pure blood Saxion
buck. II should bo ot medium sizo, [and I considor a modium sized buck to be 3 feet 9 inchos from the nose to tho root of the tail,] around the body 3 freet 2 inches; around tho fiank 3 feet 6 inches; from tho breast to tho hip 2 foot 6 inches; in hoight 2 foot 3 inchos; ho should bo a litlloilonger than a Morino ahd not quito so heary built. Tho back almost straight; broad over the kidncys; body round; tho nock atarting almost lovol with tho tops of tho shouldors, vaseoring and becoming round towards the hoad. The lioad small, and noatly sct on; no looso skin on tho undor part of the neck, or very littlo; the hoofs short and pointod; well quartered, strong, activo, and spiritad; his eyo bright; pleasant countenance, and tamo; the skin smooth and hoalthy looking. Whon walling with his side to you ho should look finished and gay. He should look and feol woolly, not stiff or hard, but sofs. The samo zu'cs should be observod in solocting ewes, only thoy aro a sizo less.
'the next comos the description of his wool. Fine wool on his forehead; wool on his crown, fine, short. downy looking wool on his checks; tho under part of the neek as fine as possible and crimped. Tho wool on the body to bo as ocen as possible all over, and should bo crimped twenty-four to twenty-eight crimps to atho inch; the crimps should run plain and evonly across the sample and up to the top resembling crape. It should be soft, fine, thick sot or compact on the sheop: it should bo so that it will stand straight out, showing small strands or divisions on the surface of the fleeco: the bolly well covered with fino wool; the hip wool soft and crimped. The wool should be a clear whito or cream color; moderatoly yolkoy and the surface of tho flecee a litule dark. Theio is a very good hiud of wool that is vory fine and closo, in which you can not trace tho crimps-ron must decide by the smallness of the fibro. 'Tho iloece when shorn, its folting properties should keep it united when spread rosombling a spiden's web; it should be soft and easy rolled; the length of the wool after itit is washed and shorn is from one and a half to twoinches.
When a young wool grower gocs to solect, he should koep the above desciibed sheep or some other modol sheep before his mind; it would help hin to have procisoly one-fourth of na.inch marked on his left thumb mail, to lay the sample on and comm, and if they count six or soven crimps in that space they are very good: You should cit the samples with scissors for pulling them injures the woal and the sheep both.
When the wool is well crimped it is superb. Sheep that are soaked and washed under a water fall until the wool is pure and clean will average two and a half tos per head-it washed in the old way thoy will average three lbs per head. You cau have your sheep exquilsitoly fine, or fine and heavier fleeced just as you seloct them to breed from. Then why not breed an American sheep equal to any in the world, or one that wis suit our notions?
Remomber " like begets like." Be carcful to guand against the following fauts: Coarse, hairy faces; coarse hairs or uncrimped wool on the under part of the neck; stringy on the top of the shoulders; bareness of the belli;; coarso hip wool; and eoarse hairs on the inside of the thighs; the skin pale or covered with spots; slabsidod, poor on reasonable keeping; sunk in tho neck; a little coarse; low on the side.

By observing theso rules in salecting and breeding, my wool of 1543 passed for the best American wool at Davis \& Aubin's depot, at Boston; ray wool of 1849 passed at H. Blanchard's depot, Kinderhook; N. Y:980 ibs super, 438 prime, all in the twoo grades. In conclusion, try to have your shoop with as many of thio good marks as pessiblo, and yory fow of thé bad ditog.

Annually select, fatton and sell faulty fleep to the butchor. By so doing you will have the profit and qleasuro of having a fino and Weatsiful nock. Wo ought to improve our flocks, raisoonr fino wool, manuYacture our own cloth; for if we pay twenty dollars for foreign oloth, it hass to to in spicrio, and away it goee, and somo band: has to drave in sixts dollars of hime circulation. t'lro dillerence is, had wo bought Amorican cloth our farmers tand mechanics would havo had tho trenty dollars; and thai same money kept among the induetrious part of 1. e community; might have paid a thousand dollars of debe in a year, and still have the same money to go on with.-IFool Grozer.

Numbering, Chassing, and ntigisterivg suber. Victon, February 9 th, 1850.

## Mr. Eitron:

'The following plan for mumbering, classing ard rotyisteling sloce, 1 have practiced for somo years past, and I think with some profit. It con i- t sin inumbering each individual, zo as io devignoto one fiom the other, be marks on the car intle folluwing manner:-A notch cr half circle on itre fore part of the left ear, means 1; one on the back part of the same, 3; with these I can autinbir rup to ten, thus: for number $t$, I makio one on each side; for 7, two on tho back and one on the fore side; a notch on the fore side of the right carstands for 10; one on the back of the samo for 20 ; with these I can number up to 100 . If the flock is large enough $\pm 0$ that the lambs of each sex should teach 40 or more, 20 should bo substituted for 20 . This could bo carried much farther, by cuting off the end of one car for loth, and of the other ior 200; two notelies might then be made in the end of each doubling cach time, from 100 , which would make the lnet stand for 3,200. The age of my sheep is known by holes through the left ear; one through the leftear stands for one that is born in the year of 1841 or ${ }^{5} 51$; one through tho right for 3 ; so that thoso borm in 1816 receive troo holes itrough the iight car; those in 1847, tro though tho tight and one through the left; those bern in 1840 or' 50 . (ic., teccive no holes. For this purpose I use a half-inch punch, made like thoso used by shoe makers. In classing or grading my sheep, I am govorned principally by tho namber of curses in a givon space, bolieving with Morref, in his American Shephe d, that "There is an intimate connesion between the finenoss of the wool and the numbor of curves or otherwise, in proportion to the number of curves in a given span, is the diametor of fibres." Again he says: "The numerons and minute curves being as observed eminonuly characteristic of the pure Saxon and Merino, will sorve as a sume test in all cases, of the purity of biood, and therefore affiords a certain and unerring guide in the solection of breeding sheop."
I grado my sheep about the first if February, by clipping a small sample from the body of the sleep, noar the centre, wisthout stretching or disturbing the regularity of the curves, then byascertaining the number of curves ii an inch $i$ am able to class as follows:-

|  | " extra, | 25 to 26 | " | " |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | " prime, | 21 to 24 | " | " |  |
|  | * No. $i$, | 19 to 20 | " | " | " |
|  | " No. 2, | 17 to 18 | " | " | " |
|  | " No.3, | 16 | " | " |  |
|  | " No. 4, | 15 |  |  |  |

I seldom havo any reach as high as tho first class or as low as the seventh. A little experience in the business will enable a juerson to judge yory correctly, on opening the flcece, to what class it selongs without the trouble of clipping. In order to
ascertain how my mamnor of grading agooes with yours, I oncloso a fow samples. The one marked extra was taken from an owo threo yoars ohd, her live weight was 63 lbs , her fleece $7 \mathrm{lbs}$.3 oz . The one marked prime. an ewo 3 years old, heo weight 77 lbs , flecco 5 lbs 2 oz. No. 1 from a luck 4 yeare ohl, live weight 10 libs. flecco 8 lbs No. 2 frem an owe 3 years old, live weight 82 ! 1 s ., fleceo 4 lbs . 111 oz . No. 3 from an owo 3 years old, live weight 68 , fleoce 6 lbs .8 oz .

The following is tho watuer in which I lieep my books:
mamemag neaster yon 18.19.


In the first column is the number of the owe; tho noxt her ago or the year in which sho was bom; in the third the class to which she bclungs; in the fourth her weight when sharn; in the fifith the weight of her fleece; in the eixth tho buck by which sho was served in tho seventh her time of cweing, in the cighth nid ninth the numbers of the back and ewo lambs. I have practi: ed weighing my sheop only for the hast threo years; it being attended with a good deal o: labor, I shail probably discontime it.

I find the difficremt grates, as a general rulo, preduco wool about in proportion to their weight, allhough somo individuals produco more than others. My sl:eep aro fed in barns, in the wincer season, with a yard and trough of water attached to each, in flocks of about 50 , sorted according to age, sex, and condition, the doors being usually loft open so they can go ont and in at leisure. A short time previons to the lambing season, which commonces with me about the 15 th of $\Lambda$ pril, my brecting owes are tunned into a field near the barn, where they are allowed to run through the day, being always driven imto the yards at night, and if tho weathes is badinto tho barn. As fast as the lambs come they aro numbered and put into an other yand or fiofl for a fow days, or until they become sufficiently stiong, when they are docked and castrated, except such as I save for bucks, and turned away to pasture. The holes through the ear that denote their ago aro not mado until they are six months old.

My present flock, oxcopt those I purchased for fattoning, consists of about $\%: 0$, from one to oleven years old, all of which are numbered and classed so that I can at any time ascertain tho comenion betweon any individuals or fenilites, and thereby be cnabled to use hucks more or loss from my own flock, withont danger of too close breeding. I am also enabled to select at all times which I invariably do myself, such as I wish to dispose of, whethor with regard to age, quality or quantity of wool. It also enables me by examining their increase to ascertain which are the most valuablo for breeding, asit is frequontly tho caso that an eswe, although nearly perfect in horself, will bring forth an indifferent offspring. I can, also, by knowing the amount of wool I have of each grade, more casily ascertain its value.
W. D. Dicrinsor.
-[ Wool Growcer.

## sub-Soil plowing.

Much has been said in favor of deep plowing and sub-soiling the earth, the subject has hardly began to cxcite that general attention anong farmers which it ought to command. There is scarcely one acre in a
thousaid on which a deep, mollow, and productiro scil can bo found, without bioaking the pan, or compact mass that lies just bolow the surface of the ground. So far as tho warm atmosphero can freely penotrato, with its oxygen, carbonce acid, ammonia, and rapors, chomical action will be extended, roots wiil grow and rot, and a fertilo soil be gradually developed. Tho benefits of deep tillago do not all accrue immediatoly aftor the operation is executed. The formation of a deep mollow, and rich soil, by the most skilful uso of natural eloments and agencies, is the work of many years.To attain this rosult, ono soeds not only mineral and organic matter in due proportions in the surface of the carth, but both minerals and mold of particular kind, and in a particular condition of solubility and combinuthou.
Aftor a man has deliborataly made up his mind that it is better to owa and cultuvate good land than poor land, and that there is such a thing as improving the natural fortility of tha carth, lius first thoughts should bo directed to tho point, whethor any field, or part of a fioh, needs draising. Stugnant wator wihhis threo foot of the surfaco will riso by capillary atraction to a degroe fatal to that warmth and friability of the soil, without which its highest productives can never bo reached. All under-draining should be into ditches at least three feet deep. Jut there aro millions of acres of tilled land that need no artificial drainage, which will bo greatly improved by deep, or sub-soil plowing, Tho adrantages of this modo of culture are the more speedy and decisive, as the manuring, liming, and ashing of the land necompany tho breaking up of tho inert mass of clay or gravel bolow the surface soil. It is not protended that this dead oarth will instantly become ferilo. Admitting that the comminuted clay really contains salts of time, potasis, soda, magnesia, and solublo silica, it takes timo to proparo these fortilizors for tho nutrition of cercal plants. Salts of iron and alumina, such as copporas and civen, aro apt to exist in excoss, and require a littio caustic limo to decompose them und form gypsum, or sulphate of line. Plants that contain considorablo nitrogen, such as poas and clover, and of coarso yield a hberal por centage of the alkali called ammonin, whon they decay, are oxceedingly favorable to the deepening of a thin soil, in connection with deep plowing. Every farmer should understand the difference in the conomical value of vegetable mold. Suppose one has 100 lbs . of cabbage, oxclusise of water, in ong heap, and a like weight of pine saw-dust in another. Which will form 50 lbs. of the better mold? The solid organized mattor is alike in each mass; and why should their bo any difference in the economical value of 100 Jbs . of cabbage or 100 los. of sawadust, either for feeding cows and children, or feeding wheat and corn piants?

In principle, there is no difference in feeding animals, from man down to a coral or sponge, and feeding plants. All living beings need food adapted to their peculiar natural wants. Henco, piace a baby oyster in salino water that contains not a particlo of lime, and its stony covering must ceaso to grow. Nature is incapable of creating the first atom of lime, or of any other element consumed to form any plant or animal. A deep. fertile soil, is one that aboands in the raw material for making bread, milk, and meat, in an available form, to the depth of twolvo or twontyfour inches, as the case may be. Is there anything unroasonablo in saying that such a soil possesses a very great intrinsic value? a cubic foot of such land in the valley of the Genesoo contains, on an average, over a pound of common lime, This gives over 43,000 pourds of this mineral to an acre, within twelve iuches of the surface of the ground. The writer is
credibly informed by ono of the bost farmers in the Stato of $\overline{\mathrm{D}}$ olaware, that a million bushols of burnt lime aro now aunually wand for improving the soil in that small Stato. Ono farmor pass a $\$ 1000$ a yoar for guano.

In the last number of the working farmer wo find statements in rogard to sub-soiling, from which wo cx tract the following. James Carsimam, Prosideat of Princetown College, states tho results of an "unintantional" oxperiment ho mado in 1848, in sub-soiln ing.
"I wished," said ho, "to sub-soil a lot in soil with a hard pans, and os I had only ono team, I hired anothor to turn over tho sod preceding the sub-soil plows. Ho camo and worked ono daj; but did not returb tho next. As the time for planting was approaching, I dirceted my farmor to go on and plow in tho common way ns deep as he could. IIo did so. The following day the other plowman returnod, worked a day (suiv-moiling) and thon was absent.
"Tho result was, tho lot was plowod alternatoly with tho common plow and the sub-soil. The whole lot manured and worked in the same way, except the sub-soiling of some parts and somo not. The month of $\Lambda u g u s t$ was dry; tha corn in the sub-soiled suffered vory titlo; and that on the part not sub-soiled suffered very mitch.
" Whon the corn was gatherod wo could distinguishe the vory row whore the sub-soiling was commenceld and ended-tic cars vere more rumerous and of as larger size. I did not moasurs the corn nor the ground, but the difference was so obvions to tho sight, that no. one could doubt the suporiority of the corn on the ground sub-soiled.
"This yoar the whole of my corn ground was subsoiled, and tho yield was vory satiafactorg: The monthr of July was dry and hot, and tho leaves of my corn did not shrivol, while those in the adjacent fields rolled up."
Evory farmer knows that a deep, friable soil will take up more rain wator without detiment to the groving crop, than will a shallow, compact soil. For a simi lar reason, moisturo from below will moro readily aycond in dry weather and supply the roots of noedy plants with their -hquid aliment. But, do not forget that a soil sixteen inches deep. requires twice as much mold as one only eight inches in depth. Now, the richest mold is that formod from the carcass of a dead horse or sheep: but as such organic matter is attainable only in homapathic doses, the farmer should test, his skill in producing mald from clover, peas, corn, grass, and othor vegotables, to mix with his sub-soil, Bowaro of the folly of sproading farm labor over too large an area for the highsst permancat profit.Fifty acres of good landiare more valuable than 200-a poo:-land.-Gicnesec Farmer!

## ILARHOWING WHEAT IN SPMING.

In none of the improvemonts in agriculture do $r$ find farmors so slow to bolieve as in harrowing wheat, after the ground has settled in the spring, Some ten, or filteen years ago much was said on this subject ins the Genesco Farmer, showing the results of experion ments, and explaining the reasons why it should: opea rate beneficially upon the crop.

Farmers know that a hard crust forms upon ground exposed to the frosts and drying winds of March and April, and that this crust greathy retards vegetation. - , But the great objection is, it will pull up all the wheat to harrow it. Having practised harrowing my wheat for the last eight or ton years, and uniformly with good effect, I foel disposed to eecomrond the practice to suy
brothor farmers. Of lato years I have Heen in tho hatit of ploughing in my wheat at the time of seoding with a gang plough, leaving it in the furtrow. In tho epring aftor the ground has become dry, the last of April or early in May, I harrow longthwise of the furrows, then crosswise, loosoning up the ground thor-oughly- I should like to do thisjust before a rain. If the land is to be secdod with clover, I sow on the seed and harrow it in. 'fhis I think far moro safo' than sowing early and trusting to the heavings of the frosts and the wash of rains to cover it. Early sown clover is often killed by the droughts so common in April..
I have been amused at the earnestness with which some of my neighbors would remonstrate with me for harrowing my wheat. "Such. a fine pieco of wheat," yay they, "to bo spoiled in that mamer ! He ought to ve sent to the mad-house."

And afterwards, whon the crop showed for itself it was not ruined, " O , it was such a good piece of land, it will produco a good crop in spite of your experimonts," A field of wheat looks bad whilo under the process of harrowing, as it is prostrated and partly covored with oarth; but aftor a showor it starts up frosh and vigorous, like a field of corn rofreshed by a shower after being hood.. I have often examined as to the amount pulled up, and do not helieve it will averago a bushol upon ten acres. Farmers, try it ; and be not frightenced by the appearauce. I nevor heard yot of a field injured by; it.

Myron Adams.
-Giencscc Farmer.
cure for the potatoe rot.
Or a methon, for protecting Potatoes, after they have been hervested, from the further spreading the

Rotato disease.
nY A. A. HAYS, DI. D.

The rapid decay which continues after the roots have been removed from the soil, is often of a most romarkable character, and aside from its sconomical byaring, is a subject of scientific importance. Duing the last season, I made trial of some chemical agents, which specifically arrost all vegetation; hoping to discover an application which would enable us to-preserve the diseased potatees from furthor changes. Early in the course of the experiments, it was noticed that a reduction of temperature by exposuro to cald air, -greatly diminishod tho rapidity of decay, whilo a slight increaso of tomperature hastenedit; moisture boing prosent or not:
Heat in:a moist atmosphore-increased: the destruction, and samplos which had' been cooled, and thergby partly protected, readily passed through. all the changos when again exposed to marm and humid air. Aftor using several substances by diroct contact with disoased parts of potatoes, I soon found that the mixture of sulphureous acid, nitrogent and common air, such as exists whers sulphur is burnt in closed vessels, would prevent the furthor progress of the disease in tubers already affocted, :nd whon exposed in contact with tubers, passing through ali stagos of the disoase,.no. further chango in tho prepared onies was induced.

The trials were varied, and the uniformity of the rosults has led mo to conclude, that the fumes of burning sulphur. coming ise eontact with potatoes partly diseased will arrest the further progress of the disoase amd provent decay. It is proper that this conclusion should be received as an oxpression of fact, under the circumstance of oxporiments on a small scale, and with no moro than two varioties of potatoos; but I conficently expect that the importance of the application vill be seon in the largest oxhibition of its offects.

Tho practical uso of tho sulphureous acid gas in vory simple and not exponsive: Crude sulphir inflamed in a shallow cast-iron vessol, or an sarthen pot;: furnishos tho fumos which may bo led by wooden pipesi to the lower part of bins filled with the roots, until'the unocupied space is fillod with them. As the flumen cool, they become heavier than air and will then onter overy interstice. By placing the pot of burning sul-phur in an ompty bariel and invorting over it a baxrel: filled with potatoos, having a light rack in place of a head, tho fumes will slowly rise within and impregnate the mass; the barrel and contents being then re-moved, and the head replaced, the exposure may bo: considered as amplo. Where the quantity is large, it would bo more economical to leave a space yacant, below the loose floor on which they repose, and introduce theso fumes until every part of the heap of potatoes has received a share.
It should bo romombered that this application will injure, if not destroy the vegetating power of the tubors, and that although this rosult may bo highly dosisable for all that are preserved for food, those intended: for soed should not bo so treated.

Agriculture.-It is an imocont pursuit, that can do injury to no one. It invades no man's just rights, and projudices no man's safety, health, peace, or reasonable enjoyment. It is a boneficial employment. for whoever cultivatos the earth, and covers it with rich. and golden crops, ronders it more beautifil; and whoover causes the earth to yield its fruits, increases tho. means of human comfort and subsistence..

## PREMIUMS AND REGULATIONS:

OF THE AGRICULTURAL ASSOCIATION OF UPPER CANADA, for the andual show to be heid at the town. of siagara, september 18, $10 \& 20,1850 \ldots$

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JOHN WETENHALL, Ese., Nelson.
FIRST VICE PRESIDENT.
JOHN Br MARKS, Ese., Kingston.

## SECOND VICE. PRESIDENT.

THOMLS CLARK STRERT, Esq., Niagara Fails:

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[These consist of Dolegatos from the County Agricultural Societies in Upper Canada, and the Ex-Presidonts of the Associationi].

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Beat Bull;
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class n.-mabinet ware, \&c.
Best set of blackwalnut drawing room furnituro, Diploma and 150 2d do 10.0
3obt sot of Curiod Maplo drawing room fur-

The abovo promiums to bo paid upon the oxhibitore giving a guarantee that they will send the prize articlog to the great Exhibition in England in 1851.15
ost Easy Arra Chair, 15
3 da do 5
Best Sofa, 3 0
3 d do $1{ }^{\circ} 0$
$2 \mathrm{~d} \underset{\text { do }}{ }$ Doom Chairs, $\quad 10$
3 d do 1
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Bost Work Box, 10
Bost Writing dosk, 10
Stuficd Birds,
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Second do do 10
Picturo Frame, vencored, 10
Stucco Moulding, $\quad \geq 0$
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Second do

CLASS O. AGRICULTURAL PRODUCTIONS.

## The Canada Company's Prize.

For tho best 25 bushels of, Fall Wheat
the produce of Canada West, being.
the growth of 1850
2 d 25 bushels of Fall Wheat, (offered by the association.)
Best manufactured and most neally and, . securoly packed barrel-of Flour,-Di-, ploma and

3: 00
2 d
do
$2.0=0$
Those four promiums to bo given to the actual growers and manefacturers only;-and the wheat and flour will become the property of the Association: The whole will be sent to the great exhibition to be held in England in 1851: Exhibitors will be requared to stato the siature of the soil, modo of cullivation, time: of sowing, amount of produce por acre, and the trind and quantity of manure [if any] applicd,

| Best 2 bushels Wintor Wheat |  |
| :---: | :---: |
| 2d do |  |
| 3d do |  |
| Best 2 bushels Spring Wheat, |  |
| 2d do | 3 |
| 3 d do | 1;0 |



| Best Weaver's Roeds, 2 d do | Flowers, Diploma and. Sccond best, |
| :---: | :---: |
| Best Board Rulo, 10 |  |
| 2 d do ${ }^{2}$ | Pencil and Crayon. |
| Best Spinning Wheot. 10 | L'oncil Portrait, Diploma and 110 |
| 2d do  <br> Bost Churn, 5 | lenci Portrait, Diploma and 110 |
| 2d do ${ }^{\text {2d }}$, 10 | Crayon Portrait, Diploma and 110 |
| Bost Augers from ? to 2 inches, 10 | $\begin{array}{ll}\text { Second, } \\ \text { Pencil Drawing, Diploma and } & \text { in } \\ \end{array}$ |
| 2 d do 5 | Pencil Drawing, Diploma and 110 |
| Bost Earth Auger, 2d do dod | $\begin{array}{lll}\text { Secolid, } \\ \text { Crayon do Diploma and } & 1 & 110\end{array}$ |
| Bost specimen 201bs Cut Nails, 10 | Second, 1 |
| 2d do 5 | Colored Crayon, Diploma and 110 |
| Bost Blacksmith's Bellows, 1. 5 | Second, 1 |
| 2d do 15 | Daguerreotype best collection, the oxhibitor |
| Best Modol Boohivo, 10 | to have operated in Canada West for the 110 |
| 2 d do $\quad 5$ | last 12 months, Diploma and 110 |
| Best Rille, 15 | Secund best, |
| 2 d do $\quad 10$ | Lithographic Drawing unprinted, Diplom \& 110 |
| Makers only to oxhibit for promiums. | Second bost, Wood engraving, Diploma and |
| Crass q.-madies derartment. | Second best, 1 |
| Best specimen of Woollon or Cotton Nettiug | Engraviigg on Copper, Diploma and 110 |
| 京号, do Second do 10 | Second best, |
| Best specinen Fracy Netting, 15 | Engraving on Steel, Diplonaa and 10 |
| Sccond do 1.0 | Ormamental Writing, Diploma and 1 |
| Bost specimen of Embroidery, 10 | Second best, 10 |
| Second do 15 | All articles in Q and R exhibited by Ladies to be |
| Bost specimen Raised Worsted Work, 10 | admitted free. All articles entered in R must have |
| Sccond do. 15 | been executed since tho last Exhibition of this associa- |
| Best specimen Wax Fruit,  <br> Second do  <br>  15 <br> 10  | tion. |
| Eost specimon Wax Flowers, 15 |  |
| Second do 10 | CIAASS S.-POTSERY. |
| Best pair Woolion Socks, 10 | Best specimen Pottory, £0 15: |
| Socond do 5 | 2d do 10 |
| Bost pair Woollon Stockings, 10 | Bost spocimon Draining Tile 15 |
| Second do 5 | 2 d do 10 |
| Bost pair Woollen Mittons, 10 | 3 d do 5 |
| Second do 5 | Eiost dozen Bricks, 15 |
| Best pair of Woollon Gloves, 10 | 2 d do 10 |
| Second do 5 | 3 d do 5. |
| Best Straw Hat of Canadian Straw, 10 | 3d do |
| Best spocimen of Gentlomen's Shirts, 5 |  |
| Best specimen of Gentlomen's Shirts, | Class T.-BOOKbINDING, Parer, \&c. |
| - Third do 10 | Best specimen Book binding: £1 0 |
| Bost specimen Quilter, 15 | $\begin{array}{lll}2 \mathrm{~d} \\ \text { do } & 15 \\ 3 \mathrm{~d} \text { do } & 10\end{array}$ |
| Second do I 0 | Eost Ream of Writing Peper, I 0 |
| Third do l5 | 2 d do 15 |
| Class-r.-mine arts. | 3 d do . 10 |
| Instorical painting Oil. | Best roam of Pranting Paper, 2 d do. |
| Ilistorical painting, Canadian subjoct, Di- | $\begin{aligned} & 2 \mathrm{~d} \text { do } \\ & 3 \mathrm{~d} \text { do. } \end{aligned}$ $\begin{aligned} & 15 \\ & 10 \end{aligned}$ |
| Second best, | Eest specimen Lettor Press Printing, execu- |
| Landscape-Canadian subject, Dipicma and 3 | ted since last Exhibition 210 |
| Socond Lest, 2 | 2 d do. $\quad . \begin{aligned} & 110 \\ & 10\end{aligned}$ |
| Animals (groupod or single) Diploma and 3 | 3d do . 10 |
| Second bost, 2 |  |
| Portrait, Diploma and: 210 | CLASS U.-INDIAN PRIZES. |
| Socond bost, ${ }^{\text {Sn Werater Colors. }} 110$ | Best Bark Canioo, <br> £1 10 <br> $2 d$ do <br> - 15 |
| Landscape-Canadian subject, Diploma and 210 | Best 4 Paddles; 10 |
| Second best, 110 | 2d do 5 |
| Portrait, Diploma and ${ }^{\text {a }}$, | Best Indian Cradie, 15 |
| Socond bost, 1 | 2d do 10 |
| Animals (groupod or single) I ip oma and 210 | Best pair Snow Shoes, (common size) 15 |
| Socond best, 110 | 2 d do -10 |
| Mimiaturo, Diploma and 2 | Best pair Snow Shoes, (8 in. long) 10 |
| Socond best, :110 | 2d do 5 |


class v.-plougirivg matcir.

| Test Plonghman ovor 18 yoars of ago, | £4 0 |
| :---: | :---: |
| 2 d do | 30 |
| 3 d de | 20 |
| 4th do | 10 |
| Best Ploughman under 18 yeses of ago, | 40 |
| 2d do | 30 |
| 3 d do | $\bigcirc 0$ |
| 4th do | 10 |


| Class w.-POUltay. |  |
| :--- | ---: |
| Best pair Dorking Fowls, |  |
| 2d | do |
| 2d 10 |  |

Best pair of Poland Fowls, 10
$\stackrel{\text { do }}{2 d} \underset{\text { Best pair Large Breed Forils, }}{ } \quad 10$
$\begin{array}{lr}9 \mathrm{~d} \\ \text { Best pair Turkors, } & 5 \\ \text { do } & 10\end{array}$

| Best pair Turkors, |
| :--- |
| 2 d do |
|  |
| 20 |

$\underset{\text { Best pair Large }}{\text { do }}$
$\stackrel{2 \mathrm{~d}}{\text { Best pair Topknot Ducks, }} \stackrel{5}{\text { do }}$
$\begin{array}{lr}2 d & 5 \\ \text { Best pair Muscovy Dacks, } & 10\end{array}$
$\begin{array}{lr}2 \mathrm{~d} \\ \text { Dest pair Common Ducks, } & 5 \\ \text { do } & 10 .\end{array}$
$\begin{array}{cc}\text { Dest pair Common Ducks, } \\ \text { do } & 10^{\circ} \\ & 5\end{array}$
Best pair Guinea Fowls, 10
$\stackrel{2 d}{\text { Boat lot Poultry owned by the Exhibitor, }} \begin{array}{r}5 \\ 10\end{array}$
Boat lot Poultry owned by the Exhibitor, 10
CLASS T.-GENERAL CLASS.
Promiums for Stock belonging to porsons rosidiug in the United Statos, or Canada East, and all others who are not competitors in other classes.

| Best Durham Bu |  |  | £2 10 |
| :---: | :---: | :---: | :---: |
| 2 d do | do |  | 210 |
| Bost Durham Cow, | do | Diploma and | 110 |
|  | do |  | ${ }_{2}^{1} 10$ |
| $\underset{2 d}{ }{ }^{\text {Best }}$ Ayrshire Bull, | do | Diploma and | 210 210 |
| Best Ayrshire Corv, | - do | Diploma and | 110 |
|  | do |  | 110 |
| $\underset{2 d}{\text { Best Heraford Bull, }}$ - | do | Diplome and | 210 210 |
| Best Heroford Cow, | da | Diploma and | 110 |
| 2 d do | da |  | 110 |



## agricultunal mplemmacts.

Best Sub-soil Plough-Diploma and.......£1 - 0
" pair Harrows........................... 10
"Fanming Alill-Diploma and......... 10
" IIorse-power Thrasher and SeparatorDiploma and............................. 210
*Seed Driil or Barrow, .................. 10
" Straw Cuttor,............................ 10
" Smut Machine, .......................... 110

* Rortable Grist Mill,-Diploma and.... 210
" Grain Cracker,. ......... ................ 110
"Machino for Cutting Roots for Stock,. 1. 0
* Corn and Cob Crusher,................ 18
* Clover Machine,-Diploma and....... 20
" Roaping Machine,-Diploma and.... \& 10
" Best Cultivator,-Diploma and....... 15
" Assortment of Agricultural Implomonts and Edgo Tools,-Diploma and... 50
Each Compotitor in this Class to pay entranco Feo, except thoso residing out of Western Canada.


## hULES AND REGULATIONS.

1st. The payment of 5 s constitutes a person a Momber of the Agriculfural Association of Upper Canada for one year; and Teoo Pounds Jein Shillinge for Life.

2d. No one bat a Member will be allowed to compete for Prizes, except in Classes Q. U.X.

3d. All Stow and Articles intended for Exhibition, must be catered in the Secretary's Books, at Niagara, before 8 o'clock on Tuesday cvening, the 17 th of September; if by letter the postage must be paid, and the person entering must remit 5 s. being the amount of subscription constituting a momber, and 7 7 d d extra. for each article above three.

4th: Members exhibiting more than Thece Articles for competition to pay $7 \frac{1}{2} d_{\text {. }}$ extra on each.
-5th. Badges from the Secretary's Office will be furnished Members, which will admit them
and their Ladies and children under 18 years of age in carris ges, free to every department of the Exhibition during the Show. Life Members admitted with their familics free.

6th. Tickets for admission to those who are not members $7 \frac{1}{2} d$. each time of admission. Carriages, including drivers, 2s. 6d.; passengers to pay $7 \frac{1}{2} d$. each. ILorsemen, not members, to pay 1s. 3d. cach admission.

7th. Every article exhibited for competition, must be the growth, produce, or manufacture of Upper Canada, except Class X. Sive Stook for breeding must be the property of persons residing in Upper Canada.

8th. Discretionary Premiums will beawarded for such articles as may be considered worthy by the Judges, although not enumerated in the list, and the Committee will determine the amount of premium.

9th. The Socrotary of each County Society is requested to furnish the names of three persons competent to act as Judges, who with the President and other Officers of County or 'Township Societies that have contributed the required amount to the funds of the Association for 1850, shall be furnished with badges for free admission to the Show Grounds in agreement xwith a bye-law to that effect.
10th. The Judges, Compecitors and Officers of the Association only will be permitted to enter the Show Grounds, until 1 i'clock, p. m., of Wednesday the 18 th Sept., at which hour the public will be admitted.

11th. No Articles or Stock exhibited will be allowed to be removed from the grounds till the awards are made, or without the permission of the President, under the penaty of losing the Premiums. An Auctioneer will be on the spot after the premiums are annomeed, and every facility affurded for the transaction of business.

12th. Delegates, Judges and members of the Press are requested to report themselves at the Secretary's Office immediately on their arrival.
13th. The Judges to meet at the Secretary's Office on Wedneslay morning at 9 o'clock pre- $^{\text {and }}$ cisely, to make arrangentents for enteriug immediately apon thör duties.

14th. The Secretary will receive entries in Toronto any time previous to the Show week. Afterwards all commanications should be addressed to him at Naagara
15th. It being essential to the satisfactory working of the Exhibition that all articles be
entered and forwarded in reasonable time; all such as arrive on Weclnesday morring, and not previously cutered, will be charged an entrance fee of 2 s . 6d. each. All entries will positively close on Wednesday morning at 9 o'clock. Articles arriving afterwards will be admitted into the Show grounds on payment of $7 \frac{1}{2} \mathrm{~d}$ cach; but they will be entitled to compete only for Discretionary premiums.
16. Arrangements will be made for Lectures and discussions on $\Lambda$ gricultural subjects for the evenings of Wednesday and Thursday. Particulars will be duly amounced.
47. Every effort will be made for cnabling tho Treasurer to commence paying the Premiums carly on Friday morning.

1Sth. A Ploughing Match will take place in the neighborhood of Niagara on Fritlay, to commence at 9 o'clock in the monning
N. B.-The Local Committee will make arrangements for the transit and accommodation of visitors; also for Stock, Implements, and other articles for Exhibition, at reduced rates. Full particulars will be aunounced as soon as the arrangements are completed. Niagara is of easy access by steamboats both for Canada and the United States; and comprises within the radius of a few miles, the most beautiful seenery and sublime natural phenomena on the Continent of North America.

## forticailture.

For the Agriculturist. CURRANTS-mRUNING AND TRAINING.
Although every one knows that Curranis grow freely from slips or cuttings, it is generally preferred, and justly, to procure rooted plants from the Nurscry. A description of the method of raising bushes from cuttings may therefore be dispensed with, and some plain directions given for training and.pruning. The following remarks are abridged firom the Gardener's Chronicle, (English,) and point out the usual and generally approved practice. Let it be lept in mind that to have fruitful, well-grown Currant Treas, rogular yearly pruming in April is necessary.
"Having procured your plants, let them bo trimmed to a straight stem, having throe leading shoots of the previous year's growth. Let the lowest of these three leaders branch off about four inches from the ground. The bushes being planted, cut the three shoots back to about four inches in length, taking care to cut each immediately above a bud, pointing outwards.

Two shoots should be encouraged from each of these three, so that in the fall, the plant will have six shoots, being the requisite number of branches. Cut off all other shoots!to within an inch of their base. At next pruning cut back the six leading shoots to four or five inches in length, of the new wood, and as formerly they should be cut near a bud pointing outwards. At every future pruning the terminal shoats of the six branches should be shortened to between four and six inches, according to their strength, that is, shorter if weak. When the branches are nearly as-high as is desired, the extremities may be annually shortened to two or three buds. With regard to the lateral shoots, they must all be cut to within an inch of the old wood at every pruning."

The general principle recommended in the foregoing extract consists in shortening the leading shoots, and leaving spars at the extremities -of the lateral branches. This system is universally applicable, and will easily be comprehended, and put in practice, with such old bushes -as havereceived little or no previous care.

Goosenerries.-The treatment required by the Gooseberry differs in no essential particular from the Currant; therefore such directions as are given for the one may be applied to the other, with the exception of shortening the leading branches, which should not be done with Gooscberries, after the head is properly formed. Regular and liberal pruning, of bath old and new wood, is invariably necessary. Early in April cut outcross shoots, and all superfuous branches, leaving at the laterals a stub of two - eyes to send out fruit buds, and spurs, and also leaving a sufficiency of last year's growth in suitable vacancies to form sufficient bearers, and supply the place of dead and decaying wood. The best fruit is borne on young wood, which should be allowed to distribute itself properly through the bush, always taking care to prevent such crowding as to exclude abundance of light and air.
'It is not unusual to hear complaints of want of success in growing fruitfal Gooseberry plants. This arises no doubt from the extreme heat and drought of Canadian summers. A successful remedy for this consists in covering the greand under the bushes with litter or straw. A sprinkling of salt on the litter; has also been found of eminent service, in attracting moisture and keeping the ground cool. Mildew is sometimes found troublesome in attacking the half grown fruit To prevent and ccure this, it is necessary to zplant the bushes in a soil, either naturally a strong loam, or made so by trenching and manuring. A rich soil, a heavy top-
drercing of manure dug in fearly around the plants, and a thorough annual pruning, will in general insure a good crop, and for the paind bestowed, amply repay every lover of this twhatosome and nseful fruit.

March, 1850.
George Lescir.

## Price at the Toronto Nursery.

Currants-red, white and black, per doz. is Gooseberries in 40 varicties " 10a

## cultivation of strawberries, grapes, akp

 faspberbies.> For tho Agriculturist.

Strawberries.-As the season for planting is just at hand-the following plan of Strawberry culture, although not new, has the recommendation of being successful in producing fine crops. The ground having been first trenched two spades deep, and a coating of Dung afterwards pointed in, the plants are taken as soon as they can be obtained, and planted in rows 2 feet apart, and 18 inches distant in the rows-if the weather is dry after they are planted, they should be well watered and short grass or well rotted manure spread over the ground to retain the moisture, the plants do not bear a full crop until the second year after planting, and after having borne for three years they should be removed, it being found that tho crop is never so good after that time; by this mode of culture excellent crops of large and well flavored stra vberries are always produced.

The varicties of this fruit are very numerous. The following are a few select sorts that will answer well in most parts of Canada: Early Scarlet, Hover's Seedling, Keen's Seedling, Black Prince, Ross Phenix, Myatt's Eliza, Red and White Alpine.
Grapes.-As few things are more pleasing in a garden than a supply of grapes, and as but comparatively few persons, can afford the expense of time and money demanded by a Grapery, any improvements respecting vines out of doors must be acceptible. The preparation of the soil has much to do with the successful cultivation of the Grape. A low, damp, undrained situation never can succeed, and nature and art should both be laid under contribution to gain a warm wali for the branches, and a dry porous soil for the roots. The whole art of pruning the vine is dependert on the physiological faet in its history, that it only produces fruit on the wood which is the gronth of the previous year, the knife must therefore be so used as to get rid annually of old branches to be replaced by new ones.-- Care must be taken not to have too much wood, and perhaps 8 inches apart is the medium distance to be observed in nailing in the branches which must be shortened according to the ripeness and strength of each. About four or six eyes will be enough to leave unicss the stem is very strong. The sorts that will succeed best in the open air are the Sweet Water, Isabella, and Catawbp.

The Raspaebry.-As the fruit of the Raspberry is held in much estimation for the dessert, and coming into season after the strawberry, and being with the latter of a very wholesome nature, and adapted to the soil and climate of this country a few words respecting its cultivation may not be unacceptable to the readers of the . Igriculturist.

Downing observes in his excellent treatise on the "Fruits and Fruit Trees of Anerica," that the Raspberry forms one of the most invaluable fruits, and that not being liable to unlergo the acctous fermentation in the stomach, it is considered bencticial in cases of gout or rheumatism.

The Rasplerry is propagated very readily from suckers, which spring up in great abundace from the old :oots. The soil should be rich and deep; a thoought trenching would be a beneficial preparation. Choose a warm open space for planting. The young canes or suckers may be placed in rows from 3 to 4 fect apart, and the same distance between the rows, if the sort be of vigorous growth and the soil rich. Itis a gool practice to put two or three plants together in a group. It should be remembered that crowding the piants together prevents the berries from growing laige and injures their flwor; to obtain firn large fruit the free access of light and air is an aboulute rognisite.

Pruning is a very simple business, and should be perforined carly in the spring. Leave about half a dozen of their strongest and healthiest looking shoots of the last year's growth in cach group, and remove all old wood and inferior suckers. Cut offabout a foot of the tops of the remaining shoots; and spread neer the surface a little well rotted manure, which must be carefully dige in. Nothing more will be recsiired, but an occusional slight hoeing to keep down weeds. a Raspberry plantation will come, with proper mangement, into full bearing in the third year, and will usually maintain its vigor for about half a dozen years, when a fresh site should be adopted.

In the colder and more exposed parts of the Province it is a good practice to prane in the fall and bind down the canes, and lighty cover them with earth, or other materials to protect them from the action of frost, which in severe winters will kill the more tender varieties.

The sorts most suitable to our climate are the Red and White Antwerp; Franconia, a large and hardy variety: Fastolff, a very fine fruit, the two latter being peculiarly adapted to the climate of Canada; American Red and the American Blacir, are used for flavoring liquors and cooking. The Ever-bearing and the Ohio Everlasting, are very late bearing varieties. For fuller particulars the reader is referred to the Treatise before mentioned.

James Fllemine.

> Yonge Stu, Norsery,
> Tororto, Ma:ch, 1850 .
ontons from time mmemonal.
To give some idea to those who have not thought on the :ubject of the effects of age upon a cultivated soil, 1 shall hero montion a fact that struck mo as being not a little singular at the time it occusied. At Dun-
staffnago, near Oban, in Argyleshire, Scotland, which is a mountainous sountry, and naturally a barren soil, a small garden was pointed out to mo, on which was growing at the time one of tho fincst crops of onions I had over seen. 1 took notice of it with some degroo of surpriso, becauso I had seen no other crop of onions in that district that was tolorablo; but my surpriso was a good doal augmentet on being told, that the present crop in that gardon was by no neans romarkable; that it had beon croppod with onions yoar aftor year, from timo inmenorial; that tho present ownor of it, who was a man abovo oighty years of age, had nover seen any other crop than onions upon that ground; and that the oldest person alive, whon he was a boy, hal told him the same thing, and the crap was always an excollent ono. Dunstafliage was a royal palace, belongin the kings of Scothad at an carly poriod of their history, almost beyond record; and thore can bo little reason to doubt that this garden was bronght under cultivation at that time, so that it camot now be loss than fivo hundred years old, and probably several hundred years more. I question much if tho soil could have been rendored capable of protucing successivo crops of such fime onions, for a great many years aftor it was first turned up from the waste, by any device that the ingenuity of man could have suggestnd. To judge then, of tho most profitable mode oi cropping such old soils, by the same rules that would apply to those which apply to those which had not had tume to be fully matuld. would be very absurd. Many casos of this suit would no doubt occur on our surves of the Netherlands, could it be properly effected.-Dr. Anulerson.

## THE VINEGAR PLANT.

This production seems at present to puzzle the hearned to find a name for it; as much as it delights the thrifty housewife, who by its use has reduced one item in hor grocers' bill, and now finds she cen produce a supply of vinegar, oqually as good, and at much less exponse than formerly. $\Lambda$ wifegar plant may not only bo propagated, but actually in the first instance made, and the following is the recipe given by a writer is the Family IIcrald:-
"Take a quarter of a pound of sugar, and half a pound of treacle, simmer them in twre quarts of water till dissolved, then placo the mixture in a large vessel, cover it over, and set it in a warm place. In about six or soven weeks you will find floating on the iop a tongh fieshy substance-this is the vinegar plaut: the mixture will havo turned to vinegar, but it will not bo of such good quality, as whon a perfect plant is set upon it at first. The plant will propagate rapidy, and by using it as directed, any quantity of good and chea, vinegar may bo made. The vinegar will be of a dark color, which doos not affect its quality. It improves by boing botted. and kept for some timo prior to use. A bit of thin wood shenld bo sot upon the mixture for the plant to float upon, Ent it should be allowed to come in contact with the liquid:"
Brown vinegar will be the result, if common treacle be used; but a pure clear vinegar, if refined treucle or golden syrup be substituted.
The following recipe has been sent us by a lady, eminently successfulin manafacturing tliis useful com-modity:-" Wator two quarts, raw sugar halfa pound, syrup (refinod tracle) or golden syy puarter of a ponnd. Let these be well mixed logethor, tho chill taken off, and the plant then spread out over the top. To bo kept in a warm dry place, allowing it to remain in the mixture for two months."

The name at prosent given to this singular fungi, is Pcricillum glaucsm. We believe however, that somo of our hotanical savans have doubts as to the correctuess
of this name. This plant when floating. ons its acid bed, increases by extonsion at the sides, and also by subdivision of its parts, and by the formation of an entire coating over the uppor surface, attached only to tho undor or original plant, by a point near its centre. Tho wholo gonus of Pcnicillitra forms upon decaying bodies, and upon fluids turning acoct. This species in partirtalar augments rapidly by the convorsion of sugary fluids into vinegar. What ailnity exists betweon this plant, and that known as " mother" of vinegar, we know not; perhaps somo of our Cryptogamic friends will inform us.

This plant appears to have boen know prior to 1846. for wo find at that period it was cultivated as a usofinl. cmiosity in various parts of Lancashure. Its history is, however, very obscure, and litlo is known even of its. namo and Hativo country, some assorting that it was brought from Italy, and others from the West Indies. Onr own opinion is, that it is one of those fungations products that will make their appearance in situations favorablo to their production, and whthout tho visiblo aid of man. However this may be, one thing is certain, that no family using vinegar ought to bo without it. Vorth Irrilish Agricullurisl.

## General Situce and fllistellam.

13



WIRE FENCES.
A grood deal of attention has lately, in the State of New York and in some of the Western States, been directed to the subject of Wire Fences. A variety of plans has been proposed, but we have as yet seen none entirely free from objections. In most of these plans the wire is stretched along the posts with suffieient tightness to prevent the smaller animals from pressing between the wires. Bre it must at onee be apparent that in this country at all events, the frost and wind would in a very short time heave and lossen the posts and thercby cither break or slacken the wires. No fence made in this way at any reasonable expense would turn hogs, to say nothing of larger animals.

A wire netting for fences, hass been used for some time in the old country, and appears to us to be free from many of the objections which exist in the other case. We observe that our enterprising towasman Mr. Wm: Gqrdon, Seed Merchant, is now manufacturing a very substantial kind of netting which will make a neat and effective fence for gardens, yards, \&c.

The above cat represents a section of the fence. Figure A exhibits a roll of the web with a couple of strong wires running along the top of the posts. Figure $B$ shows the fence with a wroden railing instead of wire. The web we beliere can be furnished at 2 s .6 d . per square yard. It can be made of any width. A coat of paint will of course be required to proteet the wire from rust. We recommend amateur gardeners and country gentlemen who disregard a
small extra expense where taiste is to be gratified, to try Mr. Gordon's fence:

## a gossir with the ladies.

The following remarks on a subject of great importance are from the pen of Dr. Lee, the able editor of the Genesec Furmer. No one can travel 10 miles through any State of the Union without meeting sad proofs of the result stated by the Doctor, mhaterer their opinion may be of the cause. This evil-the carly decay of the female sex-does not strike the ibserver so forcibly in Clanada. - But as the country inproves in wealth, and luxuries are enjoyed by greater numbers, we see unmistakable eridence of a tendency to the same mournful results in the health and appearance of the young women of the country. How far any of the causes mentioned by Dr. Lec operate to produce this evil let the reader judges and act accordingly.
The people and Legislaturos of several Statos are talking pretty seriously about Agricultural schools and Collegos. Let us tilk a litto on a sabject of equal importance-the education of the fair daughters of our land for the responsible duties of life. It may be said, and truls, that the females of this land are better cducated hian those of any other country, and that the studies parsned in our femalo seminaries are of a more solid character than those of similar seminaries in Europe. We grant all this; and still wo say that the system of femalo education is defective-moro than this, destructive to the health and consequent happiness of thousands,-making the "sweet honie" a home of ansrety, disoase and wrotchedness, and filling many an untimely grave. You may consider this ratiner a
a sovore nnd random assortion; but it is too strictly and soo foarfully true.
Travel our country over. Look at the young mothors of our land. Are they pictures of health nad vigor, or of infirmity and discaso? Does the bloom on tho cheok donoto that tho blood is playing healthfully through tho veins, or does thro sallow cumploaion and shrunken features show that the purple tudo pursuos slowly and unwillangly its sluggoh course? Does the sparkling eye oxhibit the buozancy of tho feelings -is tho joy of tho heart shown through these windous of tho sonl ; or is the melancholy sumben ele, the indox of a sad heart? Mr. Colinan, in his Eutopean :our, was surpised at tho healha and consequent hoorancy of sprits of the English wonsen-the mother the equal of tho daughter in heallh and vigor. On the contrary, the wan and faded appearanco of Ameican women is remarked by all travellers. The celebrated Do Tocqueville spoke much on this subject. Mis, Boochor says-" An English mothor at thirty or thirtyfive, is in the full blooin of perfect womanhood, as fresh and healhful as hor daughtors. But where are tho Amorican mothers who can reach this period unfadoll and unworn ?"
How fow reach this poriod of ago without suffering from head-acho, doulouroux, disonsos of the spine, and other nervous diseasos so common to tho women of this country. We might show the extent of this evil more fully; but, as it will bo admitted, we think, that the health and beauty of American ladies are lout short lived-that they are peculiarly liable to uervous disoasos, destroxing their own happiness and tho happinoss of thoir fanilics,-and finally life itsolf-it will bo muro profitable that we should point ont the cause and the romedy.

The cause conmences in the cradle, and too ofien onds in the grave. In infancy, the mothor is afraid to have a hittle of heaven's fresh and balmy air breathe upon her child. Before the child is of propor age it is sent to school-its mental faculties taxed to their utmost capacity, and but little time or opportunity given for tho dovelopment of the powers of tho body by air and oxorcise. It grows up like a houso plant that has been dopiced of fight and air-weak and puny. The seeds of future sufforing, perhaps carly death, planted in its frame.

The child is become a young woman; and never having been accustomed to out-door exercise, she has no.relish for it,-irdecd, custom and fashion aro opposed to it. A romp on the green-laboring with tho hoe and spado anoing the weeds and flowers, would be decidedly vulgar, and show a want of refinementWalking a mile or two every day would bo an outragoous imposition-father or brother must "harness up." The young Jady must sit in the rocking-chair and read silly novels, exciting the imagination at tho expense of the heart and health-attend balls, and "dance all night" for exercise, feed on pickles, owent cake, and other indigestible trash, when the stomach should be at rest, and the whole body enjoring " nature's swoot restoror, balmy sleep." Young women thus grow up with impaired constitutions; and whon active life with its cares and responsibilities come upon thom, they are unequal to the task, fall victims to their own and their paront's folly, and either drag out a miserable life, or fill an early grave. "The delicate and feeble appearance of many American women," eays Miss Boochor, "is chiofiy owng to the little use they make of their muscles. Many a palo, puny, shad-shaped girls would. havo become a plump, rosy, well-formed persan, if half the exercise affurded to her brothors in the open air had beon secured to her duing childhood and youth."

The romeat, thion, is oxorciso, and exoroiso out-ofdoors. The health of cliddron must not be sacrificod to boolts. No over-anxioty of the parent must bo permitted to bring on thoso vory ovils the paront dreads. Children love exercise-it is natural for them, and nocessary to the development of their bodies-and thoy will have it, if not prevented bs their paronts. But oxorcise inust not end with childhood. Our young. ladios must walk, ride, and work in the opon air. Novor mind a littlo tanning in tho sun and wind-hoalth and comfort aro cieaply purchased evin at the oxpense of a fair complexion. By riding, we don't mean riding in a spring buggy with a cashionod seat-but horseback. Suddlo tho horsa yourself, juang woman, and ri.'e three or four milos every day. Or yon can ramblo througin the woods and over the farm and fences. And havo a gardon-cultivato rosos and carnations, and phlocos, and shrubs-and take good caro of them. It will afferd yon exorciso and pleasure; it will teach you more of naturo than a thousand novels

Mothers, learn your children to love gardening-allot them a patch for their own gardon-got thom such little implements as will ontice them to work. It will do more to save them from yoars of sufforing than all tho drags and sugar-pills in the universo.

## TIIE WIFF'S RNFIUENCE.

A woman has hor lussband's fortune in her power, becauso sho may, as sho ploasos conform to his circumstance. This $\mathrm{i}_{3}$ hor first duty, and it ought to bo hor pido. Tho passion for luxury or di.aplay ought not for a moment to tompt her to doviate in the least from this line of conduct. She will find her own raspoctability and the esteem of others in it. Nuy other course is wretchedness itsolf, and inevitably loads to ruin.Nothing can be more misorable than the struggle to " keep up appearances." If it could succeed, it would cost more than it is worth; as it never can, its failure involves the deepest mortification. Some of the sublimest exhibition of human virtue have been mado by women, who have been precipitated suldenly from wenlth and splendor to absolute want.

Then a man's fortunes, in a mauner, are in tho hands of his wife, inasmuch as his own powor of exertion depends on her. Alt his moral strengih is inconceivably increased by her sympathy, her counsel, her aid. She can aid him immonsoly by relieving him of every household care which she is capable of taking upon herself. His own employments are usually such as to require his whole time and his whole mind. A good wife will nevor suffer her husband's attontion to be distracted by details to which her own time and talents ars adequate-

If she be prompted by truo affection and good senso, sho will perceive wher his spirits are borne down and overwholmed. She of all human beings, can best minister to its needs. For the sick squl hor nursing is quite as sovereign as for corporeal ill. If it be weary, in her asssduisy it finds reposo and refreshment. If it be harrassed and worn to morbid irritability, let her gentle tones hover ovar it with a soothing more potent than the most exquisits music. If every enterprise be dead, and hope itself almost exting uished, her patience and fortitudo have a power to rekindie them in the heart and he again goos forth to renow the encountor with the toils and troubles: of life.

How to Impiove the Heart.-Never lose an opportunity of seeing anything boautiful. Boauty is God's handwriting, a wasside sacrament. Welcome it in ovory fair face, overy fair sky, every fair flower, and thank Him for it , the fountain of all leveliness, and drink it in, simply and earnestly, with all your eyos. 'Tis a charmod draught, a cup of blessing.

## "THE EQUNOCTIAL STORJ" EXILODED.

" Prove all things-hold fast to that which is good."
Among tho many orrors that havo benn allowed almost undisturbed jossession of the public mind, perhaps for conturies past, fow aro moro common than tho beliof in equinoctial storms: and as wo shall presontly show, few notions aro more destitute of support either from scionce or actual obsorvation. Our ationtion has been called to this subject for oight or ton years past, owing to the occurrence of tho agricultural fairs in tho month of September, and tho objection which would invariably bo inado against holling a fair during the week when the equinox would occur, on account of tho supposed probaviltty of bad weathor.Wut on obsorvaion, wo have noticed that from tho 20th to the last of Septomber was, if any thing, mora commonly fine woather than any other poriod; honco wo discarded tho popular doctine of equinoctial storms.

At tho mecting of the Boand of Agriculture in Cincinnati last spring-the time for the State Fair being undor discussion-this "equinoctal storm" theory was strongly dofended; and knowing that Dr. Ray, of Woodward College, had for many years kopt an ovact daily Record of the weather, wo have requested him to favor us with the result of his observations upon this point. Tho following communication is his answer, and wo think it is conclusive; but if any important facts or argumonts are adduced on the other side, tho Doctor has the daily records and will give them :

Equinoctial Storms.-Is the weather, at that period of the jear doneminated the Autumnal Exuinox, [Sop. 23,] generally stormy, or of a more unfavorablo cliaractor than at other periods?

This question is proposed in referenco to the Northorn and middle States; though what is true in regard to them, cannot vary materially in tho Southern States.

In roply to this question, it may bo observed, that popular opinion has long since decided in tho affirmalive. The time when the "sun crosses the line" is, in the estimation of numerous individuals, a very important astronomical event, and quite worthy of being colebrated with storms of wind and rain, and a general disturbance of the atmosphore.

Tho "lino" [equator] is also regarded as somo great physical dovelopmont, like the mountain ridge, oncircling the carth. In regard to popular opinion, it is only necessary to jbservo that it is a very unsafo guide, both with regard to the existonce of facte, and the causes of phenomena, but especially the latter. There are, howover, two methods of answering the question, both of which we shall briefly notice.

First. Is there anything at tho period of the equinox, in the particular relation of the great operating causes, that has a tendency to produco an unusual state of the weather? Inreply 10 this it may bo saik, we have the equinox. And pray, what constitutes the equinox? Simply the fact that the sum has no declination, or for a moment of time [and only a moment] is vertical at some point of the imaginary line on the earth's surface, called the equator. But the sun is always vertical to some point on the earth's surface; can it then be supposed that the mere fact of its being vertical at a cortain point equally distant from the poles, shall have such a duo influenco as to conjuro up vapors, storms, winds and rain, as if nature designed, by raising a great commotion in the atmosphere, to celobrate one astronomical period, while others, equally important, so far as tho earth is conceaned, are permitted to pass by unhoeded and unsignalized? Thus the periods when tho carth passes through tho aphelion and porihelion points have an important relation to tho
climato of the earth, and to the seacons of the year ; but as thay are not genorally so well known as the poriod of the equinox, they havo not beon furnished with storms to colobrate their advonts.

Siccond. What is the teatimony of recorded observations? To this I reple, no writer on metcomology that I have consulted, makes any montion of such a phenomenon as in common pirlanco is denominated an equinoctial storm. I refer particularly to Kacmiz, Daniol, Howard, and Ferry, all of whoin in their rospectivo works treat of tho subjects of rain, winds, and storms. Ono of these [Kapintz] furnishes tables of tho number of storms occurting at difforont places during each month of the yoar; but at no place did the greatest number of storms occur cither in Septomber or Uctobor. Now it can hardly be supposed, if such a phenomenon as an equinectial storm existed, that it would havo entirely escaped tho obsorvation of mon whoso livos woro doroted to tho collection of facts pertaining to tho scionce of moteorology, and roasoning from them.

My own obsorvatiens extend through a period of 15 yoars, but the records of 1835 , excopt the abstract, aro not now to bo found, so that I can only refor to them sinco that period. During this period of fourteen Years, ton of theso equinoctial days woto cithor clear, or Gar and pleasant days; while two, though partly clear, were more than ono half cloudy; and two only wero entirely cloudy and partly rainy:

But thoso who maintain that there is usually a "bad spell of weather" at or near tho equinox, may wish to kuow how many such spells happen within some given period, of which the equinox was the middle. For tho satisfaction of such I would stato, that by taking a potiod of ono month, that is, about two weoks beforo and two weeks after the equinox, wo have had five bad spells of weather, whilo on nine of tho years thero was no weather that could be called unpleasant

From theso data it would seem, that if a groat public meeting wers to bo held in the month of September, it would be advisable to fix it for the 23d-line very day of the equinox !-as the probabilities are vory strong [6-7] that it would be a dry day, and protty strong [5-7] that it would be fair, that is, more than lialf clear; while the probability that it would bo wet is very small [1-7.] Joseph Rap.

Woouward Col., Cin., No.. 1819.

## Ohio Cultivator.

Artifictal Mahogany.-The following method of giving any species of wood, of close grain, the appearanco of mahogany in texture, density and poifish, is practiced in France, with such success that the best judges are incapable of distinguishing between the imitation and tho malogany. The surface is first planed smooth, and the wood is then rubbed with a solution.of nitrous acid. One ounce of dragon's blood is dissolved in nearly a pint of spitits of wine; this and one third of an ounce of carbonate of soda, are then to be mixed together, and filtered, and tho lizuid in this thin stato, is to bo laid on with a soft brush. This process is to be repeated, and in a short interval afterward the wood possesses the extornal appearance of mahoganyWhon the polish diminishes in billiancy, it may be restored by the use of a little drawn linsevd oil.

Steel by Electricity.-Di. Wrall. of London, has discovered and patented a process for manufacturing steel and iron through the agency of electicity, which promises to cheapen immensely the cost of their production, and at the same time improve the quality of the metal. It has beon tosted at soveral of the loading iron furnaces of Maryland and Virginia, with the most satisfactory results.

## FVitors' Noticrs K.t.

Errata.-ln Classes of Live Stock and Pigs fer " 1849 " read "1850."

Appontmbint of Shminan to the Provincial As-sociation.-At the recont meeting of tio - Igricultanal Associadon of Cpuer Canada, M1. Janes Floming, of the Yongu Sitact Nussery, in this city, was appointed Seodeman to this Society. We think this is a judicious arrangenont. Mr. Nemeng is in tho habit of importing difect!y fiom a respectablo IHouso in London, and will attond to any special cidors from members whomay wish to obtain any rare seods dic, for a small remumeration. Uo will likewise pachatso from farmers timothy, clover, and ohor agicultual socd saised in tho povince, ind exteute a!l onders wịh "hich ho may bo ontusted. $\Lambda$ ponion of Mr. Flomjags's spingr inpontation has aheady arrived through Now Youk. In examining it we noticed seveal novelies, which it is of importance should bo fai. Is thicd i. order to test their suitability to his country. Gardon flowors and agricultual secels of a greai number of vaileties can be promptly supplied.

Adpartizing.-Our new arrangements do not admit of advertisements. We shall always, however, bo happy to givo publicity to any iaformation or facts possessug a goueral interest that we may receivo from agricultural sccietics, gardeners, nursery men, \&c.

New York Stata Agriccleteral Socnety.-The next amual Exhibition of this society will take place at Albany duing the first week of September.
the county of poik agricultyial sociert.
This Socisty held its general raceting at the Court House on the usual day, when the following genticmen wore duly elected as officers for the current year:
President,-E .W. I'hömson, Lsa.
Vice-Presidents,-W. B. Jartis, IT. Ncil, F. Jukos, sind R. L. Denisorn, Esigrs.

Directors,-A. Shaw, IV. McDougall; G. Buckland, J. Surder, J. Watson, J. Bates, J. Scott, J. 13. Wheeler, N: Davis; D, Smyllie, R. McNair, J. II. Pice, E. Snider, R. C. Smith, and Dr. Clark, Esqrs.

Secreturies,-G. Wells, and W. B. Crew.
Treasurer,-W, Atkinson, Esq.
The meoting was adjourned until Wednosday the 13ih March, when it was determincd that the Spring fair should be held on Wednesday the 8 th May next, iu the city of Toronto, on the opren 'space, adjoining tho Jail, and that in consequence of the flourishing state of the society's funds, the sum of $£ 150$ should be awarded for prizes at the exhibition, and the sum:of £ 30 to aid the funds of the Provincial Asoociation.
A Commitioo of threo gentlemen were appointed at the meeting to confor with the Mayor and Corporation as to the propriety of establishing in the city periodical catuo fairs.

Eastizn Townshirs, I. C:-We are glad to find the farmers in townships and places where our paper has not heretofore had much cirsulation, awaking to the importance of improvement in the science as reill as the practice of agricultare. It is a sure sign of progroas when the agricultural class bbgin to-read and make enquiry on the subject of their oncr art. Several now orders for the Agriculturist havo been sent in from Lower Canada, perticularly from the eastern townships. J. R. Lambly Eisq. of, Lieeds, L, C., who was thio only subicriber in that vieinity last year, sends in an ordor this yoar for 44 copiee for the societr.Aitco spieakitig of tho alscrity with which the mombers responded to the resolution of the Commitioo to furnish
a copy-of the Agriculturist to each member, on paying 1s.. 3ul. extra, he sajis:-
"Our winter show was held an the 23th of last month, in the township of favernoss, and equalled our highest expectations. The shew of wheat evould nut bo suppasbed in Canada; we spoak tidvisedly, as we have scen. wheat from atl pirts, at iomo and abroad, but the whoat shown at our lest exhibition was equal to the best, and very far exceeded the average of wheat saised on this continent. The other grains exhibitod were also very gopd. Theio was also a grod display of vegetables. The fabrics, for the nowness of the country, wote of a very superior descripticn. Altogether, siis, for a young society, the 'Miburc'? was very god, and us to know and bo known, exen as a community, is sometimes survicable, a brief notice of our aglicultural exbibition, and oar existenco as asocreny, ia tais, remote lucality, would gratity $\mathrm{u}_{3}$, ard at the zamo tume show to our follow cuuntrymen that we ale alive to ort best interests as furmers."

The Mlechanics-Ingtivute of this City will hold its Ahmal Exhibition in September next, commencing one weok after tie Provincial Fair. Somo very respectable prizes are offered for specimons of art. $\Lambda$ Gold Madal, of tho value of $£ 12$ 10s. Will bs given by His Excellency the Governor Genoral, for the best specimen combining Inqenuity and Mechanical Skill. For the sccond best-a work of art, value $£ \mathbf{j}$ will bo give by the Iustitute. Best specinen of Decorativa - Art, manufactured in the lrovince, combining tasto and original desig:, will obtain a prize, being a work of art, valuod at $£ 4$. Various other prizes are offered, and a discretionary power vested in the Committso to award pizes for superior specimens of art or mañifacture not mentionod in the publishod list.

Ir. D. Wads:vortra, Esq., the well known Lecturer on Temperance, is authorized to transact any basiness connected with the Agricalturist in that part of the Province west of Toronto. Mr. WV. will receive suijscriptions that may be due for 1848 and 1849, aind as seeveral Agents who travelled for us in those years hatee ncver settled their accounts, we hope such persons ax may not have paid their subsiriptions, will take this opportunity of paying Mr. Wadsworth, if he pass through their neigliborkood. Agricultural Societies can give their orders for the paper to Mr. W., if not previously ordered. Mr. W. will alsn take subscriptiens for the pro ent year on the terms stated in oar Prospoctus.

Tononto Ilorticultural Socizity.--Wo understand that arrangements are being made for increasing. the usefulness and attractions of this Society, duriug the foithcoming seasons and wo hope the Toronto public will extend to tho Managers a prompt and libo:al support.

DT Tho name of Mr: Sheriff Ruttan was accidentally omitted in the printedritesolution, insorifed in oar last, relative to the Committee fordrafting new statutes for Agricultural Sociotios, \&ec.

Markits, dec.-The state of the market contimes mach tho same as when reported last; businioss contracted, and prices stationary. As the country roada are getting bad, and tho woather of late having been very stormy and changeablo, tho deliverics of grain havo been inconsiderable. The prospeci of an early spring is much loss encouraging now than it was a weok since. Tho present cold winterly weither, tionever, witl prebably prase idvanitigeous in the ond particularty to fruit trees which ard, when the tender buds ind blossoms become very oarly doveleped, Bo peculiarly linble in this climato io the injurious effoct of frost.

D gUCHAK, FRINTIR, FLOSEER OFIECE, TOROMTO.

